OS/390

DFSMSrmm Reporting

SC26-7335-00

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Note!

Before using this information and the product it supports, be sure to read the general information under “Notices” on page 243.

First Edition, September 2000

This edition applies to Version 2 Release 10 of OS/390 (5647-A01) and to all subsequent releases and modifications until otherwise indicated in new editions.

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About This Book

This book tells you how to create reports for DFSMSrmm™ resources. It is intended for storage administrators, system programmers, and application programmers responsible for implementing, customizing, and using DFSMSrmm. This book includes a section about using DFSORT™ symbols, which became available with DFSORT Release 14.

Required Product Knowledge

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

- Using DFSMSrmm Utilities
- Using DFSORT and the DFSORT ICETOOL
- Using ISPF
- Writing REXX EXECs
- Using the RMM TSO Subcommands

Referenced Publications

The following publications have additional information about DFSMSrmm:

Publication Title	Order Number
OS/390 DFSMSrmm Application Programming Interface	SC26-7332
OS/390 DFSMSrmm Command Reference Summary	SX26-6020
OS/390 DFSMSrmm Diagnosis Guide	SY27-7612
OS/390 DFSMSrmm Guide and Reference	SC26-7333
OS/390 DFSMSrmm Implementation and Customization Guide	SC26-7334

This book also refers to the following publications:

Title	Order Number
DFSORT Application Programming Guide Release 14	SC33-4035
Getting Started with DFSORT Release 14	SC26-4109

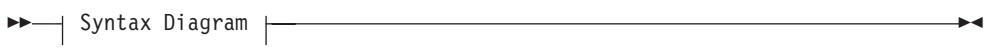
Notational Conventions

This section explains the notational conventions used in this book.

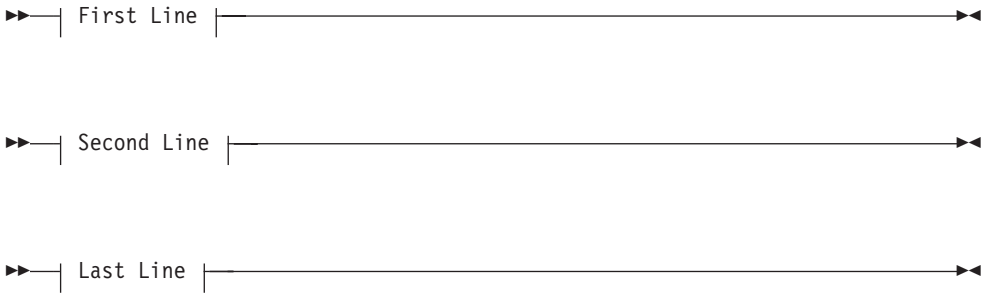
How to Read Syntax Diagrams

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.



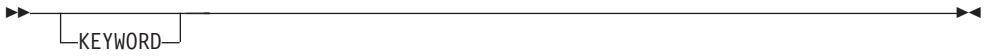
- If a diagram is longer than one line, each line to be continued ends with a single arrowhead and the next line begins with a single arrowhead.



- 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.

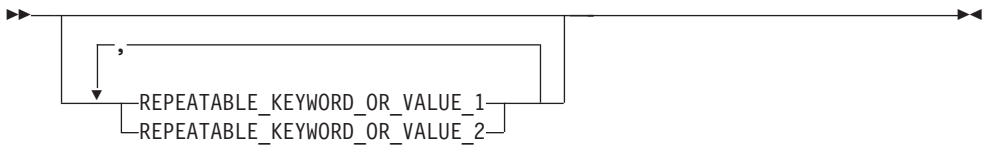
- Optional keywords and values appear below the main path line. You can choose not to code optional keywords and values.



  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.

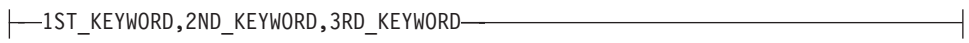
- References to syntax notes appear as numbers enclosed in parentheses above the line. Do not code the parentheses or the number.

  Notes:

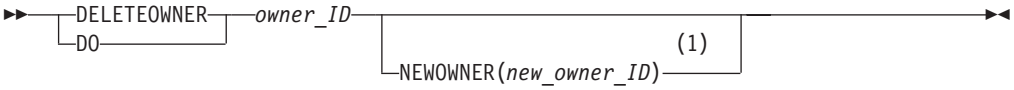
  1 An example of a syntax note.
- Some diagrams contain *syntax fragments*, which serve to break up diagrams that are too long, too complex, or too repetitious. Syntax fragment names are in

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 figure shows an example of a syntax diagram.



Notes:

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

Figure 1. Example of the DFSMSrmm DELETEVOLUME Syntax Diagram

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 book. 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'
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'.		

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
( )	To enclose subparameter list or the member name of a PDS or PDSE
&	To identify a symbolic parameter, for example, &LIB
&&	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

Accessing OS/390 DFSMS Books on the Internet

In addition to making softcopy books available on CD-ROM, IBM provides access to unlicensed OS/390 softcopy books on the Internet. To find OS/390 books on the Internet, first go to the OS/390 home page: http://www1.s390.ibm.com/os390/

From this Web site, you can link directly to the OS/390 softcopy books by selecting the Library icon. You can also link to IBM Direct to order hardcopy books.

How to Send Your Comments

Your feedback is important in helping to provide the most accurate and high-quality information. If you have any comments about this book or any other DFSMS documentation:

- Send your comments by e-mail to:
  - IBMLink from US: starpubs@us.ibm.com
  - IBMLink from Canada: STARPUBS at TORIBM
  - IBM Mail Exchange: USIB3VVD at IBMMAIL
  - Internet: starpubs@us.ibm.com

  Be sure to include the name of the book, the part number of the book, version and product name, and if applicable, the specific location of the text you are commenting on (for example, a page number or a table number).
- Fill out one of the forms at the back of this book and return it by mail or by giving it to an IBM representative. If the form has been removed, address your comments to IBM Corporation, RCF Processing Department M86/050, 5600 Cottle Road, San Jose, California 95193-0001, U.S.A.

Chapter 1. Creating DFSMSrmm Reports

DFSMSrmm is an OS/390® 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, decide 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 your do not have full-screen viewing capability 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 when it is required.

Consider using the DFSMSrmm-supplied standard reports for reporting requirements, to 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.

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, the development time and resource required to use the API might be higher than when 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 2 on page 2:

```
Volume Owner    Rack   Assigned   Expiration Location Dsets St Act   Dest.
                       date       date
------ -------- ------ ---------- ---------- -------- ----- -- ----- --------
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 2. Example of a List of Volumes Owned by a Single User

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 *OS/390 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 2. Creating Inventory Management Reports” on page 5. See *OS/390 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 3. Creating Reports with DFSMSrmm Utilities” on page 25 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 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 4. Creating Reports Using DFSMSrmm-Supplied EXECs” on page 45 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 5. Using DFSMSrmm with DFSORT" on page 75 for further information.

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 *OS/390 DFSMSrmm Application Programming Interface* for information about how to use the DFSMSrmm application programming interface.

Chapter 2. 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 *OS/390 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. If you plan 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 3 shows the data sets used for inventory management reports, along with a description of each.

Table 3. 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 extract data set is required when you specify the RPTEXT parameter.

When you protect these data sets, make sure that the RACF® user ID associated with the DFSMSrmm subsystem has the authority to write to the data sets. RACF is a component of the Secureway Security Server for OS/390.

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:

- 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 *OS/390 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 EDGRPTD, the DFSMSrmm reporting utility and to the EDGRRPTE exec to create reports. See “Chapter 3. Creating Reports with DFSMSrmm Utilities” on page 25 for information about using the EDGRPTD utility and the EDGRRPTE exec.

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 records. 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 25 and “Chapter 5. Using DFSMSrmm with DFSORT” on page 75 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 189 for the layout of the header record.

The current date is the default.

Table 4 shows the date formats that can be used for the records written to the extract data set, records that are written to the ACTIVITY file, and any messages issued during inventory management. The default date format for all date fields is the value 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 described in *OS/390 DFSMSrmm Implementation and Customization Guide*.

Table 4. Date Formats

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

Table 4. Date Formats (continued)

Value	Language	Format	Example
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 185 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 127.

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 207 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 3 on page 9, 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 207 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 207 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            RMMUSER.D001                                             D
 RMMUSER.D002                                               A00004   N      Y            RMMUSER.D002                                             D
 RMMUSER.D002                                               A00005   N      Y            RMMUSER.D002                                             D
 RMMUSER.D003                                               A00007   N      Y            RMMUSER.D003                                             D
 RMMUSER.D003                                               A00008   N      Y            RMMUSER.D003                                             D

 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                                    JNAME0D1   A00021   Y      N      D     DSM*.DS2                                                 D
 DSMASTER.DS2                                    JNAME0D1   A00022   Y      N      D     DSM*.DS2                                                 D
 DSMASTER.DS3                                    JNAME0D2   A00022   Y      N      D     DSM*.DS3                                                 D
 DSMASTER.DS3                                    JNAME0D2   A00023   Y      N      D     DSM*.DS3                                                 D
 DSMASTER.DS4                                               A00024   Y      N      D     DSM*.DS4                                                 D
 DSMASTER.DS4                                               A00024   Y      N      D     DSM*.DS4                                                 D
```

Figure 3. Sample VRS Report

VRSS Report

The VRSS report as, shown in Figure 4, 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 207 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                                      5
```

Figure 4. Sample VRSS Report

RETDATE Report

The RETDATE report shown in Figure 5 on page 11 provides information about the changes to the retention date of a data set that occur when you run vital record processing. DFSMSrmm changes these dates when you run vital record processing and 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 8 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 207 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 5. Sample RETDATE Report

RETDS Report

The RETDS report as shown in Figure 6 on page 12, 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 6. Sample RETDS Report

MATCHVRS Report

The MATCHVRS report as shown in Figure 7 on page 13, 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 207 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 207 for the vital record specification types.

2nd. VRS
This is the name of the first VRS in the secondary VRS chain that DFSMSrmm matches to a data set.

2nd. JOB
This is the jobname of the first VRS in the secondary VRS chain that DFSMSrmm matches to a data set.

```
1Data Sets Matching to different VRS        05/31/00        02:02:25        - 1 -

 NEW PRIMARY VRS:  DRMMUSER.D001

 DSNAME                                     JOBNAME    VOLSER   O-ST   N-ST   DROPRSN   OLD PRIMARY VRS                                 JOB MASK   TYPE   2nd. VRS   2nd. JOB
 ----------------------------------------   --------   ------   ----   ----   -------   -----------------------------------------   --------   ----   --------   --------
 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
1Data Sets Matching to different VRS        05/31/00        02:02:25        - 2 -

 NEW PRIMARY VRS:  DRMMUSER.D002

 DSNAME                                     JOBNAME    VOLSER   O-ST   N-ST   DROPRSN   OLD PRIMARY VRS                                 JOB MASK   TYPE   2nd. VRS   2nd. JOB
 ----------------------------------------   --------   ------   ----   ----   -------   -----------------------------------------   --------   ----   --------   --------
 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
1Data Sets Matching to different VRS        05/31/00        02:02:25        - 3 -

 NEW PRIMARY VRS:  DRMMUSER.D003

 DSNAME                                     JOBNAME    VOLSER   O-ST   N-ST   DROPRSN   OLD PRIMARY VRS                                 JOB MASK   TYPE   2nd. VRS   2nd. JOB
 ----------------------------------------   --------   ------   ----   ----   -------   -----------------------------------------   --------   ----   --------   --------
 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
1Data Sets Matching to different VRS        05/31/00        02:02:25        - 4 -

 NEW PRIMARY VRS:  DRMMUSER.D004

 DSNAME                                     JOBNAME    VOLSER   O-ST   N-ST   DROPRSN   OLD PRIMARY VRS                                 JOB MASK   TYPE   2nd. VRS   2nd. JOB
 ----------------------------------------   --------   ------   ----   ----   -------   -----------------------------------------   --------   ----   --------   --------
 RMMUSER.D004                                          A00009   N      Y
 RMMUSER.D004                                          A00009   N      Y
 RMMUSER.D004                                          A00009   N      Y
1Data Sets Matching to different VRS        05/31/00        02:02:25        - 5 -

 NEW PRIMARY VRS:  DRMMUSER.D005

 DSNAME                                     JOBNAME    VOLSER   O-ST   N-ST   DROPRSN   OLD PRIMARY VRS                                 JOB MASK   TYPE   2nd. VRS   2nd. JOB
 ----------------------------------------   --------   ------   ----   ----   -------   -----------------------------------------   --------   ----   --------   --------
 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 7. Sample MATCHVRS Report

MATCHVS Report

The MATCHVS report, as shown in Figure 8 on page 14, 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 MATCHVS 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 207 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 8. Sample MATCHVS 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 9 on page 15, 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 207 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.

```
1Data 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
1Data 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
1Data 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
1Data 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
1Data 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
1Data 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
1Data 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 9. Sample SUBCHN Report

SUBCHNS Report

The SUBCHNS report, as shown in Figure 10, 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 10. Sample SUBCHNS Report

JCL for EDGJACTP

To create a report, use the JCL as shown in Figure 11 on page 17.

```
//*EDGJACTP JOB <JOB STATEMENT PARAMETERS>
//*
//*******************************************************************
//* OS/390 DFSMSrmm V2R10                                           *
//*                                                                 *
//* PROPRIETARY V3 STATEMENT                                        *
//* LICENSED MATERIALS - PROPERTY OF IBM                            *
//* "RESTRICTED MATERIALS OF IBM"                                   *
//* 5647-A01                                                        *
//* (C) COPYRIGHT 1993,2000  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 11. 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 11. 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(MATCHVS) -
     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 11. 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 11. 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 11. 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 11. 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
//MATCHVS  DD DSN=RMM.REPORT.MATCHVS,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 11. JCL for EDGJACTP (Part 7 of 7)

Chapter 3. Creating Reports with DFSMSrmm Utilities

The DFSMSrmm report utilities EDGRPTD and EDGAUD help you keep track of your removable media inventory and to help you monitor access to classified tape data. Table 5 shows information you can obtain using EDGRPTD and EDGAUD.

Table 5. DFSMSrmm Report Utilities and Samples

To Obtain	Use	Which Requires the
Inventory, movement, and scratch reports	EDGRPTD described on page 25	Extract data set
Audit reports and security reports using System Management Facility (SMF) records	EDGAUD described on page 35	SMF data set

You can write customized reports by using DFSORT's ICETOOL. For information on using DFSORT's ICETOOL, see "Chapter 5. Using DFSMSrmm with DFSORT" on page 75.

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 29.
- 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 31.
- 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 33.

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 12.

```
//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)'
//REPTEXT DD DISP=SHR,DSN=RMMTST.PR0914X.REPTEXT
//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 12. Example of JCL for EDGRPTD -Creating Inventory, Movement, and Scratch List Reports

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

EXEC Parameters for EDGRPTD

Figure 13 shows the EXEC parameters for EDGRPTD.

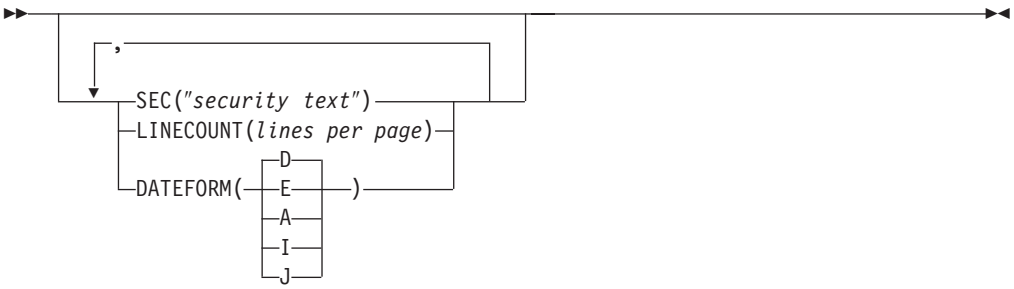


Figure 13. EDGRPTD EXEC Parameters

The EXEC parameters for EDGRPTD are:

DATEFORM(*A*|*E*|*I*|*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(*lines per page***)**
Lines per page specifies the page length. The default is 54 lines per page. Specify LINECOUNT to override the LINECOUNT value specified by the LINECOUNT operand of the EDGRMMxx parmlib member OPTION command. See *OS/390 DFSMSrmm Implementation and Customization Guide* for information about the LINECOUNT operand.

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.

Note: 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 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 must 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 27. Each output file can contain multiple reports.

DFSMSrmm produces a separate report for each location where volumes reside. The reports, as shown in Figure 14 on page 30, 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.

O 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 14 is an example of an inventory report 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 31 for information about obtaining movement information.

```
1                                   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            O
WK0009 WK0009      3 D094746            O


TOTAL NUMBER OF ENTRIES LISTED = 8
```

Figure 14. Volume Inventory Report (Part 1 of 5)

```
1                                   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           O
A00471 A00471     20 D094746            I
A01128 A01128      4 D094746            O
A01658 A01658      5 D094746            O
A01668 A01668      6 D094746            O
A01669 A01669      7 D094746            O


TOTAL NUMBER OF ENTRIES LISTED = 6
```

Figure 14. Volume Inventory Report (Part 2 of 5)

```
1                                   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             O
FOK004 FOK004      1 MAXWEAL            O
FOK005 FOK005      7 MAXWEAL            O
RMX001 RMX001      2 MAXWEAD            O
RMX002 RMX002      9 MAXWEAD            I


TOTAL NUMBER OF ENTRIES LISTED = 8
```

Figure 14. Volume Inventory Report (Part 3 of 5)

```
1                                   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      O
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 14. 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 14. 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 27. 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 15 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 15 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     ------- -- -- ----- ---- -------- -----    -- -------- -----       DATE  2000/06/14

BIN    VOLUME RACK   OWNER    MEDIANAME T  BIN    VOLUME RACK   OWNER   MEDIANAME T  BIN    VOLUME RACK   OWNER    MEDIANAME 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 TOMKIN1       3480 Y
    45 C01256 C01256 FLECK         3480 Y
    46 C01257 C01257 MBAKER        3480 Y
```

Figure 15. Volume Movement Report

Figure 16 on page 33 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 31 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     ------- -- -- ----- ---- -------- -----    -- -------- -----       DATE  2000/06/14

BIN    VOLUME RACK   OWNER    MEDIANAME T  BIN    VOLUME RACK   OWNER    MEDIANAME T BIN    VOLUME RACK   OWNER    MEDIANAME 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 16. 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.

Using Scratch List Reports

You can request a report that lists scratch volumes defined to DFSMSrmm. There are two types of scratch list reports.

- The scratch list report contains the list of all 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 is a snapshot of your volumes at a single point in time and will likely contain different volumes each time you run the report. Because the report is produced at a specific time, when you use the report you might find differences between the information in report and the information in the DFSMSrmm control data set. One reason for the difference is that your scratch volume inventory changes as volumes are used. Another reason might be that you have run expiration processing. Both these events can change information in the control data set that might not be reflected in the report. Each time the scratch list is produced, the list provides a total list of all the scratch volumes at that time.
- The new scratch list report lists volumes returned to scratch status since the last time you ran the scratch list report. The new scratch list returns only those volumes returned to scratch since the last time you requested a scratch list. The last list was either a scratch list (all volumes) or a new scratch list.

DFSMSrmm produces scratch list reports in the NEWSCR and SCRLIST output files, as described in “DD Statements for Scratch List Reports” on page 28. DFSMSrmm uses the SCRDATE output file to keep track of the latest volume scratch date and time. Producing a scratch list report is optional. You can decide which reports to produce by specifying the DD statements for the reports you want. You can combine the production of scratch reports with movement reports and inventory reports in the same run of EDGRPTD.

The NEWSCR 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.

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 17. 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 17 is an example of a scratch list report.

```
                                CENTERED CLASSIFICATION

REMOVABLE MEDIA MANAGER                  SCRATCH VOLUMES BY POOL NAME REDSTRIPE                              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 17. Scratch List Report

Figure 18 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 18. New Scratch List Report

Return Codes for EDGRPTD

EDGRPTD issues one of the return codes shown in Table 6.

Table 6. 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 *OS/390 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 19.

```
//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 19. JCL for EDGAUD

EXEC Parameters for EDGAUD

Figure 20 shows the EXEC parameters for EDGAUD.

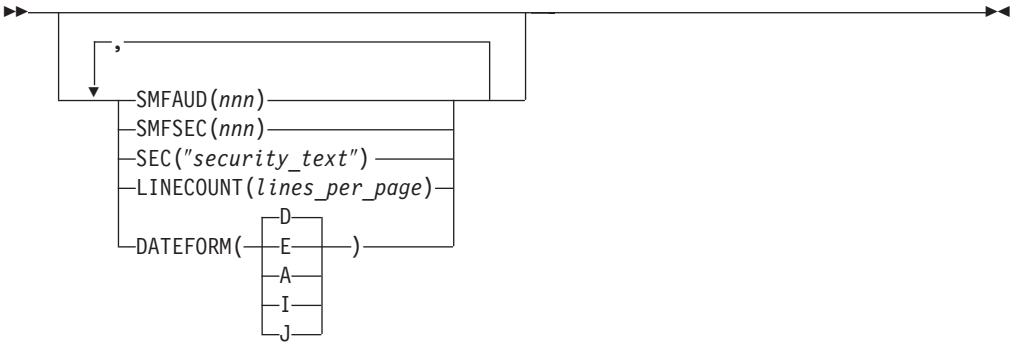


Figure 20. EDGAUD EXEC Parameters

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.

SECREPT

SECREPT 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 21 shows the format of the audit report selection options that you can supply for SYSIN.

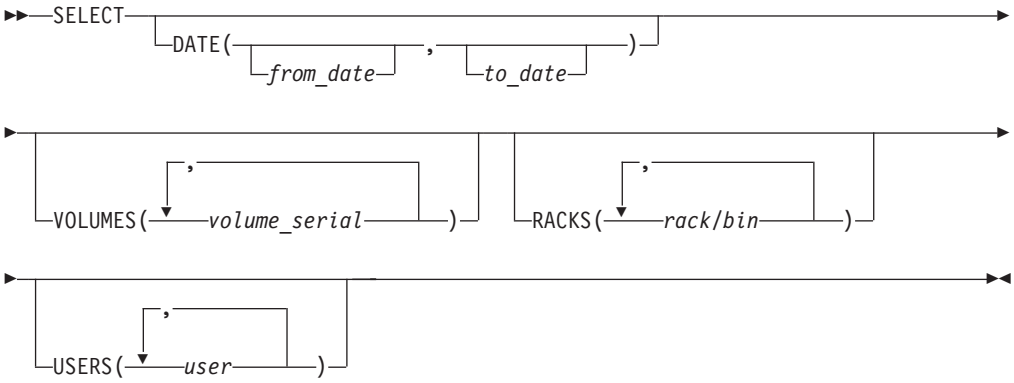


Figure 21. EDGAUD SYSIN Commands

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 22.

```
//S1SMF03 JOB 'SMF/S1SMF03',NOTIFY=LYONS,CLASS=A,USER=LYONS,
//         PASSWORD=LYONS,MSGLEVEL=(1,1),MSGCLASS=H,REGION=4M
//AUDREPT  EXEC PGM=EDGAUD,REGION=5M,
//         PARM='SMFAUD(248),SMFSEC(249),SEC(IUO),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),
//            DCB=(DSORG=PS,RECFM=VBS,BLKSIZE=4096,LRECL=32000)
//SECREPT  DD DISP=(NEW,CATLG),UNIT=SYSDA,
//            DSN=RMMTST.S1SMF03.SECREPT,
//            SPACE=(4096,(10,1),RLSE),
//            DCB=(DSORG=PS,RECFM=VBS,BLKSIZE=4096,LRECL=32000)
//SYSOUT   DD DUMMY
//SYSIN    DD *
    SELECT DATE(02/21/1993,02/24/1993) -
    VOLUMES(A0423*,A0433*) RACK(A0423*,A0433*) -
    USERS(LYONS,RMMU001,SMFU001,SMFU002,SMFU003)
```

Figure 22. 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(1993/123,1993/223)
```

RACKS(*rack|bin***)**
Specify to limit the report to specific rack numbers or bin numbers. A rack number is six alphanumeric characters in any combination. A bin number is six numerics 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 characters, or $, #, or @, 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 *OS/390 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 23 on page 40, 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 23 on page 40 shows excerpts from a security report.

```
REMOVABLE MEDIA MANAGER                          REPORT OF ACCESSES TO SECURE VOLUMES
5647-A01 (C) Copyright IBM Corp. 1993,2000       ------ -- -------- -- ------ -------                        DATE  2000/06/14

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.USRPCK.BACKUP               002030   1   1 3490     CREATE SECURE   SYS1     DILE     3090 02/19/2000 14:50:50
USERJOY.S1ATL026.USRPCK.BACKUP               002030   1   1 3490     CREATE SECURE   SYS1     MIKE     3090 02/19/2000 15:15:11
USERJOY.S1ATL026.USRPCK.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 23. 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 24 on page 42. 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 24 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 24. 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      GILLESP  16/11/1999 04:00:14 E4E4     MASTER  REMOTE            RDRHSME  07/11/1999 U        UPDATE
000044   111056      GILLESP  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 24. 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     SCRTCH  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     SCRTCH  SHELF                                 U        CREATE
*HKP     111206 111206        16/11/1999 01:01:07 E4E4     SCRTCH  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     SCRTCH  SHELF             WALDO    28/07/1999 U        CREATE
*HKP     111280 111280        16/11/1999 01:01:09 E4E4     SCRTCH  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     SCRTCH  SHELF             RDROPCA  07/10/1999 U        CREATE
*HKP     111282 111282        16/11/1999 01:01:11 E4E4     SCRTCH  SHELF                                 U        UPDATE
```

Figure 24. Audit Trail Report (Part 3 of 3)

Return Codes for EDGAUD

EDGAUD issues one of the return codes shown in Table 7.

Table 7. 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 4. Creating Reports Using DFSMSrmm-Supplied EXECs

DFSMSrmm Sample Provided in SAMPLIB

- EDGJRPT Sample JCL to Create Reports Using the Extended Report Extract Data Set

DFSMSrmm provides Restructured Extended Executor (REXX) execs and JCL that you can use to create the reports described in Table 8. 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 48.

You can use the sample EDGJRPT to invoke the EDGRRPTE exec to create the reports. The input to the reporting execs is the extended extract data set.

Use the EDGRRPTM, EDGRRPTN, or EDGRRPTR execs to create an extended extract data set. The REXX execs are in SYS1.SEDGEXE1. The extended extract data set contains volume and data set records that are combined into a single record by concatenating volume and data set information. The data set record is appended at 800 bytes. The layout is built using the EDGRVEXT volume record mapping macro and the EDGRDEXT data set record mapping macro. The data set record starts at offset 800. See "Appendix B. DFSMSrmm Mapping Macros" on page 185 for the mapping for these macros. For stacked volumes, DFSMSrmm merges the stacked volume location information into the location information for all volumes contained in the stacked volume.

EDGRRPTM
: Use the EDGRRPTM REXX exec to create an extended extract data set only for multiple data set reports or multiple volume reports.

EDGRRPTN
: Use the EDGRRPTN REXX exec to add the volume count to the extended extract data set for the entire inventory.

EDGRRPTR
: Use the EDGRRPTR REXX exec to create an extended report extract data set.

EDGRRPTE
: Use the EDGRRPTE REXX exec to create the reports.

Use the sample EDGJRPT JCL and these execs to produce the reports shown in Table 8.

Table 8. DFSMSrmm Reports

Report Name	Description
REPORT01	Pull list for scratch tapes sorted 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

Table 8. DFSMSrmm Reports (continued)

Report Name	Description
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 all data set names at loan locations
REPORT10	List of all volume serial numbers at loan locations
REPORT11	List of all multivolume data sets
REPORT12	Movement report including the first data set name on the volume.
REPORT13	Movement report sorted by storage location bin number
REPORT14	Movement report sorted by volume serial number
REPORT15	Inventory list sorted by volume serial number including volume count

How to Create Reports

Use the sample EDGJRPT JCL to create an extended extract data set from an extract data set created during DFSMSrmm inventory management. Then use EDGRRPTE to create the DFSMSrmm-supplied reports. See “Tailoring the DFSMSrmm-Supplied EXECs to Create Your Own Reports” on page 48 for further information.

Make a copy of sample EDGJRPT JCL that is in SAMPLIB. The DFSMSrmm extract data set is input to EDGJRPT to create an extended report extract data set. EDGJRPT then selects and sorts the records to create the report.

To create reports:

1. Create a DFSMSrmm extract data set by using the DFSMSrmm EDGHSKP utility. Use the ISO or JULIAN DATEFORM to sort the date fields in the correct sort order. Refer to the step named STEP01 in the sample EDGJRPT JCL.
2. Make sure all the messages that the DFSMSrmm subsystem issues during inventory management are copied to your job log. Refer to the step named SORTVOL in the sample EDGJRPT JCL.
3. Create a temporary data set that includes only extract data set volume records as mapped by EDGRVEXT record type V. This file is sorted by volume serial number in ascending order. Refer to the step named STEP02 in the sample EDGJRPT JCL.
4. Create a temporary data set that includes only the data set records from the extract data set as mapped by EDGRDEXT record type D. See “Extract Data Set Data Set Name Record: EDGRDEXT” on page 186 for a mapping of the EDGRDEXT macro. The records in the temporary data set are sorted by volume serial number in ascending order. Refer to the step named SORTDSN in the sample EDGJRPT JCL.
5. Create a new extended extract data set. Each record is a combination of an extract data set volume record EDGRVEXT and an extract data set data set record EDGRDEXT. The LRECL of the new extended extract data set is 1200 bytes, and the record format is FB. If you change the record format to VB, you must also change all sort options in sort steps that follow. Refer to the step named EXTEXTR and the SORTnn steps in the sample EDGJRPT JCL.

6. Create a temporary file for each report you want to run. For example, if you want REPORT01, you must create a temporary file during step SORT01. Skip these steps for the reports you do not want to run. Refer to the SORTnn step in the sample EDGJRPT JCL.
7. Add additional information to the extended extract data set REPORT11 and REPORT15.

   Add information about the first file on the first volume for each record to the extended extract data set. This information is required if you want to sort REPORT11 by the first file on the first volume. If you run REPORT11, you must run SORT11A, SORT11B, and SORT11C. You can skip this step if you do not select REPORT11. Refer to the steps SORT11A, SORT11B, and SORT11C in the sample EDGJRPT JCL.

   Add information about the volume identifier and data set sequence to each record to the extended extract data set. If you run REPORT15, you must run SORT15A and SORT15B. Refer to the steps SORT15A and SORT15B in the sample EDGJRPT JCL.
8. Create a temporary file to sort the records by the first file on the first volume. If you run REPORT11, you must create this file by running Step SORT11B. You can skip this step if you do not select REPORT11. If you run REPORT15, you must create this file by running Step SORT15B. You can skip this step if you do not select REPORT15. Refer to the steps SORT11B or SORT15B in the sample EDGJRPT JCL.
9. Produce the extended reports. If you have omitted any of the SORTnn steps, also omit the corresponding //REPORTnn DD statements. Refer to the step named EXTRPDT in the sample EDGJRPT JCL.

Tailoring the Sample JCL for EDGJRPT

Before you can use the JCL for the extended extract dataset, you must customize the sample JCL EDGJRPT for your environment.

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. Change the data set name of the report extract file to your own naming convention. You must make this change wherever the RMM.EXTRACT.FILE file report name is specified.
4. Change the data set name of the extended report extract file to your own naming convention. You must make this change wherever the RMM.EXTENDED.EXTRACT.FILE report file nameis used in the sample.
5. Change the SPACE and UNIT parameter for all SORTWKnn DD statements.
6. Change the SPACE and UNIT parameter for the extended report extract file. Calculate DASD space requirements for the extended extract data set by multiplying the number of data set records by 1200 bytes for each record.
7. The lines per page are defined as a parameter to the EDGRRPTE REXX procedure. If you need to use a value other than 54, replace the ″054″ value with your own choice.
8. Select reports by using the parameters that are passed to the EDGRRPTE REXX procedure. Enter a

   Y

at the corresponding position to get a report produced. If you do not want to produce all reports, omit the corresponding sort steps and REPORTnn DD statements. Figure 25 shows how to pass parameters to the EDGRRPTE procedure. For the example shown in Figure 25, all reports except REPORT06 and REPORT07 would be selected.

```
EX 'SYS1.SEDGEXE1(EDGRRPTE)' -
      '054 Y Y Y Y Y N N Y Y Y Y Y Y Y Y'
        |  | | | | | | | | | | | | | | '- report 15 - Y/N
        |  | | | | | | | | | | | | | '--- report 14 - Y/N
        |  | | | | | | | | | | | | '----- report 13 - Y/N
        |  | | | | | | | | | | | '------- report 12 - Y/N
        |  | | | | | | | | | | '--------- report 11 - Y/N
        |  | | | | | | | | | '----------- report 10 - Y/N
        |  | | | | | | | | '------------- report 09 - Y/N
        |  | | | | | | | '--------------- report 08 - Y/N
        |  | | | | | | '----------------- report 07 - Y/N
        |  | | | | | '------------------- report 06 - Y/N
        |  | | | | '--------------------- report 05 - Y/N
        |  | | | '----------------------- report 04 - Y/N
        |  | | '------------------------- report 03 - Y/N
        |  | '--------------------------- report 02 - Y/N
        |  '----------------------------- report 01 - Y/N
        '-------------------------------- lines per page
```

Figure 25. Report Selection

9. Figure 26 shows you 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 will be written on each page. Remember to use the correct continuation character ″**+**″ to suppress all the leading blanks in the new line.

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

Figure 26. Creating a Report Security Header

Tailoring the DFSMSrmm-Supplied EXECs to Create Your Own Reports

The DFSMSrmm-supplied report REPORT01, when used as is, produces a pull list for scratch volumes 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 sample EDGJRPT JCL and the EDGRRPTE REXX execs to avoid losing any modifications you make to the DFSMSrmm-supplied reports because you will lose your changes when DFSMSrmm replaces them.
2. To change the sort order and criteria, change the SORT FIELDS and INCLUDE statement in the sample JCL. You can find the fields for the SORT FIELD and the INCLUDE statement by looking at the mapping of the extended extract data set consisting of EDGRVEXT and EDGRDEXT.

   Figure 27 on page 49 shows the original JCL where REPORT01 is sorted by volume serial number in the sample EDGJRPT JCL.

```
//*        ************************************************************
//*        * SORTED BY VOLSER IN ASCENDING ORDER                       *
//*        * INCLUDE ONLY STATUS = SCRATCH AND DATA SET SEQUENCE LT 2*
//*        ************************************************************
//SYSIN    DD   *
  SORT FIELDS=(5,6,CH,A)
  INCLUDE  COND=(318,8,CH,EQ,C'SCRATCH ',
             AND,911,4,CH,LT,C'   2')
/*
```

Figure 27. Sorting by Volume Serial Number and Volume Status

Figure 28 shows 371 in the SORT FIELD which is the offset in the EDGRVEXT mapping macro for the temporary write errors.

```
//*        ************************************************************
//*        * SORTED BY TEMPORARY WRITE ERRORS IN DESCENDING ORDER    *
//*        * INCLUDE ONLY STATUS = SCRATCH AND DATA SET SEQUENCE LT 2*
//*        ************************************************************
//SYSIN    DD   *
  SORT FIELDS=(371,4,CH,D)
  INCLUDE  COND=(318,8,CH,EQ,C'SCRATCH ',
             AND,911,4,CH,LT,C'   2')
             AND,371,4,CH,GT,C'   0')
/*
```

Figure 28. Sorting by Volume Serial Number, Volume Status, and Temporary Errors, Excluding Volumes without Errors

3. To select the reports you want to produce, modify the selection values in EDGJRPT as shown in Figure 29. If you use the values in Figure 29, only REPORT01 is produced. You can also modify the classification for this report at this time.

```
EX 'SYS1.SEDGEXE1(EDGRRPTE)' -
  '054 Y N N N N N N N N N N N N N +
    Internal use only'
```

Figure 29. Selecting REPORT01

4. To change the report header, modify the DFSMSrmm-supplied EDGRRPTE REXX exec shown in Figure 30.

```
t2.1  = center('Scratch Tapes by Volume Serial Number',70)
t0.2  = left('EDGRPT01',10)
```

Figure 30. REPORT01 Report Header

Figure 31 shows the change to create a new report header named Volumes with Temporary Errors.

```
t2.1  = center('Volumes with Temporary Errors',70)
t0.2  = left('EDGRPT01',10)
```

Figure 31. REPORT01 Report Header Modified

5. To change the titles on the columns, modify the DFSMSrmm-supplied EDGRRPTE REXX exec. *out.cs = asa.2* 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 32 shows the report column headings as they are defined in the sample EDGRRPTE exec.

```
out.cs = asa.2 tvolser.1 tdsname.1 tvolseq.1 tdsnseq.1,
               tcrdate.1 texpdto.1,
               tflag.1 tltyp.1,
               tmedty.1 tmedrec.1,
               thome.1 tstore.1 tloc.1,
               terror.1
```

Figure 32. REPORT01 Column Headings

Figure 33 shows the variable *ttwrte.1*, which is the column heading for temporary errors.

```
out.cs = asa.2 tvolser.1 tdsname.1 tcrdate.1 ttwrte.1,
               texpdto.1,
               tflag.1 tltyp.1,
               tmedty.1 tmedrec.1,
               thome.1 tstore.1 tloc.1,
               terror.1
```

Figure 33. REPORT01 Column Headings Modified

6. 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 exec starting at the label lclexmap. *out.cs = asa.0* is the output value returned in the report. Figure 34 shows the JCL from the sample EDGRRPTE exec.

```
out.cs = asa.0 rvvolser rddsname rvvolseq rddsnseq,
               rvcrdate rvexpdto,
               lclflag  rvlabel,
               rvmedty rvmedrec,
               rvhloc rvloctyp lcloc lclerror
```

Figure 34. REPORT01 Returned Values

Figure 35 shows the addition of the *rvtwerr* variable to obtain the temporary write error information.

```
out.cs = asa.0 rvvolser rddsname rvcrdate rvtwerr,
               rvexpdto,
               lclflag  rvlabel,
               rvmedty rvmedrec,
               rvhloc rvloctyp lcloc
               lclerror
```

Figure 35. REPORT01 Returned Values Modified

7. Submit the job.

List of DFSMSrmm-Supplied Reports

Here are details about the reports 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 36 on page 52, 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.

```
DFSMSrmm   Internal use only                              Scratch Tapes by Volume Serial Number                 PAGE -   00001
EDGRPT01   --------------------------------                                                                    DATE -   99341
Volume                                                Vol- DSN- Create     Org. Exp.  V LBL Media    Rec. Home     S Location Sum.
Serial Data Set Name                                  Seq. Seq. Date       Date       F Typ Type     Fmt  Location S Name     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 36. 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 37 on page 54, 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.

```
DFSMSrmm   Internal use only                              Scratch Tapes by Data Set Name                    PAGE -   00001
EDGRPT02   --------------------------------                                                                 DATE -   99341
Volume                                          Vol- DSN- Create     Org. Exp.  V LBL Media    Rec. Home     S Location Sum.
Serial Data Set Name                            Seq. Seq. Date       Date       F Typ Type     Fmt  Location S Name     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 37. 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 38 on page 55, 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, if this field is blank, the name of the job that created the first data set on the volume.

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 -   00067
EDGRPT03   ------------------------------                                                                  DATE -   99285
Volume                                          Vol- DSN- Creating Create     Create Expiration Volume         Rec. V V Location
Serial Data Set Name                            Seq. Seq. Jobname  Date       Time   Date       Ref. Date  LBL Fmt  S R 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.   7258 Entries listed
```

Figure 38. Sample REPORT03 Output: Inventory List by Volume Serial Number

REPORT04: Inventory List by Data Set Name

REPORT04, as shown in Figure 39 on page 57, 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 the name of the job 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.

```
DFSMSrmm   Security heading text                    Inventory List by Data Set Name                    PAGE -   00001
EDGRPT04   ------------------------------                                                               DATE -   95285
                                          Volume Vol- DSN- Creating Create     Create Expiration Volume         Rec. V V Location
Data Set Name                             Serial Seq. Seq. Jobname  Date       Time   Date       Ref. Date  LBL Fmt  S R 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.   6480 Entries listed
```

Figure 39. Sample REPORT04 Output: Inventory List by Data Set Name

REPORT05: Inventory of Data Sets Including Used Kilobytes

REPORT05, as shown in Figure 40 on page 59, 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 the name of the job 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 DFSMShsm and DFSMSdss 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.

```
DFSMSrmm   Security heading text                    Inventory List by Data Set Name incl. used KB             PAGE -   00001
EDGRPT05   ------------------------------                                                                     DATE -   95285
                                           Volume Vol- DSN- Creating Create     Create Expiration Volume          Rec. V Kilobytes
Data Set Name                              Serial Seq. Seq. Jobname  Date       Time   Date       Ref. Date  LBL Fmt  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.   6480 Entries listed
```

Figure 40. Sample REPORT05 Output: Inventory of Data Sets Including Used Kilobytes

REPORT06: Inventory of Volume Serial Numbers by Location

REPORT06, as shown in Figure 41 on page 60, 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.

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 and 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 the name of the job 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 -   00001
EDGRPT06   ------------------------------                                                                      DATE -   95285
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.ESAS.G0053V00                   VRESAS      2    1 1992/240   212810 1995/295   1995/277   SL  36TR M
SC0515 SSC.VITALREC.BUILD.ESAS.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.ESAS.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.   57 Entries listed

DFSMSrmm   Security heading text                  Inventory of Volumes in Storage Location REMOTE             PAGE -   00003
EDGRPT06   ------------------------------                                                                      DATE -   95285
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                  000050  RMMTEST1    1    1 1992/265   093450 1995/059   1995/059   SL  18TR M
SC1196 SCHLUM.RMMDEMO.MMOVE.VOL4                  000055  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 41. Sample REPORT06 Output: Inventory of Volume Serial Number by Location

REPORT07: Inventory of Data Set Names by Location

REPORT07, as shown in Figure 42 on page 62, 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 and 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 the name of the job 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 Data Set Names in Storage Location DISTANT        PAGE -   00001
EDGRPT07   ------------------------------                                                                    DATE -   95285
                                          Volume BIN     Vol- DSN- Creating Create     Create Expiration Date           Rec. V
Data Set Name                             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.   57 Entries listed

DFSMSrmm   Security heading text              Inventory of Data Set Names in Storage Location REMOTE         PAGE -   00003
EDGRPT07   ------------------------------                                                                    DATE -   95285
                                          Volume BIN     Vol- DSN- Creating Create     Create Expiration Date           Rec. V
Data Set Name                             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 42. Sample REPORT07 Output: Inventory of Data Set Names by Location

REPORT08: Inventory of Bin Numbers by Location

REPORT08, as shown in Figure 43 on page 64, 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 and 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 the name of the job 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 -   00002
EDGRPT08   ------------------------------                                                                      DATE -   95285
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.   57 Entries listed

DFSMSrmm   Security heading text                Inventory of BIN numbers in Storage Location REMOTE           PAGE -   00003
EDGRPT08   ------------------------------                                                                      DATE -   95285
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.   61 Entries listed
```

Figure 43. 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 44 on page 65, 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 the name of the job 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 -   00001
EDGRPT09   ------------------------------                                                                       DATE -   95285
                                                Volume Vol- DSN- Creating Create     Create Expiration Volume         Rec. V V
Data Set Name                                   Serial Seq. Seq. Jobname  Date       Time   Date       Ref. Date  LBL Fmt  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.   15 Entries listed
```

Figure 44. 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 45 on page 67, 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 the name of the job 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 -   00001
EDGRPT10   ------------------------------                                                                     DATE -   95285
Volume                                           Vol- DSN- Creating Create     Create Expiration Volume         Rec. V V
Serial Data Set Name                             Seq. Seq. Jobname  Date       Time   Date       Ref. Date  LBL Fmt  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 45. Sample REPORT10 Output: List all Volume Serial Numbers that Reside in a Loan Location

REPORT11: List all MultiVolume and MultiFile Sets

REPORT11, as shown in Figure 46 on page 68, 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.

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 the name of the job 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.

```
DFSMSrmm   Security heading text                        Multi-Volume/Multi-Data Set Report                 PAGE -   00001
EDGRPT11   ----------------------------                                                                     DATE -   95285
Volume Vol- DSN-                                          Expiration First  Prev.  Next   Create   Creating Create     Create
Serial Seq. Seq. Data Set Name                            Date       Volser Volser Volser Userid   Jobname  Date       Time
------ ---- ---- ------------------------------------------ ---------- ------ ------ ------ -------- -------- ---------- ------
SC0464    1    1 ADDONS.PANELS                                        SC0464               SIEGEL            1992/240   084146
SC0464    1    2 ADDONS.SKELS                                         SC0464               SIEGEL            1992/240   084154
SC0464    1    3 ADDONS.EXEC                                          SC0464               SIEGEL            1992/240   084159
SC0464    1    4 ADDONS.EXECFB                                        SC0464               SIEGEL            1992/240   084205
SC0464    1    5 ADDONS.MSGS                                          SC0464               SIEGEL            1992/240   084218
SC0464    1    6 ADDONS.INITVARS                                      SC0464               SIEGEL            1992/240   084223
SC0464    1    7 ADDONS.LOAD                                          SC0464               SIEGEL            1992/240   084226
SC0464    1    8 ADDONS.CNTL                                          SC0464               SIEGEL            1992/240   084232
SC0464    1    9 ADDONS.SOURCE                                        SC0464               SIEGEL            1992/240   084238
SC0464    1   10 ADDONS.OBJ                                           SC0464               SIEGEL            1992/240   084248

SC0695    1    1 BSYSMF.WEEK.G9519V00                    1995/315   SC0695        SC0702 STCOPC   SMFWEEK2 1992/240   140404
SC0702    2    1 BSYSMF.WEEK.G9519V00                    1995/315   SC0695 SC0695 SC0699 STCOPC   SMFWEEK2 1992/240   140646
SC0699    3    1 BSYSMF.WEEK.G9519V00                    1995/315   SC0695 SC0702 SC0704 STCOPC   SMFWEEK2 1992/240   140934
SC0704    4    1 BSYSMF.WEEK.G9519V00                    1995/315   SC0695 SC0699 SC0706 STCOPC   SMFWEEK2 1994/207   141217
SC0706    5    1 BSYSMF.WEEK.G9519V00                    1995/315   SC0695 SC0704        STCOPC   SMFWEEK2 1992/240   141925

SC1017    1    1 BSYSMF.WEEK.G9520V00                    1995/322   SC1017        SC1153 STCOPC   SMFWEEK2 1992/252   155955
SC1153    2    1 BSYSMF.WEEK.G9520V00                    1995/322   SC1017 SC1017 SC1120 STCOPC   SMFWEEK2 1992/265   161018
SC1120    3    1 BSYSMF.WEEK.G9520V00                    1995/322   SC1017 SC1153        STCOPC   SMFWEEK2 1992/265   162051
....

                                                End of Report.   5383 Entries listed
```

Figure 46. Sample REPORT11 Output: List all MultiVolume and MultiFile Sets

REPORT12: Movement Report Including the First Data Set Name, Sorted by Data Set Name

REPORT12, as shown in Figure 47 on page 70, includes all volumes moving among the three built-in storage locations or installation-defined storage locations. REPORT12 is sorted by 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 and 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 the name of the job 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                        Movement report by Data Set Names                  PAGE -   00001
EDGRPT12   ------------------------------             from location SHELF    to location DISTANT           DATE -   95286
                                          Volume BIN     Vol- DSN- Creating Create     Create Expiration Date           Rec. V
Data Set Name                             Serial Number  Seq. Seq. Jobname  Date       Time   Date       stored     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.   51 Entries listed
DFSMSrmm   IBM internal use only                        Movement report by Data Set Names                  PAGE -   00003
EDGRPT12   ------------------------------             from location DISTANT  to location SHELF              DATE -   95286
                                          Volume BIN     Vol- DSN- Creating Create     Create Expiration Date           Rec. V
Data Set Name                             Serial Number  Seq. Seq. Jobname  Date       Time   Date       stored     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.   51 Entries listed
```

Figure 47. Sample REPORT12 Output: Movement Report Including the First Data Set Name

REPORT13: Movement Report Including the First Data Set Name Sorted by Bin Number

REPORT13, as shown in Figure 48 on page 71, includes data set information. REPORT13 is sorted by 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 and 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 the name of the job 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

```
DFSMSrmm   IBM INTERNAL USE ONLY                          Movement report by BIN number                    PAGE -   00001
EDGRPT13   --------------------------------            from location DISTANT  to location ATL3494E          DATE -   98063

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
------- ------------------------------------------ ------ ---- ---- -------- ---------- ------ ---------- ---------- --- ---- -
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 VRWWC150 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 48. Sample REPORT13 Output: Movement Report Including the First Data Set Name Sorted by Bin Number

REPORT14: Movement Report Including the First Data Set Name Sorted by Volume Serial Number

REPORT14, as shown in Figure 49 on page 73, includes data sets. REPORT14 is sorted by 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 and 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 the name of the job 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                    Movement report by Volume Serial Number              PAGE -   00001
EDGRPT14   ------------------------------          from location DISTANT  to location ATL3494E              DATE -   98063

Volume                                          BIN     Vol- DSN- Creating Create     Create Expiration Date           Rec. V
Serial Data Set Name                            Number  Seq. Seq. Jobname  Date       Time   Date       stored     LBL 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 VRWWC150 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 49. 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 50 on page 74 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.

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 and is displayed when no current bin number is set for the volume.

```
1 DFSMSrmm   INTERNAL USE ONLY                              Inventory List by Volume Serial                    PAGE -   00128
  EDGRPT15   --------------------------------                                                                   DATE -   00002
- Volume                                                Vol- Vol- DSN- Create     Create Vol Location BIN
  Serial Data Set Name                                  Seq. Cnt. Seq. Date       Time   Scr Name     Number
  ------ ---------------------------------------------- ---- ---- ---- ---------- ------ --- -------- -------
  100057 MVSP.DUMP3490.TMCFILE                            1    1    1 1999/057   090158  NO                *
  105991 PNDDTAPE.CAI.PPOPTION                            1    1    1 1999/258   165058  NO                *
  105991 PNDDTAPE.TMSCNTL                                 1    1    2 1999/258   165109  NO                *
  105991 PNDDTAPE.TMC.SEQ                                 1    1    3 1999/258   165112  NO                *
  110118 D015436.TMC                                      1    1    1 1999/209   085902  NO                *
  110118 KGRZ.PARMLIB.RMM                                 1    1    2 1999/209   085909  NO                *
  110118 CAI.PPOPTION.OS39025.RMM                         1    1    3 1999/209   085911  NO                *
  111111 EPIC.VSE.CATALOG                                 1    1    1 1997/157   001530  NO                *
  227658 P110006.BB049500                                 1    1    1 1996/261   122931  NO                *
  227658 P110006.BB048600                                 1    1    2 1996/261   124306  NO                *
  227658 P110006.BB048700                                 1    1    3 1996/261   132925  NO                *
  23A100                                                  1    1                      NO                *
  302874 DVSP009.TMC.TRANSFER                             1    1    1 1999/250   155247  NO                *
  302874 DVSP009.VAULT.TRANSFER                           1    1    2 1999/250   160719  NO                *
  302874 DVSP009.PPOPTION.TRANSFER                        1    1    3 1999/250   160724  NO                *
  31427                                                   1    1                      NO                *
  31470  A59G041.NONTMM.TMC                               1    1    1 1999/335   150130  NO                *
  534223 SYSR.B99.TMS.FFM.T99320                          1    1    1 1999/335   154858  NO                *
  68059C BADER.TLMS.RMF                                   1    1    1 1995/086   153951  NO REMOTE   000002
  700946 SYS2.CAPARM.COPY                                 1    1    1 1999/258   170249  NO                *
  700946 CA1.VPD50.COPY                                   1    1    2 1999/258   170252  NO                *
  700946 CA1.RDS50.COPY                                   1    1    3 1999/258   170254  NO                *
  700946 CA1.TMC.GENER                                    1    1    4 1999/258   170257  NO                *
  701341 DE00501.BD.MASTER                                1    1    1 1999/053   105320  NO                *
  702641 DE00501.BD.EDGHSKP                               1    1    1 1999/071   115433  NO                *
  820184                                                  1    1                      NO                *
  822508                                                  1    1                      NO                *
  828271                                                  1    1                      NO                *
  828360                                                  1    1                      NO                *
  999999 DE00501.TMS.CA1R50.TMC                           1    1    1 1999/071   115558  NO                *
  999999 TMS.CA1R50.VAULT                                 1    1    2 1999/074   144505  NO                *
  999999 DVSP.CAI.PPOPTION                                1    1    3 1999/074   144507  NO                *
                                                End of Report.     32 Entries listed
```

Figure 50. Sample REPORT15 Output: Inventory List of Volumes Including the Volume Count

Chapter 5. 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 via ICETOOL, to produce sample reports.

If you are not familiar with DFSORT and ICETOOL, or just want to learn more about them, a good starting place is 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 books, 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. 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 books 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 TSO and have your system automatically generate a job card for you. If a job card is not automatically generated, you need to replace the commented job card with one 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 and data set information and the DFSORT installation defaults 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 51 on page 77 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 taken from the SMF record header:

- Time
- Date
- System identification
- RACF user ID
- Activity type

The ICETOOL JCL example in Figure 51 on page 77 does the following:

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.

Note: 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 79 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 51. Sample ICETOOL JCL for Processing SMF Records

See Figure 57 on page 85 for the equivalent sample JCL using DFSORT symbols.

Figure 52 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 52. Sample DISPLAY Report (VREPT DD)

Producing Commands and Reports from the Extract Data Set

This example shows two tasks 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 185 are used to:

- Create RMM CHANGEVOLUME subcommands to set a release action of REPLACE for all tapes with temporary 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 53 does the following:

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.

Note: You must add 5 to an extract field offset shown in “Appendix B. DFSMSrmm Mapping Macros” on page 185 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 79 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 53. Sample ICETOOL JCL for Processing Extract Records

Figure 54 on page 79 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 54. Sample RMM TSO Subcommands (COMMANDS DD)

Figure 55 shows sample report output.

```
11/05/97        Security Level Distribution Report

Security Level   Number in Level
--------------   ---------------
                             108
IC                          9094
ICR                          310
IUO                         4006
NONE                           9
UNC                          192
```

Figure 55. 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 can increase your productivity by automatically providing the positions, lengths, and formats of the fields and the values of the constants associated with particular 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 associated with DFSMSrmm. You can obtain these IBM-created materials as described in "Appendix A. DFSORT Symbols for Use with DFSMSrmm" on page 127. 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. 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, you just:

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 82. 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 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 56 on page 81 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 56. Symbol Data Set (ACCOUNTS.SYMBOL)

SYMNAMES and SYMNOUT DD Statements

To use symbol processing in your DFSORT or ICETOOL jobs, just 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)
```

Note that 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 57 on page 85 shows a version of the same sample job shown in Figure 51 on page 77. However, this example uses the DFSORT symbols found in the EDGSMFSY symbol mapping described in "Appendix A. DFSORT Symbols for Use with DFSMSrmm" on page 127.

```
//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 57. Sample ICETOOL JCL for Processing SMF Records Using Symbols

Chapter 6. Using DFSMSrmm-Supplied Sample Reports

DFSMSrmm provides sample jobs 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 5. Using DFSMSrmm with DFSORT" on page 75 for information about using DFSORT and DFSORT's ICETOOL.

This chapter describes the output format of the report samples, how the output is sorted, the input and output dataset definitions and other details about the reports.

You use the DFSMSrmm extract data set as input to many of the sample reports. See the *OS/390 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 6 for information about using the extract data set.

List of Sample Reports

Table 9 shows the DFSMSrmm-supplied reports you can use. The sample JCL to produce the reports is shipped in SYS1.PARMLIB.

Table 9. DFSMSrmm-Supplied Reports

Report	Description
EDGJAUDM	Use EDGJAUDM to reate 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 75 for information about customizing the sample jobs.

EDGJAUDM - Create Monthly Archives from Weekly Audit Reports

EDGJAUDM produces audit data sorted by volume and then 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 “EDGJAUDW - Create Weekly Archives from Daily Audit Reports” on page 90 for information about the EDGJAUDW sample report. Audit data is not saved more than one year.

The sample is intended to produce an archive rather than a report. Therefore the sample output 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 sorted by volumes.
- SORTOUT DD CARD which contains monthly audit reports sorted by rack number.
- SORTOUT DD CARD which contains monthly audit reports sorted by user ID.

EDGJAUDM Customization

Use the following information to customize the EDGJAUDM sample job.

VSORT SORTIN
The data set names specified on the DSN keywords must be changed to those used on your system. The sample JCL assumes 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. If you want the records to be sorted other than by volume, date, and time, you can customize the SORT statement.

The INCLUDE statement is specifically set to process the reports as produced by the sample EDGJAUDW job. If you have changed the format or headings on the reports, you have to 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 58 on page 90, Figure 59 on page 90, and Figure 60 on page 90.

Figure 58 is an audit report sorted by volume. The column layout is the same as the layout of the corresponding weekly report, as shown in “EDGJAUDW - Create Weekly Archives from Daily Audit Reports”.

```
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 58. EDGJAUDM: Sample List of a Monthly Audit Report Sorted by Volume

Figure 59 is an audit report sorted by rack number. The column layout is the same as the layout of the corresponding weekly report as shown in “EDGJAUDW - Create Weekly Archives from Daily Audit Reports”.

```
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 59. EDGJAUDM: Sample List of a Monthly Audit Report Sorted by Rack Number

Figure 60 is an audit report sorted by user ID. The column layout is the same as the layout of the corresponding weekly report as shown in “EDGJAUDW - Create Weekly Archives from Daily Audit Reports”.

```
*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 60. EDGJAUDM: Sample List of a Monthly Audit Report Sorted by User ID

EDGJAUDW - Create 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 35 for information about the DFSMSrmm EDGAUD report utility. Audit data is sorted by volume and then 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 sorted by volumes.
- RREPT DD CARD which contains weekly audit records sorted by rack number.
- UREPT DD CARD which contains weekly audit records 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. The data set names must also be used in the EDGJAUDM job if you are also 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. The data set names must also be used in the EDGJAUDM job if you are also 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. The data set names must also be used in the EDGJAUDM job if you are also using EDGJAUDM.

EDGJAUDW Examples

The reports you can produce using the EDGJAUDW sample JCL are shown in Figure 61 on page 92, Figure 62 on page 93, and Figure 63 on page 93.

Figure 61 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 61. 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 owner of the volume.

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 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 62 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 62. EDGJAUDW: Sample Report of a Weekly Audit Report Sorted by Rack Number

In addition to the data columns described in Figure 61 on page 92, this sample report includes an additional data column.

RACK/BIN
The rack number which is the identifier that corresponds to a specific volume's shelf location.

Figure 63 is sorted by user ID and date and time. The report includes all the SMF audit records for the day.

See Figure 61 on page 92 for the description of the data columns used in this report.

```
DFSMSrmm - 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 63. EDGJAUDW: Sample Report of a Weekly Audit Report Sorted by Userid

EDGJBCAV - Create 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 *OS/390 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 64 on page 95 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. The OUTREC statement is used to build the RMM subcommands. In this sample we are 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 64 on page 95 shows a sample of the input for EDGJBCAV.

```
IBM 111000
IBM 111100
IBM 111010
IBM 111001
```

Figure 64. EDGJBCAV: Sample Input of Barcode-Scanned Volumes

Figure 65 shows a sample of the output for EDGJBCAV. Refer to *OS/390 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 65. EDGJBCAV: Sample Output of RMM ADDVOLUME Subcommands from Barcode Scanned Volumes

EDGJCOMB - Tape Library Audit Using 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 64 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 that 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 is used to build 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 is used to build a record that contains the rack number in column 1. You should not need to customize this information.

EDGJCOMB Examples

Figure 66 shows a sample report of volumes found only in the extract data set.

```
EM0000
EM0001
EM0002
```

Figure 66. EDGJCOMB: Sample List of Volumes Found in the Extract Data Set Only

Figure 67 shows a sample report of volumes found only in the library.

```
WOODYS
```

Figure 67. EDGJCOMB: Sample List of Volumes in the Location Library Only

Figure 68 shows a sample report of volumes found in both the library and the extract data set.

```
111000
111001
111002
111003
111010
```

Figure 68. EDGJCOMB: Sample List of Volumes in the Library and the Extract Data Set

EDGJCVB - Create 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 *OS/390 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 69 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 69. EDGJCVB: Sample Output of RMM CHANGEVOLUME Subcommands for Volumes in Storage Locations

Figure 70 on page 98 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 70. EDGJCVB: Sample Report of Volume Counts by Location

The data columns are:

LOCATION
The storage location names.

COUNT
The number of volumes by location.

EDGJDSN - Create a Data Set Report Sorted by Data Set Name

EDGJDSN reads the DFSMSrmm extract data set and builds a report of data sets, 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 71 on page 99 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 71. 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 72 shows a sample report of data sets by status.

```
DFSMSrmm - Data Set Counts by Status        11/08/95        02:21:20        - 1 -

STATUS               COUNT
--------   ---------------
PRIVATE                 11
SCRATCH                  6
```

Figure 72. 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

EDGJNSCR - Create 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.
- EXTROLD DD CARD which is the old DFSMSrmm extract data set.

Output:
The output for EDGJNSCR is:

- RMMSCR DD CARD which contains volumes sorted by volume serial number.
- RMMSCRS DD CARD which contains volume count by media name.

EDGJNSCR Customization

Use the following information to customize the EDGJNSCR sample job.

TOOLIN
You can customize the report produced by modifying the DISPLAY statement to change column headers and the record offsets to be used. 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 73 on page 101 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 73. 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 74 shows a sample report of the number 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 74. 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.

EDGJRACK - Create 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 75 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 75. 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 assigned to racks starting with the prefix

EDGJRECL - Obtain 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 76 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 76. 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 198.

EDGJRECV - Recover 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 77 on page 105 shows a sample of the RMM ADDVOLUME subcommands 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 *OS/390 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 77. EDGJRECV: Sample list of RMM ADDVOLUME Subcommands for Lost Volumes

EDGJROWN - Reports on Owners Sorted by Name and by Department

EDGJROWN reads the DFSMSrmm extract data set and creates a report of owners sorted by name and a report sorted by department number.

EDGJROWN Input and Output

EDGJOWN 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 78 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 78. 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 owners electronic mail address.

USERID
The user ID of the owners electronic mail address.

TIELINE
The internal phone number of the owner.

DEPT
The department ID of the owner.

 # OF TAPES
The number of tapes owned by the person identified by the owner ID.

Figure 79 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 80 on page 108.

```
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 79. EDGJROWN: Sample Report of Owners Listed by Department

EDGJRVOL - Volume Reports

EDGJRVOL reads the DFSMSrmm extract data set and creates reports of volumes, 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 80 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 80. 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 81 shows a sample report of volumes 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 80 on page 108.

```
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   TIMS   3480   MASTER
A00002   A00002   D041044    10/14/1995   TIMS   3480   MASTER
A00003   A00003   D041044    06/30/1996   TIMS   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 81. EDGJRVOL: Sample Report of Volumes Sorted by Rack Number

Figure 82 shows a sample report of volumes 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 80 on page 108.

```
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           3480   MASTER
A00107   A00107   D041044    03/30/1997   TIMS    3480   MASTER
A00108   A00108   D041044    08/30/1998   TIMS    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 82. EDGJRVOL: Sample Report of Volumes Sorted by Security Level

Figure 83 shows a sample report of volumes by owner.

The data columns for this report are the same as the Volumes Sorted by Volume Serial report as shown in Figure 80 on page 108.

```
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 83. EDGJRVOL: Sample Report of Volumes Sorted by Owner

Figure 84 on page 110 shows a sample report of volumes 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 80 on page 108.

```
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 84. EDGJRVOL: Sample Report of Volumes Sorted by Expiration Date

EDGJSMF - Create 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 204, maps the SMF record. The EDGSVREC macro, as described in “SMF Volume Information: EDGSVREC” on page 231, 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 “EDGJSMFP - Create a Summary of SMF Records” on page 112 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 85 shows a sample report 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 85. 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.

EDGJSMFP - Create 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 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 86 shows a sample report of SMF audit records and the number of each record.

```
DFSMSrmm - SMF Audit Records        11/27/95        15:53:48        - 1

SMF RECORD NUMBER   COUNT OF RECORDS   HEX EQUIVALENT
-----------------   ----------------   --------------
                2                  1   02
                3                  1   03
              248                817   F8
```

Figure 86. 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 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.

EDGJVLT - Create 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 87 on page 114 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.DUMPMTLY.SSCPPS.G0056V00              MASTMTLY   05/12/1995   DISTANT    08/12/1995   000001   TAPE
111019   RTSGM.DUMPMTLY.SYSPPT.G0029V00              MASTMTLY   20/06/1994   DISTANT    23/06/1995   000002   TAPE
111021   RTSGM.DUMPMTLY.SYSPPT.G0029V00              MASTMTLY   20/06/1994   DISTANT    23/06/1995   000004   TAPE
111023   RTSGM.DUMPMTLY.SYSPPT.G0029V00              MASTMTLY   20/06/1994   DISTANT    23/06/1995   000005   TAPE
111036   RTSGM.DUMPMTLY.SYSPPT.G0029V00              MASTMTLY   20/06/1994   LOCAL      23/06/1995   000006   TAPE
111044   RTSGM.DUMPMTLY.SYSPPT.G0029V00              MASTMTLY   20/06/1994   LOCAL      23/06/1995   000007   TAPE
111050   RTSGM.DUMPMTLY.SYSPPT.G0029V00              MASTMTLY   20/06/1994   LOCAL      23/06/1995   000008   TAPE
111051   RTSGM.DUMPMTLY.SYSPPT.G0029V00              MASTMTLY   20/06/1994   REMOTE     23/06/1995   000009   TAPE
111066   RTSGM.DUMPMTLY.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.DUMPMTLY.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.DUMPMTLY.SYSPPT.G0029V00              MASTMTLY   20/06/1994   REMOTE     23/06/1995   000017   TAPE
```

Figure 87. 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 creating jobname.

ASDATE
The date the volume was assigned to the current owner.

STORE
The name of the storage location.

STORE DATE
The date 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 88 shows a sample report of volumes by storage location.

```
DFSMSrmm - Volume Counts by Location        11/14/95        05:49:51        - 1 -

STORE                COUNT
--------   ---------------
DISTANT                  4
LOCAL                    3
REMOTE                   6
```

Figure 88. EDGJVLT: Sample Report of Volume Counts by Location

The data columns are:

STORE
The storage location

COUNT
The number of volumes by storage location

EDGJVLTM - Create 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 89 is sorted by destination and volume serial number and includes only volumes 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 89. 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 creating jobname.

ASDATE
The date the volume was assigned to the current owner.

DEST
The destination, the target storage location of the volume.

STORE DATE
The more recent of the date the volume destination was set or the date the volume was ejected.

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 90 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 90. EDGJVLTM: Sample Report of Volume Counts by Location

The data columns are:

STORE
The destination storage location.

COUNT
The number of volumes by storage location.

EDGJVOL - Create Volume Reports

EDGJVOL reads the DFSMSrmm extract data set and creates reports 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.

If you want 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, you have to customize the SORT statement included in the VOLFCNTL file.

EDGJVOL Examples

Figure 91 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 91. 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 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 92 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 92. 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 by volume status.

Figure 93 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 93. 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 by pending release type.

Chapter 7. Creating REXX Execs

This chapter contains information 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 *OS/390 DFSMSrmm Guide and Reference*.

Sample REXX Execs

Here are examples of REXX execs you can create to obtain information about your volumes and data sets. These examples are supplied as members EDGXMP1 and EDGXMP2 in the DFSMSrmm SAMPLIB dataset.

EDGXMP1 VOLCHAIN EXEC

Use EDGXMP1 to list all the volumes in a multivolume set of volumes.

```
/*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.                     */
```

Figure 94. VOLCHAIN EXEC Sample REXX Exec (Part 1 of 3)

```
    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.    */
    Do while (result = 0) & (strip(edg@nvl) ^= '')
      Call LISTVOL edg@nvl          /* 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               */
```

Figure 94. VOLCHAIN EXEC Sample REXX Exec (Part 2 of 3)

```
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 94. VOLCHAIN EXEC Sample REXX Exec (Part 3 of 3)

EDGXMP2 DSNLIST EXEC

Use EDGXMP2 to display volume information.

```
/*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 95. 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 95. DSNLIST EXEC Sample REXX Exec (Part 2 of 2)

Appendix A. DFSORT Symbols for Use with DFSMSrmm

DFSMSrmm provides you with symbols 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 131.
- "EDGSMFSY: SMF Record Symbols" on page 143.

Note: You can obtain information about downloading DFSORT symbol mappings for data associated with DFSMSrmm releases 1.5 and 1.4 from the DFSORT home page at: http://www.ibm.com/storage/dfsort/

EDGACTSY: Activity File Symbols

EDGACTSY provides the DFSORT symbol mapping for the DFSMSrmm inventory management activity file as follows.

```
********************************************************************** 00050000
*                                                                    * 00100000
*  RMM Inventory Management Activity File Record                     * 00150000
*      DFSORT Symbol mapping                                         * 00200000
*                                                                    * 00250000
********************************************************************** 00300000
* OS/390 DFSMSrmm V2R10                                             * 00350000
*                                                                    * 00400000
*PROPRIETARY V3 STATEMENT                                           * 00450000
*LICENSED MATERIALS - PROPERTY OF IBM                               * 00500000
*"RESTRICTED MATERIALS OF IBM"                                      * 00550000
*5647-A01                                                           * 00600000
*(C) COPYRIGHT 1993,2000  IBM CORP.                                 * 00650000
*STATUS = HDZ11F0                                                   * 00700000
*END PROPRIETARY V3 STATEMENT                                       * 00750000
*                                                                    * 00800000
********************************************************************** 00850000
*   SEE "OS/390 REPORTING                                           * 00900000
*           (SC26-7335)" FOR FIELD DETAILS ON RMM RECORDS.          * 00950000
*   SEE "DFSORT APG (SC33-4035)" FOR DETAILS OF USING SYMBOLS.      * 01000000
********************************************************************** 01050000
* CHANGE ACTIVITY:                                                  * 01100000
* $LG=RMM210 ,210,990901,CHK: DFSORT Symbols                  ¹LGA * 01150000
********************************************************************** 01200000
ACTRC,1,443                                                           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                        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
    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_RPTEXT,*,1,CH            RPTEXT                      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,=                        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
      ACTRC_DSN_DSEQ,*,4,CH                 data set sequence number  05800000
      ACTRC_DSN_FILESEQ,*,4,CH              physical file sequence    05850000
*                                             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                     07050000
*         ACTRC_NO,'N'                        no                      07100000
        ACTRC_DSN_CHNG_RETDATE,*,1,CH       retention date            07150000
*         ACTRC_YES,'Y'                       yes                     07200000
*         ACTRC_NO,'N'                        no                      07250000
        ACTRC_DSN_CHNG_MATCH,*,1,CH         matching VRS              07300000
*         ACTRC_YES,'Y'                       yes                     07350000
*         ACTRC_NO,'N'                        no                      07400000
        ACTRC_DSN_CHNG_SUBCHAIN,*,1,CH      retaining Subchain        07450000
*         ACTRC_YES,'Y'                       yes                     07500000
*         ACTRC_NO,'N'                        no                      07550000
        SKIP,4                              reserved                  07600000
      ACTRC_DSN_OLD_VITAL,*,1,CH            old vital record status   07650000
*         ACTRC_YES,'Y'                       yes                     07700000
*         ACTRC_NO,'N'                        no                      07750000
      ACTRC_DSN_NEW_VITAL,*,1,CH            new vital record status   07800000
```

```
*         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 exeeded            08100000
        ACTRC_DSN_DROP_DAYS,'D'               days since creation exceed08150000
        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 exeeded    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 locati08650000
      ACTRC_DSN_OLD_RETDATE,*,10,CH         old data set retention date 08700000
*                                             Format: see DATEFORM parm08750000
*                                             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 parm09050000
*                                             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_MNAME,*,8,CH          old primary VRS subchain    09850000
*                                             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_MTYPE,=,1,CH          old primary VRS type        10350000
          ACTRC_DSN_NEW_MTYPE_DSN,'D'         data set name             10400000
          ACTRC_DSN_NEW_MTYPE_SMS,'S'         SMS mamagement 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    10550010
        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_M2MASK,*,8,CH         new second. VRS mask        10700000
        ACTRC_DSN_NEW_M2JOB,*,8,CH          new second. VRS job name    10750000
        ACTRC_DSN_NEW_MNAME,*,8,CH          new primary VRS subchain    10800000
*                                             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_END,*                        End of data set record     11250000
*************************************************************************** 11300000
* End of ACTRC                                                       * 11350000
*************************************************************************** 11400000
```

EDGEXTSY: Extract Data Set Symbols

EDGEXTSY provides the DFSORT symbol mapping for the DFSMSrmm extract data set produced during inventory management as follows:

```
*************************************************************************** 00050000
*                                                                     * 00100000
*  RMM Inventory Management Extract File Record                       * 00150000
*      DFSORT Symbol mapping                                          * 00200000
*                                                                     * 00250000
*************************************************************************** 00300000
* OS/390 DFSMSrmm V2R10                                              * 00350000
*                                                                     * 00400000
*PROPRIETARY V3 STATEMENT                                            * 00450000
*LICENSED MATERIALS - PROPERTY OF IBM                                * 00500000
*"RESTRICTED MATERIALS OF IBM"                                       * 00550000
*5647-A01                                                            * 00600000
*(C) COPYRIGHT 1993,2000  IBM CORP.                                  * 00650000
*STATUS = HDZ11F0                                                    * 00700000
*END PROPRIETARY V3 STATEMENT                                        * 00750000
*                                                                    * 00800000
*************************************************************************** 00850000
*   SEE "OS/390 DFSMSrmm REPORTING                                   * 00900000
*     GUIDE (SC26-7335)" FOR FIELD DETAILS ON RMM RECORDS.           * 00950000
*   SEE "DFSORT APG (SC33-4035)" FOR DETAILS OF USING SYMBOLS.       * 01000000
*************************************************************************** 01050000
* CHANGE ACTIVITY:                                                   * 01100000
* $LG=RMM210 ,210,990901,CHK: DFSORT Symbols                  ¹LGA * 01133300
* $K1=K160481,210,991007,MWW: New Extract Header Record       @K1A * 01166600
*************************************************************************** 01200000
  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
    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
    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
*************************************************************************  01327500
* RMM Extract File records                                        *  01332600
*************************************************************************  01337700
```

```
EXTRACT,*,760                                                          01342800
************************************************************************ 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
    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
************************************************************************ 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
  RDDSNAME,*,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
************************************************************************ 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
  RDLCUID,*,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
  RDDSNSEQ,*,4,CH      DATA SET SEQUENCE NUMBER                        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
  RDSECLEV,*,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
  RDDDNAME,*,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
*   RDNO,'N'              NO                                            06250000
  SKIP,3                RESERVED                                        06300000
  RDLABNO,*,4,CH        LABEL NUMBER LABEL=(xx,ll)                      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
*********************************************************************** 07400000
* END OF REPORT EXTRACT DATA SET NAME RECORD                         *  07450000
*********************************************************************** 07500000
```

```
RDRCEND,*              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
    RHDATEFORM_ISO,'I'                                           @K1A   07590300
    RHDATEFORM_JULIAN,'J'                                        @K1A   07591600
  SKIP,100             RESERVED                                  @K1A   07592900
************************************************************************ 07594200
* END OF REPORT EXTRACT HEADER RECORD                                    07595500
************************************************************************ 07596800
RHRCEND,*              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
  RKGENKEY,*,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
  RKCRDATE,*,10,CH     CREATE DATE of VRS record                         08950000
  RKCRTIME,*,6,CH      CREATE TIME (HHMMSS) of VRS record                09000000
```

```
  RKCRSID,*,8,CH        CREATE SYSTEM ID of VRS record                  09050000
  RKLCDATE,*,10,CH      LAST CHANGE DATE of VRS record                  09100000
  RKLCTIME,*,6,CH       LAST CHANGE TIME (HHMMSS) of VRS record         09150000
  RKLCUID,*,8,CH        LAST CHANGE USER ID of VRS record               09200000
  RKLCSID,*,8,CH        LAST CHANGE SYSTEM ID of VRS record             09250000
****************************************************************************09300000
*  End of common fields                                                 *  09350000
****************************************************************************09400000
  RKCRTJBN,*,8,CH       JOBNAME MASK                                    09450000
  RKRETNC,*,1,CH        RETAIN BASED ON NUMBER OF CYCLES                09500000
*   RKYES,'Y'            YES                                            09550000
*   RKNO,'N'             NO                                             09600000
  RKRETND,*,1,CH        RETAIN BASED ON NUMBER OF ELAPSED DAYS          09650000
*   RKYES,'Y'            YES                                            09700000
*   RKNO,'N'             NO                                             09750000
  RKRETNR,*,1,CH        RETAIN BASED ON NUMBER OF DAYS UNREFERENCED     09800000
*   RKYES,'Y'            YES                                            09850000
*   RKNO,'N'             NO                                             09900000
  RKRETNW,*,1,CH        RETAIN ONLY WHILE DATA SET IS CATALOGED         09950000
*   RKYES,'Y'            YES                                            10000000
*   RKNO,'N'             NO                                             10050000
  RKRETNX,*,1,CH        RETAIN UNTIL EXPIRED                            10100000
*   RKYES,'Y'            YES                                            10150000
*   RKNO,'N'             NO                                             10200000
  RKRETNXD,*,1,CH       RETAIN BASED ON EXTRA DAYS SINCE VRS MATCHED    10250000
*   RKYES,'Y'            YES                                            10300000
*   RKNO,'N'             NO                                             10350000
  RKRETNCD,*,1,CH       RETAIN BASED ON BYDAYSCYCLE (ALL COPIES ON      10400000
*                         1 DAY ARE TREATED AS A CYCLE)                 10450000
*   RKYES,'Y'            YES                                            10500000
*   RKNO,'N'             NO                                             10550000
  RKRETAND,*,1,CH       RETENTION MUST BE ANDED WITH THE NEXT VRS IN    10600000
*                         THE CHAIN                                     10650000
*   RKYES,'Y'            YES                                            10700000
*   RKNO,'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
  RKDELDAT,*,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
*   RKYES,'Y'            YES                                            11950000
*   RKNO,'N'             NO                                             12000000
  RKRELSI,*,1,CH        SCRATCH IMMEDIATE                               12050000
*   RKYES,'Y'            YES                                            12100000
*   RKNO,'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
  ROLCUID,*,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
  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 NUMBER                   14150000
  ROOWNTEX,*,20,CH      OWNER EXTERNAL TELEPHONE NUMBER                   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
*********************************************************************     14400000
* END OF REPORT EXTRACT OWNER RECORD                                *     14450000
*********************************************************************     14500000
RORCEND,*             END OF ROEXT                                      14550000
*                                                                         14600000
*********************************************************************     14650000
* 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
*********************************************************************     14950000
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,        15200000
*                       mm - modification level                           15250000
  SKIP,30               RESERVED                                          15300000
*********************************************************************     15350000
*  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
*********************************************************************     15600000
  RPCRDATE,*,10,CH      CREATE DATE of product record                     15650000
  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
*********************************************************************** 16000000
*  End of common fields                                               * 16050000
*********************************************************************** 16100000
  RPPPOWN,*,8,CH        PRODUCT OWNER ID                                16150000
  RPPPNAME,*,30,CH      PRODUCT NAME                                    16200000
  RPPPDESC,*,30,CH      PRODUCT DESCRIPTION                             16250000
  RPVOLNO,*,4,CH        NUMBER OF PRODUCT VOLUMES                       16300000
*********************************************************************** 16350000
* END OF REPORT EXTRACT PRODUCT RECORD                                 * 16400000
*********************************************************************** 16450000
RPRCEND,*             END OF RPEXT                                      16500000
*                                                                       16550000
*********************************************************************** 16600000
* 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
*********************************************************************** 16900000
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
  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
```

```
  RSRMSTID,*,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
*********************************************************************** 20200000
* END OF REPORT EXTRACT STORAGE LOCATION BIN RECORD                    20250000
*********************************************************************** 20300000
RSRCEND,*               END OF RSEXT                                    20350000
*                                                                       20400000
*********************************************************************** 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
  RVLCTIME,*,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
  RVDSNNO,*,4,CH        NUMBER OF DATASETS ON VOLUME                  22500000
  RVTUSE,*,10,CH        TAPE USAGE IN KBYTES                          22550000
  RVUSE,*,4,CH          VOLUME USE COUNT                              22600000
  RVLABNO1,*,4,CH       LABEL NO OF FIRST FILE                        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
********************************************************************* 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
*   RVYES,'Y'             YES                                         25250000
*   RVNO,'N'              NO                                          25300000
  RVVRS,*,1,CH          VOLUME RETAINED BY VRS                        25350000
*   RVYES,'Y'             YES                                         25400000
*   RVNO,'N'              NO                                          25450000
  RVLOAN,*,1,CH         VOLUME ON LOAN                                25500000
*   RVYES,'Y'             YES                                         25550000
*   RVNO,'N'              NO                                          25600000
  RVOPEN,*,1,CH         VOLUME IS OPENED                              25650000
*   RVYES,'Y'             YES                                         25700000
*   RVNO,'N'              NO                                          25750000
```

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  RVOCER,*,1,CH         VOLUME RECORDED BY O/C/EOV                      25800000
*   RVYES,'Y'             YES                                           25850000
*   RVNO,'N'              NO                                            25900000
  RVDEFRET,*,1,CH       PARMLIB DEFAULT RETENTION USED TO GENERATE      25950000
*                          THE VOLUME EXPDT                             26000000
*   RVYES,'Y'             YES                                           26050000
*   RVNO,'N'              NO                                            26100000
  RVPPTAPE,*,1,CH       PROGRAM PRODUCT TAPE                            26150000
*   RVYES,'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
*   RVYES,'Y'             YES                                           27000000
*   RVNO,'N'              NO                                            27050000
*********************************************************************** 27100000
* 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 RVACTION for the        *  27250000
*              pending actions.                                      *  27300000
*********************************************************************** 27350000
  RVRETS,*,8,CH         RETURN ACTION                                   27400000
    RVOWN,'OWNER'         OWNER                                         27450000
*   RVSCR,'SCRATCH'       SCRATCH                                       27500000
  RVREPL,*,1,CH         REPLACE ON RELEASE                              27550000
*   RVYES,'Y'             YES                                           27600000
*   RVNO,'N'              NO                                            27650000
  RVINIT,*,1,CH         REINITIALISE                                    27700000
*   RVYES,'Y'             YES                                           27750000
*   RVNO,'N'              NO                                            27800000
  RVERASE,*,1,CH        SECURITY ERASE                                  27850000
*   RVYES,'Y'             YES                                           27900000
*   RVNO,'N'              NO                                            27950000
  RVNTFY,*,1,CH         NOTIFY OWNER                                    28000000
*   RVYES,'Y'             YES                                           28050000
*   RVNO,'N'              NO                                            28100000
  RVOWNAC,*,1,CH        OWNER ACCESS                                    28150000
    RVRD,'R'              READ                                        28200000
    RVUPD,'U'             UPDATE                                      28250000
    RVADD,'A'             ADD                                         28300000
  RVUSERAC,*,1,CH       USER ACCESS                                     28350000
*   RVRD,'R'              READ                                          28400000
*   RVUPD,'U'             UPDATE                                        28450000
  RVVMUSE,*,1,CH        VM USE                                          28500000
*   RVYES,'Y'             YES                                           28550000
*   RVNO,'N'              NO                                            28600000
  RVMVSUSE,*,1,CH       MVS USE                                         28650000
*   RVYES,'Y'             YES                                           28700000
*   RVNO,'N'              NO                                            28750000
  RVNAME,*,8,CH         MEDIA NAME                                      28800000
    RVUNIT,=,8,CH       Old name for RVNAME field                       28850000
  RVRACK,*,6,CH         RACK NUMBER                                     28900000
  RVTRERR,*,4,CH        TEMPORARY READ ERRORS                           28950000
  RVTWERR,*,4,CH        TEMPORARY WRITE ERRORS                          29000000
  RVPRERR,*,4,CH        PERMANENT READ ERRORS                           29050000
  RVPWERR,*,4,CH        PERMANENT WRITE ERRORS                          29100000
```

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*********************************************************************  29150000
* Product Information: Includes number, release and feature code     *  29200000
*********************************************************************  29250000
  RVPPNUM,*,8,CH        PROGRAM PRODUCT NUMBER                         29300000
  RVVER,*,6,CH          VERSION/RELEASE/MOD NUMBER                     29350000
  RVFEAT,*,4,CH         FEATURE CODE                                   29400000
  RVACCINF,*,40,CH      ACCOUNTING INFORMATION                         29450000
  RVUSEFLD,*,30,CH      USER DESCRIPTION                               29500000
  RVACCLST,*,3,CH       NUMBER OF ACCESS LIST ENTRIES                  29550000
  RVAUTIDS,*,96,CH      AUTHORISED USER IDS AREA                       29600000
  RVHLOC,*,8,CH         HOME LOCATION NAME                             29650000
  RVTRANS,*,1,CH        VOLUME IN TRANSIT                              29700000
*   RVYES,'Y'             YES                                        29750000
*   RVNO,'N'              NO                                         29800000
  RVLOCTYP,*,1,CH       LOCATION TYPE                                  29850000
    RVAUT,'A'             AUTO                                       29900000
    RVMAN,'M'             MANUAL                                     29950000
    RVSTR,'S'             STORE                                      30000000
    RVBLK,' '             BLANK                                      30050000
  RVDESTYP,*,1,CH       DESTINATION TYPE                               30100000
*   RVAUT,'A'             AUTO                                       30150000
*   RVMAN,'M'             MANUAL                                     30200000
*   RVSTR,'S'             STORE                                      30250000
*   RVBLK,' '             BLANK                                      30300000
  RVOLOC,*,8,CH         THE PREVIOUS LOCATION NAME                     30350000
  RVSGNAME,*,8,CH       STORAGE GROUP NAME                             30400000
  RVMEDREC,*,8,CH       VOLUME RECORDING FORMAT                        30450000
    RV18,'18TRACK'        18 TRACK                                     30500000
    RV36,'36TRACK'        36 TRACK                                     30550000
    RV128,'128TRACK'      128 TRACK                                    30600000
    RV256,'256TRACK'      256 TRACK                                    30650000
  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
*********************************************************************  31000000
* EHPCT IS RESERVED FOR EXTENDED HIGH PERFORMANCE                   *  31050000
* CARTRIDGE TAPE.                                                   *  31100000
*********************************************************************  31150000
  RVMEDCMP,*,8,CH       COMPACTION TECHNIQUE                           31200000
*   RVAST,'*'             *                                          31250000
    RVNON,'NONE'          NONE                                       31300000
*   RVYES,'Y'             YES                                        31350000
  RVMEDATR,*,8,CH       SPECIAL ATTRIBUTES                             31400000
*   RVNON,'NONE'          NONE                                       31450000
    RVRDC,'RDCOMPAT'      RDCOMPAT                                   31500000
  RVDSNAM1,*,44,CH      FIRST FILE DATA SET NAME                       31550000
  RVMVMODE,*,1,CH       MOVE MODE                                      31600000
*   RVAUT,'A'             AUTO                                       31650000
*   RVMAN,'M'             MANUAL                                     31700000
  RVDSNREC,*,1,CH       DS RECORDING                                   31750000
*   RVYES,'Y'             YES                                        31800000
*   RVNO,'N'              NO                                         31850000
  RVALVERS,*,2,CH       ANSI LABLE VERSION                             31900000
    RVALCUR,=,1,CH        CURRENT LABEL VERSION                      31950000
    RVALREQ,*,1,CH        REQUIRED LABEL VERSION                     32000000
  RVBMEDN,*,8,CH        BIN MEDIA NAME                                 32050000
  RVOBMEDN,*,8,CH       PREVIOUS BIN MEDIA NAME                        32100000
  RVNLOC,*,8,CH         REQUIRED LOCATION NAME - AS DETERMINED BY      32150000
*                          VRS OR COMMAND                             32200000
  RVLUDEV,*,4,CH        LAST USED DRIVE                                32250000
*********************************************************************  32300000
* Pending Actions:  The following fields list the actions required   *  32350000
*              for the volume.  See RVRETS for the actions set       *  32400000
*              when the volume is released.                          *  32450000
```

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*********************************************************************  32500000
  RVACTION,*,8,CH       PENDING ACTIONS                                32550000
    RVACTSCR,=,1,CH     RETURN TO SCRATCH                              32600000
*     RVYES,'Y'           YES                                          32650000
*     RVNO,'N'            NO                                           32700000
    RVACTREP,*,1,CH     REPLACE VOLUME                                 32750000
*     RVYES,'Y'           YES                                          32800000
*     RVNO,'N'            NO                                           32850000
    RVACTRET,*,1,CH     RETURN TO OWNER                                32900000
*     RVYES,'Y'           YES                                          32950000
*     RVNO,'N'            NO                                           33000000
    RVACTINI,*,1,CH     INITIALIZE                                     33050000
*     RVYES,'Y'           YES                                          33100000
*     RVNO,'N'            NO                                           33150000
    RVACTERA,*,1,CH     ERASE                                          33200000
*     RVYES,'Y'           YES                                          33250000
*     RVNO,'N'            NO                                           33300000
    RVACTNOT,*,1,CH     NOTIFY                                         33350000
*     RVYES,'Y'           YES                                          33400000
*     RVNO,'N'            NO                                           33450000
    SKIP,2              RESERVED                                       33500000
  RVABEND,*,1,CH        DATA SET CLOSED BY ABEND                       33550000
*   RVYES,'Y'           YES                                            33600000
*   RVNO,'N'            NO                                             33650000
  RVHOMTYP,*,1,Ch       HOME LOCATION TYPE                             33700000
*   RVAUT,'A'           AUTO                                           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
  RVCONTNR,*,16,CH      IN CONTAINER NAME                              34750000
  RVRQPRTY,*,4,CH       MOVEMENT PRIORITY                              34800000
  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                                       35100000
  RVSTACKED_VOLCOUNT,*,4,FI  COUNT OF VOLUMES STACKED ON A             35150000
*                            VOLUME                                  35200000
*********************************************************************  35300000
* END OF REPORT EXTRACT VOLUME RECORD                              *   35350000
*********************************************************************  35400000
RVRCEND,*               END OF RVEXT                                   35450000
*********************************************************************  35500000
* END OF REPORT EXTRACT RECORD                                     *   35550000
*********************************************************************  35600000
```

EDGSMFSY: SMF Record Symbols

EDGSMFSY provides the DFSORT symbol mapping for the DFSMSrmm SMF records as follows:

```
************************************************************************ 00036000
*                                                                      * 00072000
*  RMM Inventory Management SMF Record                          @02C * 00108000
*      DFSORT Symbol mapping                                           * 00144000
*                                                                      * 00180000
************************************************************************ 00216000
* OS/390 DFSMSrmm V2R10                                                * 00252000
*                                                                      * 00288000
*PROPRIETARY V3 STATEMENT                                              * 00324000
*LICENSED MATERIALS - PROPERTY OF IBM                                  * 00360000
*"RESTRICTED MATERIALS OF IBM"                                         * 00396000
*5647-A01                                                              * 00432000
*(C) COPYRIGHT 1993,2000  IBM CORP.                                    * 00468000
*STATUS = HDZ11F0                                                      * 00504000
*END PROPRIETARY V3 STATEMENT                                          * 00540000
*                                                                      * 00576000
************************************************************************ 00612000
*   SEE "OS/390 DFSMSrmm Reporting                               @02C * 00667990
*           (SC26-7335)" FOR FIELD DETAILS ON RMM RECORDS.       @02C * 00687980
*   SEE "DFSORT APG (SC33-4035)" FOR DETAILS OF USING SYMBOLS.         * 00720000
************************************************************************ 00756000
* CHANGE ACTIVITY:                                                     * 00792000
* $LG=RMM210 ,210,990901,CHK: DFSORT Symbols                   @LGA * 00816000
* $01=K161019,210,000118,CHK: Creating Program name symbols    @01A * 00840000
* $02=OW44589,210,000522,BG:  Correct DFSMSrmm reference comment @02A * 00849990
************************************************************************ 00864000
*                                                                        00900000
************************************************************************ 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   01296000
*                          THAT RECORD WAS MOVED TO THE SMF BUFFER.     01332000
  SMFADDTE,*,4,PD       DATE RECORD WAS MOVED TO THE SMF BUFFER         01368000
*                          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
*                                                                       02088000
************************************************************************ 02124000
* ACTION RECORD                                                        * 02160000
************************************************************************ 02196000
```

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*                                                                       02232000
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 - HHMMSST                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 -  HHMMSST                 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
    MADELFLG,X'80'            RECORD DELETED                            03636000
    MASELFLG,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
```

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     MDTYPEID,'D'          DSN INFO ID SYMBOL                          04644000
   MDDSNAME,*,44,CH        DATASET NAME                                04680000
   MDVOLSER,*,6,CH         VOLUME SERIAL NUMBER                        04716000
   SKIP,1                  RESERVED                                    04752000
   MDDSNSEQ,*,2,FI         DATASET SEQUENCE NUMBER                     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 - HHMMSST                  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 -  HHMMSST                 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
    MDSELFLG,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_BLKS,*,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
  MDOWNDSN,*,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/EOV                 06624000
    MDFORCE,B'......1.'      FORCE SUPPLIED                            06660000
  SKIP,2                   RESERVED                                    06696000
  MDVRSTYP,*,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
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  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
  MDDDNAME,*,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 07484400
***************************************************************************** 07488000
* VARIABLE LENGTH SECTION                                                * 07524000
***************************************************************************** 07560000
  MDPDSNL,*,1,BI            LENGTH OF PREVIOUS DSNAME                  07596000
  MDNDSNL,*,1,BI            LENGTH OF NEXT DSNAME                      07632000
  MDVRSNML,*,1,BI           LENGTH OF MATCHING VRS NAME                07668000
  MD2VMTCL,*,1,BI           LENGTH OF SECOND. VRS FIELDS               07704000
  MDPDSN,*,44,CH            PREVIOUS DSNAME OR NULL                    07740000
  MDNDSN,*,44,CH            NEXT DSNAME OR NULL                        07776000
  MDVRSNAM,*,44,CH          MATCHING VRS NAME                          07812000
  MD2VNAME,*,8,CH           SECONDARY VRS MASK                         07848000
  MD2VJBNM,*,8,CH           SECONDARY VRS JOB NAME MASK                07884000
  MD2VSCH,*,8,CH            SECONDARY VRS SUBSEQUENT SUBCHAIN NAME     07920000
  MD2VSDTE,*,4,PD           SECONDARY VRS SUBSEQUENT SUBCHAIN          07956000
*                              START DATE                              07992000
***************************************************************************** 08028000
* END OF DATA SET INFORMATION                                            * 08064000
***************************************************************************** 08100000
MDRCEND,*                   END OF MDREC                               08136000
***************************************************************************** 08172000
* END OF RMM MDREC                                                      * 08208000
***************************************************************************** 08244000
*                                                                         08280000
POSITION,SMFADREC           START AFTER EDGSMFAR                       08316000
***************************************************************************** 08352000
* KEY                                                                   * 08388000
***************************************************************************** 08424000
  MKKEY,=,56                KEY OF VRS RECORD                          08460000
    MKTYPE,=,1,CH           RECORD TYPE                                08496000
      MKTYPEID,'K'            VRS RECORD ID                            08532000
  MKTYPE2,*,1,CH            VRS TYPE                                   08568000
    MKTYPVOL,'V'              VOLUME VRS                               08604000
    MKTYPNAM,'N'              NAME VRS                                 08640000
    MKTYPDSN,'D'              DATA SET VRS                             08676000
  MKVOLSER,*,6,CH           VOLUME SERIAL MASK                         08712000
    MKNAME,=,8,CH           NAME OF VRS                                08748000
      MKDSNAME,=,44,CH        DATA SET NAME MASK                       08784000
  MKGENKEY,*,1,CH           GENERIC/SPECIFIC INDICATOR                 08820000
    MKGKSPEC,'0'              SPECIFIC                                 08856000
    MKGKGEN,'1'               GENERIC                                  08892000
  MKCRTJBN,*,8,CH           JOB NAME                                   08928000
  SKIP,1                    RESERVED                                   08964000
*****************************************************************************09000000
* CONTROL INFORMATION                                                   *09036000
*****************************************************************************09072000
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  MKRECLN,*,2,FI            RECORD LENGTH                              09108000
  SKIP,2                    RESERVED                                   09144000
  MKCRDATE,*,4,PD           VRS CREATE DATE - YYYYDDD                  09180000
  MKCRTIME,*,4,PD           VRS CREATE TIME - HHMMSST                  09216000
  MKCRSID,*,8,CH            CREATE SYSTEM ID                           09252000
  MKRCCDS,*,8,CH            RECORD CREATE CDS ID                       09288000
  MKLCDATE,*,4,PD           LAST CHANGE DATE - YYYYDDD                 09324000
  MKLCTIME,*,4,PD           LAST CHANGE TIME - HHMMSST                 09360000
  MKLCUID,*,8,CH            LAST CHANGE USER ID                        09396000
  MKLCSID,*,8,CH            LAST CHANGE SYSTEM ID                      09432000
  MKUCDATE,*,4,PD           LAST "USER" CHANGE DATE                    09468000
  MKUCTIME,*,4,PD           LAST "USER" CHANGE TIME                    09504000
  MKCFLG,*,1,BI             CONTROL FLAGS 1                            09540000
    MKDELFLG,X'80'            RECORD DELETED                           09576000
    MKSELFLG,X'10'            SELECT - PROC BY SATELLITE UPDT          09612000
  MKRECLEV,*,1,BI           RECORD LEVEL NUMBER                        09648000
  SKIP,6                    RESERVED                                   09684000
*****************************************************************************09720000
* RETENTION TYPE                                                           *09756000
*****************************************************************************09792000
  MKRETN,*,1,BI             TYPE OF RETENTION                          09828000
    MKRETNC,B'1.......'       CYCLES                                   09864000
    MKRETND,B'.1......'       DAYS                                     09900000
    MKRETNR,B'..1.....'       LASTREFERENCEDAYS                        09936000
    MKRETNW,B'...1....'       WHILECATALOGED                           09972000
    MKRETNX,B'....1...'       UNTILEXPIRED                             10008000
    MKRETNXD,B'.....1..'      EXTRADAYS                                10044000
    MKRETNCD,B'......1.'      BYDAYSCYCLE                              10080000
*****************************************************************************10116000
* DATA SET NAME MASK TYPE                                                  *10152000
*****************************************************************************10188000
  MKDSNTYP,*,1,BI           DATA SET NAME MASK TYPE                    10224000
    MKDSNG,X'80'              GENERATION DATA GROUP                    10260000
    MKDSNP,X'40'              PSEUDO GDG                               10296000
    MKDSND,X'20'              STANDARD DATA SET NAME                   10332000
    MKOPEN,X'02'              MASK IS FOR OPEN FILES                   10368000
    MKABEND,X'01'             MASK IS FOR ABENDED FILES                10404000
*****************************************************************************10440000
* STORE INFORMATION                                                        *10476000
*****************************************************************************10512000
  MKSTORE,*,1,CH            STORE REQUIREMENT                          10548000
    MKSTOREV,'V'              VITAL RECORD ONLY                        10584000
    MKSTORER,'R'              REMOTE STORE                             10620000
    MKSTOREL,'L'              LOCAL STORE                              10656000
    MKSTORED,'D'              DISTANT STORE                            10692000
    MKSTOREB,'B'              BOTH: LOCAL THEN DISTANT                 10728000
  MKLOCFLG,*,1,BI           LIBRARY SUPPORT FLAG                       10764000
  MKLOC,*,8,CH              LOCATION NAME                              10800000
    MKLHOM,'HOME'              HOME                                    10836000
    MKLLCL,'LOCAL'             LOCAL                                   10872000
    MKLREM,'REMOTE'            REMOTE                                  10908000
    MKLDIS,'DISTANT'           DISTANT                                 10944000
    MKLCUR,'CURRENT'           CURRENT                                 10980000
**  CAN ALSO BE DEFINED LIBRARY NAME                                     11016000
*****************************************************************************11052000
* VRS CONTROL INFORMATION                                                  *11088000
*****************************************************************************11124000
  MKNEXT,*,8,CH             NAME OF NEXTVRS OR ANDVRS                  11160000
  MKCOUNT,*,4,FI            NBR OF CYCLES, DAYS, VOLUMES               11196000
  MKLPRTY,*,2,FI            LOCATION PRIORITY OVERRIDE                 11232000
  MKSTART,*,2,FI            STORE START NUMBER                         11268000
  MKSTORE1,*,4,FI           STORE KEEP NUMBER                          11304000
  MKSTORE2,*,4,FI           DISTANT STORE KEEP NUMBER                  11340000
  MKFLAGA,*,1,BI            FLAG-A                                     11376000
    MKFGAAND,X'80'            MKNEXT IS ANDVRS() OPERAND               11412000
    MKFGANXT,X'40'            MKNEXT IS NEXTVRS() OPERAND              11448000
  MKRLSOPT,*,1,BI           RELEASE OPTIONS                            11484000
```

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    MKRLSXDI,B'1.......'       EXPIRY DATE IGNORE                      11520000
    MKRLSSCI,B'.1......'       SCRATCH IMMEDIATE                       11556000
  MKDELAY,*,2,FI              NUMBER OF DAYS BEFORE MOVE                11592000
  MKOWNER,*,8,CH              VRS OWNER                                 11628000
  MKDELDAT,*,4,PD             VRS DELETE DATE (YYYYDDD)                 11664000
  MKDESC,*,30,CH              DESCRIPTION                               11700000
  SKIP,6                      RESERVED                                  11736000
************************************************************************ 11772000
MKRCEND,*                           END OF MKREC                        11808000
************************************************************************ 11844000
* END OF RMM MKREC                                                    * 11880000
************************************************************************ 11916000
*                                                                       11952000
POSITION,SMFADREC             START AFTER EDGSMFAR                      11988000
************************************************************************ 12024000
* KEY FIELD                                                           * 12060000
************************************************************************ 12096000
  MOKEY,=,56                  KEY FIELD                                 12132000
    MOTYPE,=,1,CH             RECORD TYPE                               12168000
      MOTYPEID,'O'              OWNER RECORD ID SYMBOL                  12204000
  MOOWNER,*,8,CH              OWNER ID                                  12240000
  MORTYPE,*,6,CH              OWNER INFO                                12276000
***????  ARE THESE CONSTANTS RIGHT?                                     12312000
    MORDET,'000000'             OWNER DETAILS                           12348000
    MORVLO,'VOLSER'             VOLUME/OWNER INFORMTN                   12384000
    MOREND,'111111'             END OF VOLUME/OWNER                     12420000
  SKIP,41                     RESERVED - BINARY ZEROS                   12456000
************************************************************************ 12492000
* CONTROL INFORMATION                                                 * 12528000
************************************************************************ 12564000
  MORECLN,*,2,FI              RECORD LENGTH                             12600000
  SKIP,2                      RESERVED                                  12636000
  MOCRDATE,*,4,PD             OWNR CREATE DATE - YYYYDDD                12672000
  MOCRTIME,*,4,PD             OWNR CREATE TIME - HHMMSST                12708000
  MOCRSID,*,8,CH              CREATE SYSTEM ID                          12744000
  MORCCDS,*,8,CH              RECORD CREATE CDS ID                      12780000
  MOLCDATE,*,4,PD             LAST CHANGE DATE  - YYYYDDD               12816000
  MOLCTIME,*,4,PD             LAST CHANGE TIME -  HHMMSST               12852000
  MOLCUID,*,8,CH              LAST CHANGE USER ID                       12888000
  MOLCSID,*,8,CH              LAST CHANGE SYSTEM ID                     12924000
  MOUCDATE,*,4,PD             LAST "USER" CHANGE DATE                   12960000
  MOUCTIME,*,4,PD             LAST "USER" CHANGE TIME                   12996000
  MOCFLG,*,1,BI               CONTROL FLAGS 1                           13032000
    MODELFLG,X'80'              RECORD DELETED                          13068000
    MOSELFLG,X'10'              SELECT - PROC BY SATELLITE UPDT         13104000
    MODUMMY,X'08'               DUMMY RECORD - ALLOW TSO ADD            13140000
  SKIP,7                      RESERVED                                  13176000
************************************************************************ 13212000
* OWNER DETAILS                                                       * 13248000
************************************************************************ 13284000
  ALIGN,F                     ENSURE AREA F-WORD ALIGNED                13320000
  MOOWNDET,*,248              OWNER DETAILS                             13356000
    MOOWNSUR,=,20,CH          OWNER SURNAME                             13392000
    MOOWNFST,*,20,CH          OWNER FIRST NAME                          13428000
    MOOWNDEP,*,40,CH          OWNER DEPARTMENT                          13464000
    MOOWNAD1,*,40,CH          OWNER ADDRESS LINE 1                      13500000
    MOOWNAD2,*,40,CH          OWNER ADDRESS LINE 2                      13536000
    MOOWNAD3,*,40,CH          OWNER ADDRESS LINE 3                      13572000
    MOOWNTIN,*,8,CH           OWNER INTERNAL TELEPHONE NO               13608000
    MOOWNTEX,*,20,CH          OWNER EXTERNAL TELEPHONE NO               13644000
    MOOWNUID,*,8,CH           OWNER USERID                              13680000
    MOOWNNOD,*,8,CH           OWNER NODENAME                            13716000
    MOOWNVOL,*,4,CH           TOTAL NUMBER OF OWNED VOLUMES             13752000
  MOODETND,*                  END OF OWNER DETAILS                      13788000
************************************************************************ 13824000
* OWNED VOLUME DETAILS                                                * 13860000
************************************************************************ 13896000
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  POSITION,MOOWNDET          OVERLAY OWNER DETAILS                      13932000
  MOVOLDET,*,4               VOLUME DETAILS                             13968000
    MOVOLNO,=,2,FI           OWNED VOLS THIS INFORMATION                14004000
    SKIP,2                   RESERVED                                   14040000
**************************************************************************14076000
* OWNED VOLUME ENTRIES - 001-100                                       * 14112000
*   THE ACTUAL NUMBER OF ENTRIES IS INDICATED BY MOVOLNO.              * 14148000
**************************************************************************14184000
  MOVOLENT_ARRAY,*,1600      ARRAY OF VOLUME ENTRIES                    14220000
    MOVOLENT_001,=,16        VOLUME ENTRY - 001                         14256000
      MOVOLSER_001,=,6,CH    VOLUME SERIAL - 001                        14292000
      SKIP,2                 RESERVED                                   14328000
      MOUNIT_001,*,8,CH      UNIT TYPE - 001                            14364000
    MOVOLENT_002,*,16        VOLUME ENTRY - 002                         14400000
      MOVOLSER_002,=,6,CH    VOLUME SERIAL - 002                        14436000
      SKIP,2                 RESERVED                                   14472000
      MOUNIT_002,*,8,CH      UNIT TYPE - 002                            14508000
    MOVOLENT_003,*,16        VOLUME ENTRY - 003                         14544000
      MOVOLSER_003,=,6,CH    VOLUME SERIAL - 003                        14580000
      SKIP,2                 RESERVED                                   14616000
      MOUNIT_003,*,8,CH      UNIT TYPE - 003                            14652000
    MOVOLENT_004,*,16        VOLUME ENTRY - 004                         14688000
      MOVOLSER_004,=,6,CH    VOLUME SERIAL - 004                        14724000
      SKIP,2                 RESERVED                                   14760000
      MOUNIT_004,*,8,CH      UNIT TYPE - 004                            14796000
    MOVOLENT_005,*,16        VOLUME ENTRY - 005                         14832000
      MOVOLSER_005,=,6,CH    VOLUME SERIAL - 005                        14868000
      SKIP,2                 RESERVED                                   14904000
      MOUNIT_005,*,8,CH      UNIT TYPE - 005                            14940000
    MOVOLENT_006,*,16        VOLUME ENTRY - 006                         14976000
      MOVOLSER_006,=,6,CH    VOLUME SERIAL - 006                        15012000
      SKIP,2                 RESERVED                                   15048000
      MOUNIT_006,*,8,CH      UNIT TYPE - 006                            15084000
    MOVOLENT_007,*,16        VOLUME ENTRY - 007                         15120000
      MOVOLSER_007,=,6,CH    VOLUME SERIAL - 007                        15156000
      SKIP,2                 RESERVED                                   15192000
      MOUNIT_007,*,8,CH      UNIT TYPE - 007                            15228000
    MOVOLENT_008,*,16        VOLUME ENTRY - 008                         15264000
      MOVOLSER_008,=,6,CH    VOLUME SERIAL - 008                        15300000
      SKIP,2                 RESERVED                                   15336000
      MOUNIT_008,*,8,CH      UNIT TYPE - 008                            15372000
    MOVOLENT_009,*,16        VOLUME ENTRY - 009                         15408000
      MOVOLSER_009,=,6,CH    VOLUME SERIAL - 009                        15444000
      SKIP,2                 RESERVED                                   15480000
      MOUNIT_009,*,8,CH      UNIT TYPE - 009                            15516000
    MOVOLENT_010,*,16        VOLUME ENTRY - 010                         15552000
      MOVOLSER_010,=,6,CH    VOLUME SERIAL - 010                        15588000
      SKIP,2                 RESERVED                                   15624000
      MOUNIT_010,*,8,CH      UNIT TYPE - 010                            15660000
    MOVOLENT_011,*,16        VOLUME ENTRY - 011                         15696000
      MOVOLSER_011,=,6,CH    VOLUME SERIAL - 011                        15732000
      SKIP,2                 RESERVED                                   15768000
      MOUNIT_011,*,8,CH      UNIT TYPE - 011                            15804000
    MOVOLENT_012,*,16        VOLUME ENTRY - 012                         15840000
      MOVOLSER_012,=,6,CH    VOLUME SERIAL - 012                        15876000
      SKIP,2                 RESERVED                                   15912000
      MOUNIT_012,*,8,CH      UNIT TYPE - 012                            15948000
    MOVOLENT_013,*,16        VOLUME ENTRY - 013                         15984000
      MOVOLSER_013,=,6,CH    VOLUME SERIAL - 013                        16020000
      SKIP,2                 RESERVED                                   16056000
      MOUNIT_013,*,8,CH      UNIT TYPE - 013                            16092000
    MOVOLENT_014,*,16        VOLUME ENTRY - 014                         16128000
      MOVOLSER_014,=,6,CH    VOLUME SERIAL - 014                        16164000
      SKIP,2                 RESERVED                                   16200000
      MOUNIT_014,*,8,CH      UNIT TYPE - 014                            16236000
    MOVOLENT_015,*,16        VOLUME ENTRY - 015                         16272000
      MOVOLSER_015,=,6,CH    VOLUME SERIAL - 015                        16308000
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  SKIP,2                RESERVED                                16344000
  MOUNIT_015,*,8,CH     UNIT TYPE - 015                         16380000
MOVOLENT_016,*,16       VOLUME ENTRY - 016                      16416000
  MOVOLSER_016,=,6,CH   VOLUME SERIAL - 016                     16452000
  SKIP,2                RESERVED                                16488000
  MOUNIT_016,*,8,CH     UNIT TYPE - 016                         16524000
MOVOLENT_017,*,16       VOLUME ENTRY - 017                      16560000
  MOVOLSER_017,=,6,CH   VOLUME SERIAL - 017                     16596000
  SKIP,2                RESERVED                                16632000
  MOUNIT_017,*,8,CH     UNIT TYPE - 017                         16668000
MOVOLENT_018,*,16       VOLUME ENTRY - 018                      16704000
  MOVOLSER_018,=,6,CH   VOLUME SERIAL - 018                     16740000
  SKIP,2                RESERVED                                16776000
  MOUNIT_018,*,8,CH     UNIT TYPE - 018                         16812000
MOVOLENT_019,*,16       VOLUME ENTRY - 019                      16848000
  MOVOLSER_019,=,6,CH   VOLUME SERIAL - 019                     16884000
  SKIP,2                RESERVED                                16920000
  MOUNIT_019,*,8,CH     UNIT TYPE - 019                         16956000
MOVOLENT_020,*,16       VOLUME ENTRY - 020                      16992000
  MOVOLSER_020,=,6,CH   VOLUME SERIAL - 020                     17028000
  SKIP,2                RESERVED                                17064000
  MOUNIT_020,*,8,CH     UNIT TYPE - 020                         17100000
MOVOLENT_021,*,16       VOLUME ENTRY - 021                      17136000
  MOVOLSER_021,=,6,CH   VOLUME SERIAL - 021                     17172000
  SKIP,2                RESERVED                                17208000
  MOUNIT_021,*,8,CH     UNIT TYPE - 021                         17244000
MOVOLENT_022,*,16       VOLUME ENTRY - 022                      17280000
  MOVOLSER_022,=,6,CH   VOLUME SERIAL - 022                     17316000
  SKIP,2                RESERVED                                17352000
  MOUNIT_022,*,8,CH     UNIT TYPE - 022                         17388000
MOVOLENT_023,*,16       VOLUME ENTRY - 023                      17424000
  MOVOLSER_023,=,6,CH   VOLUME SERIAL - 023                     17460000
  SKIP,2                RESERVED                                17496000
  MOUNIT_023,*,8,CH     UNIT TYPE - 023                         17532000
MOVOLENT_024,*,16       VOLUME ENTRY - 024                      17568000
  MOVOLSER_024,=,6,CH   VOLUME SERIAL - 024                     17604000
  SKIP,2                RESERVED                                17640000
  MOUNIT_024,*,8,CH     UNIT TYPE - 024                         17676000
MOVOLENT_025,*,16       VOLUME ENTRY - 025                      17712000
  MOVOLSER_025,=,6,CH   VOLUME SERIAL - 025                     17748000
  SKIP,2                RESERVED                                17784000
  MOUNIT_025,*,8,CH     UNIT TYPE - 025                         17820000
MOVOLENT_026,*,16       VOLUME ENTRY - 026                      17856000
  MOVOLSER_026,=,6,CH   VOLUME SERIAL - 026                     17892000
  SKIP,2                RESERVED                                17928000
  MOUNIT_026,*,8,CH     UNIT TYPE - 026                         17964000
MOVOLENT_027,*,16       VOLUME ENTRY - 027                      18000000
  MOVOLSER_027,=,6,CH   VOLUME SERIAL - 027                     18036000
  SKIP,2                RESERVED                                18072000
  MOUNIT_027,*,8,CH     UNIT TYPE - 027                         18108000
MOVOLENT_028,*,16       VOLUME ENTRY - 028                      18144000
  MOVOLSER_028,=,6,CH   VOLUME SERIAL - 028                     18180000
  SKIP,2                RESERVED                                18216000
  MOUNIT_028,*,8,CH     UNIT TYPE - 028                         18252000
MOVOLENT_029,*,16       VOLUME ENTRY - 029                      18288000
  MOVOLSER_029,=,6,CH   VOLUME SERIAL - 029                     18324000
  SKIP,2                RESERVED                                18360000
  MOUNIT_029,*,8,CH     UNIT TYPE - 029                         18396000
MOVOLENT_030,*,16       VOLUME ENTRY - 030                      18432000
  MOVOLSER_030,=,6,CH   VOLUME SERIAL - 030                     18468000
  SKIP,2                RESERVED                                18504000
  MOUNIT_030,*,8,CH     UNIT TYPE - 030                         18540000
MOVOLENT_031,*,16       VOLUME ENTRY - 031                      18576000
  MOVOLSER_031,=,6,CH   VOLUME SERIAL - 031                     18612000
  SKIP,2                RESERVED                                18648000
  MOUNIT_031,*,8,CH     UNIT TYPE - 031                         18684000
MOVOLENT_032,*,16       VOLUME ENTRY - 032                      18720000
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  MOVOLSER_032,=,6,CH    VOLUME SERIAL - 032                18756000
  SKIP,2                 RESERVED                           18792000
  MOUNIT_032,*,8,CH      UNIT TYPE - 032                    18828000
MOVOLENT_033,*,16        VOLUME ENTRY - 033                 18864000
  MOVOLSER_033,=,6,CH    VOLUME SERIAL - 033                18900000
  SKIP,2                 RESERVED                           18936000
  MOUNIT_033,*,8,CH      UNIT TYPE - 033                    18972000
MOVOLENT_034,*,16        VOLUME ENTRY - 034                 19008000
  MOVOLSER_034,=,6,CH    VOLUME SERIAL - 034                19044000
  SKIP,2                 RESERVED                           19080000
  MOUNIT_034,*,8,CH      UNIT TYPE - 034                    19116000
MOVOLENT_035,*,16        VOLUME ENTRY - 035                 19152000
  MOVOLSER_035,=,6,CH    VOLUME SERIAL - 035                19188000
  SKIP,2                 RESERVED                           19224000
  MOUNIT_035,*,8,CH      UNIT TYPE - 035                    19260000
MOVOLENT_036,*,16        VOLUME ENTRY - 036                 19296000
  MOVOLSER_036,=,6,CH    VOLUME SERIAL - 036                19332000
  SKIP,2                 RESERVED                           19368000
  MOUNIT_036,*,8,CH      UNIT TYPE - 036                    19404000
MOVOLENT_037,*,16        VOLUME ENTRY - 037                 19440000
  MOVOLSER_037,=,6,CH    VOLUME SERIAL - 037                19476000
  SKIP,2                 RESERVED                           19512000
  MOUNIT_037,*,8,CH      UNIT TYPE - 037                    19548000
MOVOLENT_038,*,16        VOLUME ENTRY - 038                 19584000
  MOVOLSER_038,=,6,CH    VOLUME SERIAL - 038                19620000
  SKIP,2                 RESERVED                           19656000
  MOUNIT_038,*,8,CH      UNIT TYPE - 038                    19692000
MOVOLENT_039,*,16        VOLUME ENTRY - 039                 19728000
  MOVOLSER_039,=,6,CH    VOLUME SERIAL - 039                19764000
  SKIP,2                 RESERVED                           19800000
  MOUNIT_039,*,8,CH      UNIT TYPE - 039                    19836000
MOVOLENT_040,*,16        VOLUME ENTRY - 040                 19872000
  MOVOLSER_040,=,6,CH    VOLUME SERIAL - 040                19908000
  SKIP,2                 RESERVED                           19944000
  MOUNIT_040,*,8,CH      UNIT TYPE - 040                    19980000
MOVOLENT_041,*,16        VOLUME ENTRY - 041                 20016000
  MOVOLSER_041,=,6,CH    VOLUME SERIAL - 041                20052000
  SKIP,2                 RESERVED                           20088000
  MOUNIT_041,*,8,CH      UNIT TYPE - 041                    20124000
MOVOLENT_042,*,16        VOLUME ENTRY - 042                 20160000
  MOVOLSER_042,=,6,CH    VOLUME SERIAL - 042                20196000
  SKIP,2                 RESERVED                           20232000
  MOUNIT_042,*,8,CH      UNIT TYPE - 042                    20268000
MOVOLENT_043,*,16        VOLUME ENTRY - 043                 20304000
  MOVOLSER_043,=,6,CH    VOLUME SERIAL - 043                20340000
  SKIP,2                 RESERVED                           20376000
  MOUNIT_043,*,8,CH      UNIT TYPE - 043                    20412000
MOVOLENT_044,*,16        VOLUME ENTRY - 044                 20448000
  MOVOLSER_044,=,6,CH    VOLUME SERIAL - 044                20484000
  SKIP,2                 RESERVED                           20520000
  MOUNIT_044,*,8,CH      UNIT TYPE - 044                    20556000
MOVOLENT_045,*,16        VOLUME ENTRY - 045                 20592000
  MOVOLSER_045,=,6,CH    VOLUME SERIAL - 045                20628000
  SKIP,2                 RESERVED                           20664000
  MOUNIT_045,*,8,CH      UNIT TYPE - 045                    20700000
MOVOLENT_046,*,16        VOLUME ENTRY - 046                 20736000
  MOVOLSER_046,=,6,CH    VOLUME SERIAL - 046                20772000
  SKIP,2                 RESERVED                           20808000
  MOUNIT_046,*,8,CH      UNIT TYPE - 046                    20844000
MOVOLENT_047,*,16        VOLUME ENTRY - 047                 20880000
  MOVOLSER_047,=,6,CH    VOLUME SERIAL - 047                20916000
  SKIP,2                 RESERVED                           20952000
  MOUNIT_047,*,8,CH      UNIT TYPE - 047                    20988000
MOVOLENT_048,*,16        VOLUME ENTRY - 048                 21024000
  MOVOLSER_048,=,6,CH    VOLUME SERIAL - 048                21060000
  SKIP,2                 RESERVED                           21096000
  MOUNIT_048,*,8,CH      UNIT TYPE - 048                    21132000
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MOVOLENT_049,*,16       VOLUME ENTRY - 049                  21168000
  MOVOLSER_049,=,6,CH   VOLUME SERIAL - 049                 21204000
  SKIP,2                RESERVED                            21240000
  MOUNIT_049,*,8,CH     UNIT TYPE - 049                     21276000
MOVOLENT_050,*,16       VOLUME ENTRY - 050                  21312000
  MOVOLSER_050,=,6,CH   VOLUME SERIAL - 050                 21348000
  SKIP,2                RESERVED                            21384000
  MOUNIT_050,*,8,CH     UNIT TYPE - 050                     21420000
MOVOLENT_051,*,16       VOLUME ENTRY - 051                  21456000
  MOVOLSER_051,=,6,CH   VOLUME SERIAL - 051                 21492000
  SKIP,2                RESERVED                            21528000
  MOUNIT_051,*,8,CH     UNIT TYPE - 051                     21564000
MOVOLENT_052,*,16       VOLUME ENTRY - 052                  21600000
  MOVOLSER_052,=,6,CH   VOLUME SERIAL - 052                 21636000
  SKIP,2                RESERVED                            21672000
  MOUNIT_052,*,8,CH     UNIT TYPE - 052                     21708000
MOVOLENT_053,*,16       VOLUME ENTRY - 053                  21744000
  MOVOLSER_053,=,6,CH   VOLUME SERIAL - 053                 21780000
  SKIP,2                RESERVED                            21816000
  MOUNIT_053,*,8,CH     UNIT TYPE - 053                     21852000
MOVOLENT_054,*,16       VOLUME ENTRY - 054                  21888000
  MOVOLSER_054,=,6,CH   VOLUME SERIAL - 054                 21924000
  SKIP,2                RESERVED                            21960000
  MOUNIT_054,*,8,CH     UNIT TYPE - 054                     21996000
MOVOLENT_055,*,16       VOLUME ENTRY - 055                  22032000
  MOVOLSER_055,=,6,CH   VOLUME SERIAL - 055                 22068000
  SKIP,2                RESERVED                            22104000
  MOUNIT_055,*,8,CH     UNIT TYPE - 055                     22140000
MOVOLENT_056,*,16       VOLUME ENTRY - 056                  22176000
  MOVOLSER_056,=,6,CH   VOLUME SERIAL - 056                 22212000
  SKIP,2                RESERVED                            22248000
  MOUNIT_056,*,8,CH     UNIT TYPE - 056                     22284000
MOVOLENT_057,*,16       VOLUME ENTRY - 057                  22320000
  MOVOLSER_057,=,6,CH   VOLUME SERIAL - 057                 22356000
  SKIP,2                RESERVED                            22392000
  MOUNIT_057,*,8,CH     UNIT TYPE - 057                     22428000
MOVOLENT_058,*,16       VOLUME ENTRY - 058                  22464000
  MOVOLSER_058,=,6,CH   VOLUME SERIAL - 058                 22500000
  SKIP,2                RESERVED                            22536000
  MOUNIT_058,*,8,CH     UNIT TYPE - 058                     22572000
MOVOLENT_059,*,16       VOLUME ENTRY - 059                  22608000
  MOVOLSER_059,=,6,CH   VOLUME SERIAL - 059                 22644000
  SKIP,2                RESERVED                            22680000
  MOUNIT_059,*,8,CH     UNIT TYPE - 059                     22716000
MOVOLENT_060,*,16       VOLUME ENTRY - 060                  22752000
  MOVOLSER_060,=,6,CH   VOLUME SERIAL - 060                 22788000
  SKIP,2                RESERVED                            22824000
  MOUNIT_060,*,8,CH     UNIT TYPE - 060                     22860000
MOVOLENT_061,*,16       VOLUME ENTRY - 061                  22896000
  MOVOLSER_061,=,6,CH   VOLUME SERIAL - 061                 22932000
  SKIP,2                RESERVED                            22968000
  MOUNIT_061,*,8,CH     UNIT TYPE - 061                     23004000
MOVOLENT_062,*,16       VOLUME ENTRY - 062                  23040000
  MOVOLSER_062,=,6,CH   VOLUME SERIAL - 062                 23076000
  SKIP,2                RESERVED                            23112000
  MOUNIT_062,*,8,CH     UNIT TYPE - 062                     23148000
MOVOLENT_063,*,16       VOLUME ENTRY - 063                  23184000
  MOVOLSER_063,=,6,CH   VOLUME SERIAL - 063                 23220000
  SKIP,2                RESERVED                            23256000
  MOUNIT_063,*,8,CH     UNIT TYPE - 063                     23292000
MOVOLENT_064,*,16       VOLUME ENTRY - 064                  23328000
  MOVOLSER_064,=,6,CH   VOLUME SERIAL - 064                 23364000
  SKIP,2                RESERVED                            23400000
  MOUNIT_064,*,8,CH     UNIT TYPE - 064                     23436000
MOVOLENT_065,*,16       VOLUME ENTRY - 065                  23472000
  MOVOLSER_065,=,6,CH   VOLUME SERIAL - 065                 23508000
  SKIP,2                RESERVED                            23544000
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  MOUNIT_065,*,8,CH     UNIT TYPE - 065                  23580000
MOVOLENT_066,*,16       VOLUME ENTRY - 066               23616000
  MOVOLSER_066,=,6,CH   VOLUME SERIAL - 066              23652000
  SKIP,2                RESERVED                         23688000
  MOUNIT_066,*,8,CH     UNIT TYPE - 066                  23724000
MOVOLENT_067,*,16       VOLUME ENTRY - 067               23760000
  MOVOLSER_067,=,6,CH   VOLUME SERIAL - 067              23796000
  SKIP,2                RESERVED                         23832000
  MOUNIT_067,*,8,CH     UNIT TYPE - 067                  23868000
MOVOLENT_068,*,16       VOLUME ENTRY - 068               23904000
  MOVOLSER_068,=,6,CH   VOLUME SERIAL - 068              23940000
  SKIP,2                RESERVED                         23976000
  MOUNIT_068,*,8,CH     UNIT TYPE - 068                  24012000
MOVOLENT_069,*,16       VOLUME ENTRY - 069               24048000
  MOVOLSER_069,=,6,CH   VOLUME SERIAL - 069              24084000
  SKIP,2                RESERVED                         24120000
  MOUNIT_069,*,8,CH     UNIT TYPE - 069                  24156000
MOVOLENT_070,*,16       VOLUME ENTRY - 070               24192000
  MOVOLSER_070,=,6,CH   VOLUME SERIAL - 070              24228000
  SKIP,2                RESERVED                         24264000
  MOUNIT_070,*,8,CH     UNIT TYPE - 070                  24300000
MOVOLENT_071,*,16       VOLUME ENTRY - 071               24336000
  MOVOLSER_071,=,6,CH   VOLUME SERIAL - 071              24372000
  SKIP,2                RESERVED                         24408000
  MOUNIT_071,*,8,CH     UNIT TYPE - 071                  24444000
MOVOLENT_072,*,16       VOLUME ENTRY - 072               24480000
  MOVOLSER_072,=,6,CH   VOLUME SERIAL - 072              24516000
  SKIP,2                RESERVED                         24552000
  MOUNIT_072,*,8,CH     UNIT TYPE - 072                  24588000
MOVOLENT_073,*,16       VOLUME ENTRY - 073               24624000
  MOVOLSER_073,=,6,CH   VOLUME SERIAL - 073              24660000
  SKIP,2                RESERVED                         24696000
  MOUNIT_073,*,8,CH     UNIT TYPE - 073                  24732000
MOVOLENT_074,*,16       VOLUME ENTRY - 074               24768000
  MOVOLSER_074,=,6,CH   VOLUME SERIAL - 074              24804000
  SKIP,2                RESERVED                         24840000
  MOUNIT_074,*,8,CH     UNIT TYPE - 074                  24876000
MOVOLENT_075,*,16       VOLUME ENTRY - 075               24912000
  MOVOLSER_075,=,6,CH   VOLUME SERIAL - 075              24948000
  SKIP,2                RESERVED                         24984000
  MOUNIT_075,*,8,CH     UNIT TYPE - 075                  25020000
MOVOLENT_076,*,16       VOLUME ENTRY - 076               25056000
  MOVOLSER_076,=,6,CH   VOLUME SERIAL - 076              25092000
  SKIP,2                RESERVED                         25128000
  MOUNIT_076,*,8,CH     UNIT TYPE - 076                  25164000
MOVOLENT_077,*,16       VOLUME ENTRY - 077               25200000
  MOVOLSER_077,=,6,CH   VOLUME SERIAL - 077              25236000
  SKIP,2                RESERVED                         25272000
  MOUNIT_077,*,8,CH     UNIT TYPE - 077                  25308000
MOVOLENT_078,*,16       VOLUME ENTRY - 078               25344000
  MOVOLSER_078,=,6,CH   VOLUME SERIAL - 078              25380000
  SKIP,2                RESERVED                         25416000
  MOUNIT_078,*,8,CH     UNIT TYPE - 078                  25452000
MOVOLENT_079,*,16       VOLUME ENTRY - 079               25488000
  MOVOLSER_079,=,6,CH   VOLUME SERIAL - 079              25524000
  SKIP,2                RESERVED                         25560000
  MOUNIT_079,*,8,CH     UNIT TYPE - 079                  25596000
MOVOLENT_080,*,16       VOLUME ENTRY - 080               25632000
  MOVOLSER_080,=,6,CH   VOLUME SERIAL - 080              25668000
  SKIP,2                RESERVED                         25704000
  MOUNIT_080,*,8,CH     UNIT TYPE - 080                  25740000
MOVOLENT_081,*,16       VOLUME ENTRY - 081               25776000
  MOVOLSER_081,=,6,CH   VOLUME SERIAL - 081              25812000
  SKIP,2                RESERVED                         25848000
  MOUNIT_081,*,8,CH     UNIT TYPE - 081                  25884000
MOVOLENT_082,*,16       VOLUME ENTRY - 082               25920000
  MOVOLSER_082,=,6,CH   VOLUME SERIAL - 082              25956000
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  SKIP,2                RESERVED                          25992000
  MOUNIT_082,*,8,CH     UNIT TYPE - 082                   26028000
MOVOLENT_083,*,16       VOLUME ENTRY - 083                26064000
  MOVOLSER_083,=,6,CH   VOLUME SERIAL - 083               26100000
  SKIP,2                RESERVED                          26136000
  MOUNIT_083,*,8,CH     UNIT TYPE - 083                   26172000
MOVOLENT_084,*,16       VOLUME ENTRY - 084                26208000
  MOVOLSER_084,=,6,CH   VOLUME SERIAL - 084               26244000
  SKIP,2                RESERVED                          26280000
  MOUNIT_084,*,8,CH     UNIT TYPE - 084                   26316000
MOVOLENT_085,*,16       VOLUME ENTRY - 085                26352000
  MOVOLSER_085,=,6,CH   VOLUME SERIAL - 085               26388000
  SKIP,2                RESERVED                          26424000
  MOUNIT_085,*,8,CH     UNIT TYPE - 085                   26460000
MOVOLENT_086,*,16       VOLUME ENTRY - 086                26496000
  MOVOLSER_086,=,6,CH   VOLUME SERIAL - 086               26532000
  SKIP,2                RESERVED                          26568000
  MOUNIT_086,*,8,CH     UNIT TYPE - 086                   26604000
MOVOLENT_087,*,16       VOLUME ENTRY - 087                26640000
  MOVOLSER_087,=,6,CH   VOLUME SERIAL - 087               26676000
  SKIP,2                RESERVED                          26712000
  MOUNIT_087,*,8,CH     UNIT TYPE - 087                   26748000
MOVOLENT_088,*,16       VOLUME ENTRY - 088                26784000
  MOVOLSER_088,=,6,CH   VOLUME SERIAL - 088               26820000
  SKIP,2                RESERVED                          26856000
  MOUNIT_088,*,8,CH     UNIT TYPE - 088                   26892000
MOVOLENT_089,*,16       VOLUME ENTRY - 089                26928000
  MOVOLSER_089,=,6,CH   VOLUME SERIAL - 089               26964000
  SKIP,2                RESERVED                          27000000
  MOUNIT_089,*,8,CH     UNIT TYPE - 089                   27036000
MOVOLENT_090,*,16       VOLUME ENTRY - 090                27072000
  MOVOLSER_090,=,6,CH   VOLUME SERIAL - 090               27108000
  SKIP,2                RESERVED                          27144000
  MOUNIT_090,*,8,CH     UNIT TYPE - 090                   27180000
MOVOLENT_091,*,16       VOLUME ENTRY - 091                27216000
  MOVOLSER_091,=,6,CH   VOLUME SERIAL - 091               27252000
  SKIP,2                RESERVED                          27288000
  MOUNIT_091,*,8,CH     UNIT TYPE - 091                   27324000
MOVOLENT_092,*,16       VOLUME ENTRY - 092                27360000
  MOVOLSER_092,=,6,CH   VOLUME SERIAL - 092               27396000
  SKIP,2                RESERVED                          27432000
  MOUNIT_092,*,8,CH     UNIT TYPE - 092                   27468000
MOVOLENT_093,*,16       VOLUME ENTRY - 093                27504000
  MOVOLSER_093,=,6,CH   VOLUME SERIAL - 093               27540000
  SKIP,2                RESERVED                          27576000
  MOUNIT_093,*,8,CH     UNIT TYPE - 093                   27612000
MOVOLENT_094,*,16       VOLUME ENTRY - 094                27648000
  MOVOLSER_094,=,6,CH   VOLUME SERIAL - 094               27684000
  SKIP,2                RESERVED                          27720000
  MOUNIT_094,*,8,CH     UNIT TYPE - 094                   27756000
MOVOLENT_095,*,16       VOLUME ENTRY - 095                27792000
  MOVOLSER_095,=,6,CH   VOLUME SERIAL - 095               27828000
  SKIP,2                RESERVED                          27864000
  MOUNIT_095,*,8,CH     UNIT TYPE - 095                   27900000
MOVOLENT_096,*,16       VOLUME ENTRY - 096                27936000
  MOVOLSER_096,=,6,CH   VOLUME SERIAL - 096               27972000
  SKIP,2                RESERVED                          28008000
  MOUNIT_096,*,8,CH     UNIT TYPE - 096                   28044000
MOVOLENT_097,*,16       VOLUME ENTRY - 097                28080000
  MOVOLSER_097,=,6,CH   VOLUME SERIAL - 097               28116000
  SKIP,2                RESERVED                          28152000
  MOUNIT_097,*,8,CH     UNIT TYPE - 097                   28188000
MOVOLENT_098,*,16       VOLUME ENTRY - 098                28224000
  MOVOLSER_098,=,6,CH   VOLUME SERIAL - 098               28260000
  SKIP,2                RESERVED                          28296000
  MOUNIT_098,*,8,CH     UNIT TYPE - 098                   28332000
MOVOLENT_099,*,16       VOLUME ENTRY - 099                28368000
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      MOVOLSER_099,=,6,CH    VOLUME SERIAL - 099                      28404000
      SKIP,2                 RESERVED                                 28440000
      MOUNIT_099,*,8,CH      UNIT TYPE - 099                          28476000
    MOVOLENT_100,*,16        VOLUME ENTRY - 100                       28512000
      MOVOLSER_100,=,6,CH    VOLUME SERIAL - 100                      28548000
      SKIP,2                 RESERVED                                 28584000
      MOUNIT_100,*,8,CH      UNIT TYPE - 100                          28620000
*************************************************************************28656000
* END OF OWNER INFORMATION                                            * 28692000
*************************************************************************28728000
MORCEND,*                    END OF MOREC                             28764000
*************************************************************************28800000
* END OF RMM MOREC                                                    * 28836000
*************************************************************************28872000
*                                                                       28908000
POSITION,SMFADREC            START AFTER EDGSMFAR                     28944000
*************************************************************************28980000
* KEY FIELD                                                           * 29016000
*************************************************************************29052000
  MPKEY,=,56                 KEY FIELD                                29088000
    MPTYPE,=,1,CH            RECORD TYPE                              29124000
      MPTYPEID,'P'             PP RECORD ID SYMBOL                    29160000
*************************************************************************29196000
* START OF RMM MPREC                                                  * 29232000
*************************************************************************29268000
  MPPPNUM,*,8,CH             PP NUMBER (NNNN-CCC)                     29304000
  MPVER,*,6,CH               VERSION/RELEASE/MOD NUMBER               29340000
  SKIP,41                    RESERVED                                 29376000
*************************************************************************29412000
* CONTROL INFORMATION                                                 * 29448000
*************************************************************************29484000
  MPRECLN,*,2,FI             RECORD LENGTH                            29520000
  SKIP,2                     RESERVED                                 29556000
  MPCRDATE,*,4,PD            PP CREATE DATE - YYYYDDD                 29592000
  MPCRTIME,*,4,PD            PP CREATE TIME - HHMMSST                 29628000
  MPCRSID,*,8,CH             CREATE SYSTEM ID                         29664000
  MPRCCDS,*,8,CH             RECORD CREATE CDS ID                     29700000
  MPLCDATE,*,4,PD            LAST CHANGE DATE  - YYYYDDD              29736000
  MPLCTIME,*,4,PD            LAST CHANGE TIME -  HHMMSST              29772000
  MPLCUID,*,8,CH             LAST CHANGE USER ID                      29808000
  MPLCSID,*,8,CH             LAST CHANGE SYSTEM ID                    29844000
  MPUCDATE,*,4,PD            LAST "USER" CHANGE DATE                  29880000
  MPUCTIME,*,4,PD            LAST "USER" CHANGE TIME                  29916000
  MPCFLG,*,1,BI              CONTROL FLAGS 1                          29952000
    MPDELFLG,X'80'             RECORD DELETED                         29988000
    MPSELFLG,X'10'             SELECT - PROC BY SATELLITE UPDT        30024000
    MPDUMMY,X'08'              DUMMY RECORD - ALLOW TSO ADD           30060000
  SKIP,7                     RESERVED                                 30096000
*************************************************************************30132000
* PROGRAM PRODUCT DETAILS                                             * 30168000
*************************************************************************30204000
  MPPPOWN,*,8,CH             PROGRAM PRODUCT OWNER ID                 30240000
  MPPPNAME,*,30,CH           PROGRAM PRODUCT NAME                     30276000
  MPPPDESC,*,30,CH           PROGRAM PRODUCT DESCRIPTION              30312000
  SKIP,64                    RESERVED                                 30348000
*************************************************************************30384000
* PROGRAM PRODUCT VOLUME DETAILS                                      * 30420000
*************************************************************************30456000
  MPVOLDET,*,4               VOLUME DETAILS                           30492000
    MPVOLNO,=,2,FI           NO OF PP VOLS                            30528000
    SKIP,2                   RESERVED                                 30564000
*************************************************************************30600000
* PROGRAM PRODUCT VOLUME ENTRY - 001-255                              * 30636000
*   THE ACTUAL NUMBER OF ENTRIES IS INDICATED BY MPVOLNO.             * 30672000
*************************************************************************30708000
  MPVOLENT_ARRAY,*,8160      ARRAY OF VOLUME ENTRIES                  30744000
    MPVOLENT_001,=,32        VOLUME ENTRY - 001                       30780000
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  MPVOLSER_001,=,6,CH    VOLUME SERIAL - 001                30816000
  MPRACK_001,*,6,CH      RACK NUMBER - 001                  30852000
  MPFEAT_001,*,4,CH      FEATURE CODE - 001                 30888000
  MPUNIT_001,*,8,CH      UNIT TYPE - 001                    30924000
  SKIP,8                 RESERVED                           30960000
MPVOLENT_002,*,32        VOLUME ENTRY - 002                 30996000
  MPVOLSER_002,=,6,CH    VOLUME SERIAL - 002                31032000
  MPRACK_002,*,6,CH      RACK NUMBER - 002                  31068000
  MPFEAT_002,*,4,CH      FEATURE CODE - 002                 31104000
  MPUNIT_002,*,8,CH      UNIT TYPE - 002                    31140000
  SKIP,8                 RESERVED                           31176000
MPVOLENT_003,*,32        VOLUME ENTRY - 003                 31212000
  MPVOLSER_003,=,6,CH    VOLUME SERIAL - 003                31248000
  MPRACK_003,*,6,CH      RACK NUMBER - 003                  31284000
  MPFEAT_003,*,4,CH      FEATURE CODE - 003                 31320000
  MPUNIT_003,*,8,CH      UNIT TYPE - 003                    31356000
  SKIP,8                 RESERVED                           31392000
MPVOLENT_004,*,32        VOLUME ENTRY - 004                 31428000
  MPVOLSER_004,=,6,CH    VOLUME SERIAL - 004                31464000
  MPRACK_004,*,6,CH      RACK NUMBER - 004                  31500000
  MPFEAT_004,*,4,CH      FEATURE CODE - 004                 31536000
  MPUNIT_004,*,8,CH      UNIT TYPE - 004                    31572000
  SKIP,8                 RESERVED                           31608000
MPVOLENT_005,*,32        VOLUME ENTRY - 005                 31644000
  MPVOLSER_005,=,6,CH    VOLUME SERIAL - 005                31680000
  MPRACK_005,*,6,CH      RACK NUMBER - 005                  31716000
  MPFEAT_005,*,4,CH      FEATURE CODE - 005                 31752000
  MPUNIT_005,*,8,CH      UNIT TYPE - 005                    31788000
  SKIP,8                 RESERVED                           31824000
MPVOLENT_006,*,32        VOLUME ENTRY - 006                 31860000
  MPVOLSER_006,=,6,CH    VOLUME SERIAL - 006                31896000
  MPRACK_006,*,6,CH      RACK NUMBER - 006                  31932000
  MPFEAT_006,*,4,CH      FEATURE CODE - 006                 31968000
  MPUNIT_006,*,8,CH      UNIT TYPE - 006                    32004000
  SKIP,8                 RESERVED                           32040000
MPVOLENT_007,*,32        VOLUME ENTRY - 007                 32076000
  MPVOLSER_007,=,6,CH    VOLUME SERIAL - 007                32112000
  MPRACK_007,*,6,CH      RACK NUMBER - 007                  32148000
  MPFEAT_007,*,4,CH      FEATURE CODE - 007                 32184000
  MPUNIT_007,*,8,CH      UNIT TYPE - 007                    32220000
  SKIP,8                 RESERVED                           32256000
MPVOLENT_008,*,32        VOLUME ENTRY - 008                 32292000
  MPVOLSER_008,=,6,CH    VOLUME SERIAL - 008                32328000
  MPRACK_008,*,6,CH      RACK NUMBER - 008                  32364000
  MPFEAT_008,*,4,CH      FEATURE CODE - 008                 32400000
  MPUNIT_008,*,8,CH      UNIT TYPE - 008                    32436000
  SKIP,8                 RESERVED                           32472000
MPVOLENT_009,*,32        VOLUME ENTRY - 009                 32508000
  MPVOLSER_009,=,6,CH    VOLUME SERIAL - 009                32544000
  MPRACK_009,*,6,CH      RACK NUMBER - 009                  32580000
  MPFEAT_009,*,4,CH      FEATURE CODE - 009                 32616000
  MPUNIT_009,*,8,CH      UNIT TYPE - 009                    32652000
  SKIP,8                 RESERVED                           32688000
MPVOLENT_010,*,32        VOLUME ENTRY - 010                 32724000
  MPVOLSER_010,=,6,CH    VOLUME SERIAL - 010                32760000
  MPRACK_010,*,6,CH      RACK NUMBER - 010                  32796000
  MPFEAT_010,*,4,CH      FEATURE CODE - 010                 32832000
  MPUNIT_010,*,8,CH      UNIT TYPE - 010                    32868000
  SKIP,8                 RESERVED                           32904000
MPVOLENT_011,*,32        VOLUME ENTRY - 011                 32940000
  MPVOLSER_011,=,6,CH    VOLUME SERIAL - 011                32976000
  MPRACK_011,*,6,CH      RACK NUMBER - 011                  33012000
  MPFEAT_011,*,4,CH      FEATURE CODE - 011                 33048000
  MPUNIT_011,*,8,CH      UNIT TYPE - 011                    33084000
  SKIP,8                 RESERVED                           33120000
MPVOLENT_012,*,32        VOLUME ENTRY - 012                 33156000
  MPVOLSER_012,=,6,CH    VOLUME SERIAL - 012                33192000
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  MPRACK_012,*,6,CH      RACK NUMBER - 012                33228000
  MPFEAT_012,*,4,CH      FEATURE CODE - 012               33264000
  MPUNIT_012,*,8,CH      UNIT TYPE - 012                  33300000
  SKIP,8                 RESERVED                         33336000
MPVOLENT_013,*,32        VOLUME ENTRY - 013               33372000
  MPVOLSER_013,=,6,CH    VOLUME SERIAL - 013              33408000
  MPRACK_013,*,6,CH      RACK NUMBER - 013                33444000
  MPFEAT_013,*,4,CH      FEATURE CODE - 013               33480000
  MPUNIT_013,*,8,CH      UNIT TYPE - 013                  33516000
  SKIP,8                 RESERVED                         33552000
MPVOLENT_014,*,32        VOLUME ENTRY - 014               33588000
  MPVOLSER_014,=,6,CH    VOLUME SERIAL - 014              33624000
  MPRACK_014,*,6,CH      RACK NUMBER - 014                33660000
  MPFEAT_014,*,4,CH      FEATURE CODE - 014               33696000
  MPUNIT_014,*,8,CH      UNIT TYPE - 014                  33732000
  SKIP,8                 RESERVED                         33768000
MPVOLENT_015,*,32        VOLUME ENTRY - 015               33804000
  MPVOLSER_015,=,6,CH    VOLUME SERIAL - 015              33840000
  MPRACK_015,*,6,CH      RACK NUMBER - 015                33876000
  MPFEAT_015,*,4,CH      FEATURE CODE - 015               33912000
  MPUNIT_015,*,8,CH      UNIT TYPE - 015                  33948000
  SKIP,8                 RESERVED                         33984000
MPVOLENT_016,*,32        VOLUME ENTRY - 016               34020000
  MPVOLSER_016,=,6,CH    VOLUME SERIAL - 016              34056000
  MPRACK_016,*,6,CH      RACK NUMBER - 016                34092000
  MPFEAT_016,*,4,CH      FEATURE CODE - 016               34128000
  MPUNIT_016,*,8,CH      UNIT TYPE - 016                  34164000
  SKIP,8                 RESERVED                         34200000
MPVOLENT_017,*,32        VOLUME ENTRY - 017               34236000
  MPVOLSER_017,=,6,CH    VOLUME SERIAL - 017              34272000
  MPRACK_017,*,6,CH      RACK NUMBER - 017                34308000
  MPFEAT_017,*,4,CH      FEATURE CODE - 017               34344000
  MPUNIT_017,*,8,CH      UNIT TYPE - 017                  34380000
  SKIP,8                 RESERVED                         34416000
MPVOLENT_018,*,32        VOLUME ENTRY - 018               34452000
  MPVOLSER_018,=,6,CH    VOLUME SERIAL - 018              34488000
  MPRACK_018,*,6,CH      RACK NUMBER - 018                34524000
  MPFEAT_018,*,4,CH      FEATURE CODE - 018               34560000
  MPUNIT_018,*,8,CH      UNIT TYPE - 018                  34596000
  SKIP,8                 RESERVED                         34632000
MPVOLENT_019,*,32        VOLUME ENTRY - 019               34668000
  MPVOLSER_019,=,6,CH    VOLUME SERIAL - 019              34704000
  MPRACK_019,*,6,CH      RACK NUMBER - 019                34740000
  MPFEAT_019,*,4,CH      FEATURE CODE - 019               34776000
  MPUNIT_019,*,8,CH      UNIT TYPE - 019                  34812000
  SKIP,8                 RESERVED                         34848000
MPVOLENT_020,*,32        VOLUME ENTRY - 020               34884000
  MPVOLSER_020,=,6,CH    VOLUME SERIAL - 020              34920000
  MPRACK_020,*,6,CH      RACK NUMBER - 020                34956000
  MPFEAT_020,*,4,CH      FEATURE CODE - 020               34992000
  MPUNIT_020,*,8,CH      UNIT TYPE - 020                  35028000
  SKIP,8                 RESERVED                         35064000
MPVOLENT_021,*,32        VOLUME ENTRY - 021               35100000
  MPVOLSER_021,=,6,CH    VOLUME SERIAL - 021              35136000
  MPRACK_021,*,6,CH      RACK NUMBER - 021                35172000
  MPFEAT_021,*,4,CH      FEATURE CODE - 021               35208000
  MPUNIT_021,*,8,CH      UNIT TYPE - 021                  35244000
  SKIP,8                 RESERVED                         35280000
MPVOLENT_022,*,32        VOLUME ENTRY - 022               35316000
  MPVOLSER_022,=,6,CH    VOLUME SERIAL - 022              35352000
  MPRACK_022,*,6,CH      RACK NUMBER - 022                35388000
  MPFEAT_022,*,4,CH      FEATURE CODE - 022               35424000
  MPUNIT_022,*,8,CH      UNIT TYPE - 022                  35460000
  SKIP,8                 RESERVED                         35496000
MPVOLENT_023,*,32        VOLUME ENTRY - 023               35532000
  MPVOLSER_023,=,6,CH    VOLUME SERIAL - 023              35568000
  MPRACK_023,*,6,CH      RACK NUMBER - 023                35604000
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  MPFEAT_023,*,4,CH      FEATURE CODE - 023                35640000
  MPUNIT_023,*,8,CH      UNIT TYPE - 023                   35676000
  SKIP,8                 RESERVED                          35712000
MPVOLENT_024,*,32        VOLUME ENTRY - 024                35748000
  MPVOLSER_024,=,6,CH    VOLUME SERIAL - 024               35784000
  MPRACK_024,*,6,CH      RACK NUMBER - 024                 35820000
  MPFEAT_024,*,4,CH      FEATURE CODE - 024                35856000
  MPUNIT_024,*,8,CH      UNIT TYPE - 024                   35892000
  SKIP,8                 RESERVED                          35928000
MPVOLENT_025,*,32        VOLUME ENTRY - 025                35964000
  MPVOLSER_025,=,6,CH    VOLUME SERIAL - 025               36000000
  MPRACK_025,*,6,CH      RACK NUMBER - 025                 36036000
  MPFEAT_025,*,4,CH      FEATURE CODE - 025                36072000
  MPUNIT_025,*,8,CH      UNIT TYPE - 025                   36108000
  SKIP,8                 RESERVED                          36144000
MPVOLENT_026,*,32        VOLUME ENTRY - 026                36180000
  MPVOLSER_026,=,6,CH    VOLUME SERIAL - 026               36216000
  MPRACK_026,*,6,CH      RACK NUMBER - 026                 36252000
  MPFEAT_026,*,4,CH      FEATURE CODE - 026                36288000
  MPUNIT_026,*,8,CH      UNIT TYPE - 026                   36324000
  SKIP,8                 RESERVED                          36360000
MPVOLENT_027,*,32        VOLUME ENTRY - 027                36396000
  MPVOLSER_027,=,6,CH    VOLUME SERIAL - 027               36432000
  MPRACK_027,*,6,CH      RACK NUMBER - 027                 36468000
  MPFEAT_027,*,4,CH      FEATURE CODE - 027                36504000
  MPUNIT_027,*,8,CH      UNIT TYPE - 027                   36540000
  SKIP,8                 RESERVED                          36576000
MPVOLENT_028,*,32        VOLUME ENTRY - 028                36612000
  MPVOLSER_028,=,6,CH    VOLUME SERIAL - 028               36648000
  MPRACK_028,*,6,CH      RACK NUMBER - 028                 36684000
  MPFEAT_028,*,4,CH      FEATURE CODE - 028                36720000
  MPUNIT_028,*,8,CH      UNIT TYPE - 028                   36756000
  SKIP,8                 RESERVED                          36792000
MPVOLENT_029,*,32        VOLUME ENTRY - 029                36828000
  MPVOLSER_029,=,6,CH    VOLUME SERIAL - 029               36864000
  MPRACK_029,*,6,CH      RACK NUMBER - 029                 36900000
  MPFEAT_029,*,4,CH      FEATURE CODE - 029                36936000
  MPUNIT_029,*,8,CH      UNIT TYPE - 029                   36972000
  SKIP,8                 RESERVED                          37008000
MPVOLENT_030,*,32        VOLUME ENTRY - 030                37044000
  MPVOLSER_030,=,6,CH    VOLUME SERIAL - 030               37080000
  MPRACK_030,*,6,CH      RACK NUMBER - 030                 37116000
  MPFEAT_030,*,4,CH      FEATURE CODE - 030                37152000
  MPUNIT_030,*,8,CH      UNIT TYPE - 030                   37188000
  SKIP,8                 RESERVED                          37224000
MPVOLENT_031,*,32        VOLUME ENTRY - 031                37260000
  MPVOLSER_031,=,6,CH    VOLUME SERIAL - 031               37296000
  MPRACK_031,*,6,CH      RACK NUMBER - 031                 37332000
  MPFEAT_031,*,4,CH      FEATURE CODE - 031                37368000
  MPUNIT_031,*,8,CH      UNIT TYPE - 031                   37404000
  SKIP,8                 RESERVED                          37440000
MPVOLENT_032,*,32        VOLUME ENTRY - 032                37476000
  MPVOLSER_032,=,6,CH    VOLUME SERIAL - 032               37512000
  MPRACK_032,*,6,CH      RACK NUMBER - 032                 37548000
  MPFEAT_032,*,4,CH      FEATURE CODE - 032                37584000
  MPUNIT_032,*,8,CH      UNIT TYPE - 032                   37620000
  SKIP,8                 RESERVED                          37656000
MPVOLENT_033,*,32        VOLUME ENTRY - 033                37692000
  MPVOLSER_033,=,6,CH    VOLUME SERIAL - 033               37728000
  MPRACK_033,*,6,CH      RACK NUMBER - 033                 37764000
  MPFEAT_033,*,4,CH      FEATURE CODE - 033                37800000
  MPUNIT_033,*,8,CH      UNIT TYPE - 033                   37836000
  SKIP,8                 RESERVED                          37872000
MPVOLENT_034,*,32        VOLUME ENTRY - 034                37908000
  MPVOLSER_034,=,6,CH    VOLUME SERIAL - 034               37944000
  MPRACK_034,*,6,CH      RACK NUMBER - 034                 37980000
  MPFEAT_034,*,4,CH      FEATURE CODE - 034                38016000
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  MPUNIT_034,*,8,CH      UNIT TYPE - 034                38052000
  SKIP,8                 RESERVED                       38088000
MPVOLENT_035,*,32        VOLUME ENTRY - 035             38124000
  MPVOLSER_035,=,6,CH    VOLUME SERIAL - 035            38160000
  MPRACK_035,*,6,CH      RACK NUMBER - 035              38196000
  MPFEAT_035,*,4,CH      FEATURE CODE - 035             38232000
  MPUNIT_035,*,8,CH      UNIT TYPE - 035                38268000
  SKIP,8                 RESERVED                       38304000
MPVOLENT_036,*,32        VOLUME ENTRY - 036             38340000
  MPVOLSER_036,=,6,CH    VOLUME SERIAL - 036            38376000
  MPRACK_036,*,6,CH      RACK NUMBER - 036              38412000
  MPFEAT_036,*,4,CH      FEATURE CODE - 036             38448000
  MPUNIT_036,*,8,CH      UNIT TYPE - 036                38484000
  SKIP,8                 RESERVED                       38520000
MPVOLENT_037,*,32        VOLUME ENTRY - 037             38556000
  MPVOLSER_037,=,6,CH    VOLUME SERIAL - 037            38592000
  MPRACK_037,*,6,CH      RACK NUMBER - 037              38628000
  MPFEAT_037,*,4,CH      FEATURE CODE - 037             38664000
  MPUNIT_037,*,8,CH      UNIT TYPE - 037                38700000
  SKIP,8                 RESERVED                       38736000
MPVOLENT_038,*,32        VOLUME ENTRY - 038             38772000
  MPVOLSER_038,=,6,CH    VOLUME SERIAL - 038            38808000
  MPRACK_038,*,6,CH      RACK NUMBER - 038              38844000
  MPFEAT_038,*,4,CH      FEATURE CODE - 038             38880000
  MPUNIT_038,*,8,CH      UNIT TYPE - 038                38916000
  SKIP,8                 RESERVED                       38952000
MPVOLENT_039,*,32        VOLUME ENTRY - 039             38988000
  MPVOLSER_039,=,6,CH    VOLUME SERIAL - 039            39024000
  MPRACK_039,*,6,CH      RACK NUMBER - 039              39060000
  MPFEAT_039,*,4,CH      FEATURE CODE - 039             39096000
  MPUNIT_039,*,8,CH      UNIT TYPE - 039                39132000
  SKIP,8                 RESERVED                       39168000
MPVOLENT_040,*,32        VOLUME ENTRY - 040             39204000
  MPVOLSER_040,=,6,CH    VOLUME SERIAL - 040            39240000
  MPRACK_040,*,6,CH      RACK NUMBER - 040              39276000
  MPFEAT_040,*,4,CH      FEATURE CODE - 040             39312000
  MPUNIT_040,*,8,CH      UNIT TYPE - 040                39348000
  SKIP,8                 RESERVED                       39384000
MPVOLENT_041,*,32        VOLUME ENTRY - 041             39420000
  MPVOLSER_041,=,6,CH    VOLUME SERIAL - 041            39456000
  MPRACK_041,*,6,CH      RACK NUMBER - 041              39492000
  MPFEAT_041,*,4,CH      FEATURE CODE - 041             39528000
  MPUNIT_041,*,8,CH      UNIT TYPE - 041                39564000
  SKIP,8                 RESERVED                       39600000
MPVOLENT_042,*,32        VOLUME ENTRY - 042             39636000
  MPVOLSER_042,=,6,CH    VOLUME SERIAL - 042            39672000
  MPRACK_042,*,6,CH      RACK NUMBER - 042              39708000
  MPFEAT_042,*,4,CH      FEATURE CODE - 042             39744000
  MPUNIT_042,*,8,CH      UNIT TYPE - 042                39780000
  SKIP,8                 RESERVED                       39816000
MPVOLENT_043,*,32        VOLUME ENTRY - 043             39852000
  MPVOLSER_043,=,6,CH    VOLUME SERIAL - 043            39888000
  MPRACK_043,*,6,CH      RACK NUMBER - 043              39924000
  MPFEAT_043,*,4,CH      FEATURE CODE - 043             39960000
  MPUNIT_043,*,8,CH      UNIT TYPE - 043                39996000
  SKIP,8                 RESERVED                       40032000
MPVOLENT_044,*,32        VOLUME ENTRY - 044             40068000
  MPVOLSER_044,=,6,CH    VOLUME SERIAL - 044            40104000
  MPRACK_044,*,6,CH      RACK NUMBER - 044              40140000
  MPFEAT_044,*,4,CH      FEATURE CODE - 044             40176000
  MPUNIT_044,*,8,CH      UNIT TYPE - 044                40212000
  SKIP,8                 RESERVED                       40248000
MPVOLENT_045,*,32        VOLUME ENTRY - 045             40284000
  MPVOLSER_045,=,6,CH    VOLUME SERIAL - 045            40320000
  MPRACK_045,*,6,CH      RACK NUMBER - 045              40356000
  MPFEAT_045,*,4,CH      FEATURE CODE - 045             40392000
  MPUNIT_045,*,8,CH      UNIT TYPE - 045                40428000
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  SKIP,8                RESERVED                          40464000
MPVOLENT_046,*,32       VOLUME ENTRY - 046                40500000
  MPVOLSER_046,=,6,CH   VOLUME SERIAL - 046               40536000
  MPRACK_046,*,6,CH     RACK NUMBER - 046                 40572000
  MPFEAT_046,*,4,CH     FEATURE CODE - 046                40608000
  MPUNIT_046,*,8,CH     UNIT TYPE - 046                   40644000
  SKIP,8                RESERVED                          40680000
MPVOLENT_047,*,32       VOLUME ENTRY - 047                40716000
  MPVOLSER_047,=,6,CH   VOLUME SERIAL - 047               40752000
  MPRACK_047,*,6,CH     RACK NUMBER - 047                 40788000
  MPFEAT_047,*,4,CH     FEATURE CODE - 047                40824000
  MPUNIT_047,*,8,CH     UNIT TYPE - 047                   40860000
  SKIP,8                RESERVED                          40896000
MPVOLENT_048,*,32       VOLUME ENTRY - 048                40932000
  MPVOLSER_048,=,6,CH   VOLUME SERIAL - 048               40968000
  MPRACK_048,*,6,CH     RACK NUMBER - 048                 41004000
  MPFEAT_048,*,4,CH     FEATURE CODE - 048                41040000
  MPUNIT_048,*,8,CH     UNIT TYPE - 048                   41076000
  SKIP,8                RESERVED                          41112000
MPVOLENT_049,*,32       VOLUME ENTRY - 049                41148000
  MPVOLSER_049,=,6,CH   VOLUME SERIAL - 049               41184000
  MPRACK_049,*,6,CH     RACK NUMBER - 049                 41220000
  MPFEAT_049,*,4,CH     FEATURE CODE - 049                41256000
  MPUNIT_049,*,8,CH     UNIT TYPE - 049                   41292000
  SKIP,8                RESERVED                          41328000
MPVOLENT_050,*,32       VOLUME ENTRY - 050                41364000
  MPVOLSER_050,=,6,CH   VOLUME SERIAL - 050               41400000
  MPRACK_050,*,6,CH     RACK NUMBER - 050                 41436000
  MPFEAT_050,*,4,CH     FEATURE CODE - 050                41472000
  MPUNIT_050,*,8,CH     UNIT TYPE - 050                   41508000
  SKIP,8                RESERVED                          41544000
MPVOLENT_051,*,32       VOLUME ENTRY - 051                41580000
  MPVOLSER_051,=,6,CH   VOLUME SERIAL - 051               41616000
  MPRACK_051,*,6,CH     RACK NUMBER - 051                 41652000
  MPFEAT_051,*,4,CH     FEATURE CODE - 051                41688000
  MPUNIT_051,*,8,CH     UNIT TYPE - 051                   41724000
  SKIP,8                RESERVED                          41760000
MPVOLENT_052,*,32       VOLUME ENTRY - 052                41796000
  MPVOLSER_052,=,6,CH   VOLUME SERIAL - 052               41832000
  MPRACK_052,*,6,CH     RACK NUMBER - 052                 41868000
  MPFEAT_052,*,4,CH     FEATURE CODE - 052                41904000
  MPUNIT_052,*,8,CH     UNIT TYPE - 052                   41940000
  SKIP,8                RESERVED                          41976000
MPVOLENT_053,*,32       VOLUME ENTRY - 053                42012000
  MPVOLSER_053,=,6,CH   VOLUME SERIAL - 053               42048000
  MPRACK_053,*,6,CH     RACK NUMBER - 053                 42084000
  MPFEAT_053,*,4,CH     FEATURE CODE - 053                42120000
  MPUNIT_053,*,8,CH     UNIT TYPE - 053                   42156000
  SKIP,8                RESERVED                          42192000
MPVOLENT_054,*,32       VOLUME ENTRY - 054                42228000
  MPVOLSER_054,=,6,CH   VOLUME SERIAL - 054               42264000
  MPRACK_054,*,6,CH     RACK NUMBER - 054                 42300000
  MPFEAT_054,*,4,CH     FEATURE CODE - 054                42336000
  MPUNIT_054,*,8,CH     UNIT TYPE - 054                   42372000
  SKIP,8                RESERVED                          42408000
MPVOLENT_055,*,32       VOLUME ENTRY - 055                42444000
  MPVOLSER_055,=,6,CH   VOLUME SERIAL - 055               42480000
  MPRACK_055,*,6,CH     RACK NUMBER - 055                 42516000
  MPFEAT_055,*,4,CH     FEATURE CODE - 055                42552000
  MPUNIT_055,*,8,CH     UNIT TYPE - 055                   42588000
  SKIP,8                RESERVED                          42624000
MPVOLENT_056,*,32       VOLUME ENTRY - 056                42660000
  MPVOLSER_056,=,6,CH   VOLUME SERIAL - 056               42696000
  MPRACK_056,*,6,CH     RACK NUMBER - 056                 42732000
  MPFEAT_056,*,4,CH     FEATURE CODE - 056                42768000
  MPUNIT_056,*,8,CH     UNIT TYPE - 056                   42804000
  SKIP,8                RESERVED                          42840000
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MPVOLENT_057,*,32       VOLUME ENTRY - 057          42876000
  MPVOLSER_057,=,6,CH   VOLUME SERIAL - 057         42912000
  MPRACK_057,*,6,CH     RACK NUMBER - 057           42948000
  MPFEAT_057,*,4,CH     FEATURE CODE - 057          42984000
  MPUNIT_057,*,8,CH     UNIT TYPE - 057             43020000
  SKIP,8                RESERVED                    43056000
MPVOLENT_058,*,32       VOLUME ENTRY - 058          43092000
  MPVOLSER_058,=,6,CH   VOLUME SERIAL - 058         43128000
  MPRACK_058,*,6,CH     RACK NUMBER - 058           43164000
  MPFEAT_058,*,4,CH     FEATURE CODE - 058          43200000
  MPUNIT_058,*,8,CH     UNIT TYPE - 058             43236000
  SKIP,8                RESERVED                    43272000
MPVOLENT_059,*,32       VOLUME ENTRY - 059          43308000
  MPVOLSER_059,=,6,CH   VOLUME SERIAL - 059         43344000
  MPRACK_059,*,6,CH     RACK NUMBER - 059           43380000
  MPFEAT_059,*,4,CH     FEATURE CODE - 059          43416000
  MPUNIT_059,*,8,CH     UNIT TYPE - 059             43452000
  SKIP,8                RESERVED                    43488000
MPVOLENT_060,*,32       VOLUME ENTRY - 060          43524000
  MPVOLSER_060,=,6,CH   VOLUME SERIAL - 060         43560000
  MPRACK_060,*,6,CH     RACK NUMBER - 060           43596000
  MPFEAT_060,*,4,CH     FEATURE CODE - 060          43632000
  MPUNIT_060,*,8,CH     UNIT TYPE - 060             43668000
  SKIP,8                RESERVED                    43704000
MPVOLENT_061,*,32       VOLUME ENTRY - 061          43740000
  MPVOLSER_061,=,6,CH   VOLUME SERIAL - 061         43776000
  MPRACK_061,*,6,CH     RACK NUMBER - 061           43812000
  MPFEAT_061,*,4,CH     FEATURE CODE - 061          43848000
  MPUNIT_061,*,8,CH     UNIT TYPE - 061             43884000
  SKIP,8                RESERVED                    43920000
MPVOLENT_062,*,32       VOLUME ENTRY - 062          43956000
  MPVOLSER_062,=,6,CH   VOLUME SERIAL - 062         43992000
  MPRACK_062,*,6,CH     RACK NUMBER - 062           44028000
  MPFEAT_062,*,4,CH     FEATURE CODE - 062          44064000
  MPUNIT_062,*,8,CH     UNIT TYPE - 062             44100000
  SKIP,8                RESERVED                    44136000
MPVOLENT_063,*,32       VOLUME ENTRY - 063          44172000
  MPVOLSER_063,=,6,CH   VOLUME SERIAL - 063         44208000
  MPRACK_063,*,6,CH     RACK NUMBER - 063           44244000
  MPFEAT_063,*,4,CH     FEATURE CODE - 063          44280000
  MPUNIT_063,*,8,CH     UNIT TYPE - 063             44316000
  SKIP,8                RESERVED                    44352000
MPVOLENT_064,*,32       VOLUME ENTRY - 064          44388000
  MPVOLSER_064,=,6,CH   VOLUME SERIAL - 064         44424000
  MPRACK_064,*,6,CH     RACK NUMBER - 064           44460000
  MPFEAT_064,*,4,CH     FEATURE CODE - 064          44496000
  MPUNIT_064,*,8,CH     UNIT TYPE - 064             44532000
  SKIP,8                RESERVED                    44568000
MPVOLENT_065,*,32       VOLUME ENTRY - 065          44604000
  MPVOLSER_065,=,6,CH   VOLUME SERIAL - 065         44640000
  MPRACK_065,*,6,CH     RACK NUMBER - 065           44676000
  MPFEAT_065,*,4,CH     FEATURE CODE - 065          44712000
  MPUNIT_065,*,8,CH     UNIT TYPE - 065             44748000
  SKIP,8                RESERVED                    44784000
MPVOLENT_066,*,32       VOLUME ENTRY - 066          44820000
  MPVOLSER_066,=,6,CH   VOLUME SERIAL - 066         44856000
  MPRACK_066,*,6,CH     RACK NUMBER - 066           44892000
  MPFEAT_066,*,4,CH     FEATURE CODE - 066          44928000
  MPUNIT_066,*,8,CH     UNIT TYPE - 066             44964000
  SKIP,8                RESERVED                    45000000
MPVOLENT_067,*,32       VOLUME ENTRY - 067          45036000
  MPVOLSER_067,=,6,CH   VOLUME SERIAL - 067         45072000
  MPRACK_067,*,6,CH     RACK NUMBER - 067           45108000
  MPFEAT_067,*,4,CH     FEATURE CODE - 067          45144000
  MPUNIT_067,*,8,CH     UNIT TYPE - 067             45180000
  SKIP,8                RESERVED                    45216000
MPVOLENT_068,*,32       VOLUME ENTRY - 068          45252000
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  MPVOLSER_068,=,6,CH    VOLUME SERIAL - 068                45288000
  MPRACK_068,*,6,CH      RACK NUMBER - 068                  45324000
  MPFEAT_068,*,4,CH      FEATURE CODE - 068                 45360000
  MPUNIT_068,*,8,CH      UNIT TYPE - 068                    45396000
  SKIP,8                 RESERVED                           45432000
MPVOLENT_069,*,32        VOLUME ENTRY - 069                 45468000
  MPVOLSER_069,=,6,CH    VOLUME SERIAL - 069                45504000
  MPRACK_069,*,6,CH      RACK NUMBER - 069                  45540000
  MPFEAT_069,*,4,CH      FEATURE CODE - 069                 45576000
  MPUNIT_069,*,8,CH      UNIT TYPE - 069                    45612000
  SKIP,8                 RESERVED                           45648000
MPVOLENT_070,*,32        VOLUME ENTRY - 070                 45684000
  MPVOLSER_070,=,6,CH    VOLUME SERIAL - 070                45720000
  MPRACK_070,*,6,CH      RACK NUMBER - 070                  45756000
  MPFEAT_070,*,4,CH      FEATURE CODE - 070                 45792000
  MPUNIT_070,*,8,CH      UNIT TYPE - 070                    45828000
  SKIP,8                 RESERVED                           45864000
MPVOLENT_071,*,32        VOLUME ENTRY - 071                 45900000
  MPVOLSER_071,=,6,CH    VOLUME SERIAL - 071                45936000
  MPRACK_071,*,6,CH      RACK NUMBER - 071                  45972000
  MPFEAT_071,*,4,CH      FEATURE CODE - 071                 46008000
  MPUNIT_071,*,8,CH      UNIT TYPE - 071                    46044000
  SKIP,8                 RESERVED                           46080000
MPVOLENT_072,*,32        VOLUME ENTRY - 072                 46116000
  MPVOLSER_072,=,6,CH    VOLUME SERIAL - 072                46152000
  MPRACK_072,*,6,CH      RACK NUMBER - 072                  46188000
  MPFEAT_072,*,4,CH      FEATURE CODE - 072                 46224000
  MPUNIT_072,*,8,CH      UNIT TYPE - 072                    46260000
  SKIP,8                 RESERVED                           46296000
MPVOLENT_073,*,32        VOLUME ENTRY - 073                 46332000
  MPVOLSER_073,=,6,CH    VOLUME SERIAL - 073                46368000
  MPRACK_073,*,6,CH      RACK NUMBER - 073                  46404000
  MPFEAT_073,*,4,CH      FEATURE CODE - 073                 46440000
  MPUNIT_073,*,8,CH      UNIT TYPE - 073                    46476000
  SKIP,8                 RESERVED                           46512000
MPVOLENT_074,*,32        VOLUME ENTRY - 074                 46548000
  MPVOLSER_074,=,6,CH    VOLUME SERIAL - 074                46584000
  MPRACK_074,*,6,CH      RACK NUMBER - 074                  46620000
  MPFEAT_074,*,4,CH      FEATURE CODE - 074                 46656000
  MPUNIT_074,*,8,CH      UNIT TYPE - 074                    46692000
  SKIP,8                 RESERVED                           46728000
MPVOLENT_075,*,32        VOLUME ENTRY - 075                 46764000
  MPVOLSER_075,=,6,CH    VOLUME SERIAL - 075                46800000
  MPRACK_075,*,6,CH      RACK NUMBER - 075                  46836000
  MPFEAT_075,*,4,CH      FEATURE CODE - 075                 46872000
  MPUNIT_075,*,8,CH      UNIT TYPE - 075                    46908000
  SKIP,8                 RESERVED                           46944000
MPVOLENT_076,*,32        VOLUME ENTRY - 076                 46980000
  MPVOLSER_076,=,6,CH    VOLUME SERIAL - 076                47016000
  MPRACK_076,*,6,CH      RACK NUMBER - 076                  47052000
  MPFEAT_076,*,4,CH      FEATURE CODE - 076                 47088000
  MPUNIT_076,*,8,CH      UNIT TYPE - 076                    47124000
  SKIP,8                 RESERVED                           47160000
MPVOLENT_077,*,32        VOLUME ENTRY - 077                 47196000
  MPVOLSER_077,=,6,CH    VOLUME SERIAL - 077                47232000
  MPRACK_077,*,6,CH      RACK NUMBER - 077                  47268000
  MPFEAT_077,*,4,CH      FEATURE CODE - 077                 47304000
  MPUNIT_077,*,8,CH      UNIT TYPE - 077                    47340000
  SKIP,8                 RESERVED                           47376000
MPVOLENT_078,*,32        VOLUME ENTRY - 078                 47412000
  MPVOLSER_078,=,6,CH    VOLUME SERIAL - 078                47448000
  MPRACK_078,*,6,CH      RACK NUMBER - 078                  47484000
  MPFEAT_078,*,4,CH      FEATURE CODE - 078                 47520000
  MPUNIT_078,*,8,CH      UNIT TYPE - 078                    47556000
  SKIP,8                 RESERVED                           47592000
MPVOLENT_079,*,32        VOLUME ENTRY - 079                 47628000
  MPVOLSER_079,=,6,CH    VOLUME SERIAL - 079                47664000
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  MPRACK_079,*,6,CH      RACK NUMBER - 079                47700000
  MPFEAT_079,*,4,CH      FEATURE CODE - 079               47736000
  MPUNIT_079,*,8,CH      UNIT TYPE - 079                  47772000
  SKIP,8                 RESERVED                         47808000
MPVOLENT_080,*,32        VOLUME ENTRY - 080               47844000
  MPVOLSER_080,=,6,CH    VOLUME SERIAL - 080              47880000
  MPRACK_080,*,6,CH      RACK NUMBER - 080                47916000
  MPFEAT_080,*,4,CH      FEATURE CODE - 080               47952000
  MPUNIT_080,*,8,CH      UNIT TYPE - 080                  47988000
  SKIP,8                 RESERVED                         48024000
MPVOLENT_081,*,32        VOLUME ENTRY - 081               48060000
  MPVOLSER_081,=,6,CH    VOLUME SERIAL - 081              48096000
  MPRACK_081,*,6,CH      RACK NUMBER - 081                48132000
  MPFEAT_081,*,4,CH      FEATURE CODE - 081               48168000
  MPUNIT_081,*,8,CH      UNIT TYPE - 081                  48204000
  SKIP,8                 RESERVED                         48240000
MPVOLENT_082,*,32        VOLUME ENTRY - 082               48276000
  MPVOLSER_082,=,6,CH    VOLUME SERIAL - 082              48312000
  MPRACK_082,*,6,CH      RACK NUMBER - 082                48348000
  MPFEAT_082,*,4,CH      FEATURE CODE - 082               48384000
  MPUNIT_082,*,8,CH      UNIT TYPE - 082                  48420000
  SKIP,8                 RESERVED                         48456000
MPVOLENT_083,*,32        VOLUME ENTRY - 083               48492000
  MPVOLSER_083,=,6,CH    VOLUME SERIAL - 083              48528000
  MPRACK_083,*,6,CH      RACK NUMBER - 083                48564000
  MPFEAT_083,*,4,CH      FEATURE CODE - 083               48600000
  MPUNIT_083,*,8,CH      UNIT TYPE - 083                  48636000
  SKIP,8                 RESERVED                         48672000
MPVOLENT_084,*,32        VOLUME ENTRY - 084               48708000
  MPVOLSER_084,=,6,CH    VOLUME SERIAL - 084              48744000
  MPRACK_084,*,6,CH      RACK NUMBER - 084                48780000
  MPFEAT_084,*,4,CH      FEATURE CODE - 084               48816000
  MPUNIT_084,*,8,CH      UNIT TYPE - 084                  48852000
  SKIP,8                 RESERVED                         48888000
MPVOLENT_085,*,32        VOLUME ENTRY - 085               48924000
  MPVOLSER_085,=,6,CH    VOLUME SERIAL - 085              48960000
  MPRACK_085,*,6,CH      RACK NUMBER - 085                48996000
  MPFEAT_085,*,4,CH      FEATURE CODE - 085               49032000
  MPUNIT_085,*,8,CH      UNIT TYPE - 085                  49068000
  SKIP,8                 RESERVED                         49104000
MPVOLENT_086,*,32        VOLUME ENTRY - 086               49140000
  MPVOLSER_086,=,6,CH    VOLUME SERIAL - 086              49176000
  MPRACK_086,*,6,CH      RACK NUMBER - 086                49212000
  MPFEAT_086,*,4,CH      FEATURE CODE - 086               49248000
  MPUNIT_086,*,8,CH      UNIT TYPE - 086                  49284000
  SKIP,8                 RESERVED                         49320000
MPVOLENT_087,*,32        VOLUME ENTRY - 087               49356000
  MPVOLSER_087,=,6,CH    VOLUME SERIAL - 087              49392000
  MPRACK_087,*,6,CH      RACK NUMBER - 087                49428000
  MPFEAT_087,*,4,CH      FEATURE CODE - 087               49464000
  MPUNIT_087,*,8,CH      UNIT TYPE - 087                  49500000
  SKIP,8                 RESERVED                         49536000
MPVOLENT_088,*,32        VOLUME ENTRY - 088               49572000
  MPVOLSER_088,=,6,CH    VOLUME SERIAL - 088              49608000
  MPRACK_088,*,6,CH      RACK NUMBER - 088                49644000
  MPFEAT_088,*,4,CH      FEATURE CODE - 088               49680000
  MPUNIT_088,*,8,CH      UNIT TYPE - 088                  49716000
  SKIP,8                 RESERVED                         49752000
MPVOLENT_089,*,32        VOLUME ENTRY - 089               49788000
  MPVOLSER_089,=,6,CH    VOLUME SERIAL - 089              49824000
  MPRACK_089,*,6,CH      RACK NUMBER - 089                49860000
  MPFEAT_089,*,4,CH      FEATURE CODE - 089               49896000
  MPUNIT_089,*,8,CH      UNIT TYPE - 089                  49932000
  SKIP,8                 RESERVED                         49968000
MPVOLENT_090,*,32        VOLUME ENTRY - 090               50004000
  MPVOLSER_090,=,6,CH    VOLUME SERIAL - 090              50040000
  MPRACK_090,*,6,CH      RACK NUMBER - 090                50076000
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  MPFEAT_090,*,4,CH     FEATURE CODE - 090                50112000
  MPUNIT_090,*,8,CH     UNIT TYPE - 090                   50148000
  SKIP,8                RESERVED                          50184000
MPVOLENT_091,*,32       VOLUME ENTRY - 091                50220000
  MPVOLSER_091,=,6,CH   VOLUME SERIAL - 091               50256000
  MPRACK_091,*,6,CH     RACK NUMBER - 091                 50292000
  MPFEAT_091,*,4,CH     FEATURE CODE - 091                50328000
  MPUNIT_091,*,8,CH     UNIT TYPE - 091                   50364000
  SKIP,8                RESERVED                          50400000
MPVOLENT_092,*,32       VOLUME ENTRY - 092                50436000
  MPVOLSER_092,=,6,CH   VOLUME SERIAL - 092               50472000
  MPRACK_092,*,6,CH     RACK NUMBER - 092                 50508000
  MPFEAT_092,*,4,CH     FEATURE CODE - 092                50544000
  MPUNIT_092,*,8,CH     UNIT TYPE - 092                   50580000
  SKIP,8                RESERVED                          50616000
MPVOLENT_093,*,32       VOLUME ENTRY - 093                50652000
  MPVOLSER_093,=,6,CH   VOLUME SERIAL - 093               50688000
  MPRACK_093,*,6,CH     RACK NUMBER - 093                 50724000
  MPFEAT_093,*,4,CH     FEATURE CODE - 093                50760000
  MPUNIT_093,*,8,CH     UNIT TYPE - 093                   50796000
  SKIP,8                RESERVED                          50832000
MPVOLENT_094,*,32       VOLUME ENTRY - 094                50868000
  MPVOLSER_094,=,6,CH   VOLUME SERIAL - 094               50904000
  MPRACK_094,*,6,CH     RACK NUMBER - 094                 50940000
  MPFEAT_094,*,4,CH     FEATURE CODE - 094                50976000
  MPUNIT_094,*,8,CH     UNIT TYPE - 094                   51012000
  SKIP,8                RESERVED                          51048000
MPVOLENT_095,*,32       VOLUME ENTRY - 095                51084000
  MPVOLSER_095,=,6,CH   VOLUME SERIAL - 095               51120000
  MPRACK_095,*,6,CH     RACK NUMBER - 095                 51156000
  MPFEAT_095,*,4,CH     FEATURE CODE - 095                51192000
  MPUNIT_095,*,8,CH     UNIT TYPE - 095                   51228000
  SKIP,8                RESERVED                          51264000
MPVOLENT_096,*,32       VOLUME ENTRY - 096                51300000
  MPVOLSER_096,=,6,CH   VOLUME SERIAL - 096               51336000
  MPRACK_096,*,6,CH     RACK NUMBER - 096                 51372000
  MPFEAT_096,*,4,CH     FEATURE CODE - 096                51408000
  MPUNIT_096,*,8,CH     UNIT TYPE - 096                   51444000
  SKIP,8                RESERVED                          51480000
MPVOLENT_097,*,32       VOLUME ENTRY - 097                51516000
  MPVOLSER_097,=,6,CH   VOLUME SERIAL - 097               51552000
  MPRACK_097,*,6,CH     RACK NUMBER - 097                 51588000
  MPFEAT_097,*,4,CH     FEATURE CODE - 097                51624000
  MPUNIT_097,*,8,CH     UNIT TYPE - 097                   51660000
  SKIP,8                RESERVED                          51696000
MPVOLENT_098,*,32       VOLUME ENTRY - 098                51732000
  MPVOLSER_098,=,6,CH   VOLUME SERIAL - 098               51768000
  MPRACK_098,*,6,CH     RACK NUMBER - 098                 51804000
  MPFEAT_098,*,4,CH     FEATURE CODE - 098                51840000
  MPUNIT_098,*,8,CH     UNIT TYPE - 098                   51876000
  SKIP,8                RESERVED                          51912000
MPVOLENT_099,*,32       VOLUME ENTRY - 099                51948000
  MPVOLSER_099,=,6,CH   VOLUME SERIAL - 099               51984000
  MPRACK_099,*,6,CH     RACK NUMBER - 099                 52020000
  MPFEAT_099,*,4,CH     FEATURE CODE - 099                52056000
  MPUNIT_099,*,8,CH     UNIT TYPE - 099                   52092000
  SKIP,8                RESERVED                          52128000
MPVOLENT_100,*,32       VOLUME ENTRY - 100                52164000
  MPVOLSER_100,=,6,CH   VOLUME SERIAL - 100               52200000
  MPRACK_100,*,6,CH     RACK NUMBER - 100                 52236000
  MPFEAT_100,*,4,CH     FEATURE CODE - 100                52272000
  MPUNIT_100,*,8,CH     UNIT TYPE - 100                   52308000
  SKIP,8                RESERVED                          52344000
MPVOLENT_101,*,32       VOLUME ENTRY - 101                52380000
  MPVOLSER_101,=,6,CH   VOLUME SERIAL - 101               52416000
  MPRACK_101,*,6,CH     RACK NUMBER - 101                 52452000
  MPFEAT_101,*,4,CH     FEATURE CODE - 101                52488000
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  MPUNIT_101,*,8,CH      UNIT TYPE - 101                  52524000
  SKIP,8                 RESERVED                         52560000
MPVOLENT_102,*,32        VOLUME ENTRY - 102               52596000
  MPVOLSER_102,=,6,CH    VOLUME SERIAL - 102              52632000
  MPRACK_102,*,6,CH      RACK NUMBER - 102                52668000
  MPFEAT_102,*,4,CH      FEATURE CODE - 102               52704000
  MPUNIT_102,*,8,CH      UNIT TYPE - 102                  52740000
  SKIP,8                 RESERVED                         52776000
MPVOLENT_103,*,32        VOLUME ENTRY - 103               52812000
  MPVOLSER_103,=,6,CH    VOLUME SERIAL - 103              52848000
  MPRACK_103,*,6,CH      RACK NUMBER - 103                52884000
  MPFEAT_103,*,4,CH      FEATURE CODE - 103               52920000
  MPUNIT_103,*,8,CH      UNIT TYPE - 103                  52956000
  SKIP,8                 RESERVED                         52992000
MPVOLENT_104,*,32        VOLUME ENTRY - 104               53028000
  MPVOLSER_104,=,6,CH    VOLUME SERIAL - 104              53064000
  MPRACK_104,*,6,CH      RACK NUMBER - 104                53100000
  MPFEAT_104,*,4,CH      FEATURE CODE - 104               53136000
  MPUNIT_104,*,8,CH      UNIT TYPE - 104                  53172000
  SKIP,8                 RESERVED                         53208000
MPVOLENT_105,*,32        VOLUME ENTRY - 105               53244000
  MPVOLSER_105,=,6,CH    VOLUME SERIAL - 105              53280000
  MPRACK_105,*,6,CH      RACK NUMBER - 105                53316000
  MPFEAT_105,*,4,CH      FEATURE CODE - 105               53352000
  MPUNIT_105,*,8,CH      UNIT TYPE - 105                  53388000
  SKIP,8                 RESERVED                         53424000
MPVOLENT_106,*,32        VOLUME ENTRY - 106               53460000
  MPVOLSER_106,=,6,CH    VOLUME SERIAL - 106              53496000
  MPRACK_106,*,6,CH      RACK NUMBER - 106                53532000
  MPFEAT_106,*,4,CH      FEATURE CODE - 106               53568000
  MPUNIT_106,*,8,CH      UNIT TYPE - 106                  53604000
  SKIP,8                 RESERVED                         53640000
MPVOLENT_107,*,32        VOLUME ENTRY - 107               53676000
  MPVOLSER_107,=,6,CH    VOLUME SERIAL - 107              53712000
  MPRACK_107,*,6,CH      RACK NUMBER - 107                53748000
  MPFEAT_107,*,4,CH      FEATURE CODE - 107               53784000
  MPUNIT_107,*,8,CH      UNIT TYPE - 107                  53820000
  SKIP,8                 RESERVED                         53856000
MPVOLENT_108,*,32        VOLUME ENTRY - 108               53892000
  MPVOLSER_108,=,6,CH    VOLUME SERIAL - 108              53928000
  MPRACK_108,*,6,CH      RACK NUMBER - 108                53964000
  MPFEAT_108,*,4,CH      FEATURE CODE - 108               54000000
  MPUNIT_108,*,8,CH      UNIT TYPE - 108                  54036000
  SKIP,8                 RESERVED                         54072000
MPVOLENT_109,*,32        VOLUME ENTRY - 109               54108000
  MPVOLSER_109,=,6,CH    VOLUME SERIAL - 109              54144000
  MPRACK_109,*,6,CH      RACK NUMBER - 109                54180000
  MPFEAT_109,*,4,CH      FEATURE CODE - 109               54216000
  MPUNIT_109,*,8,CH      UNIT TYPE - 109                  54252000
  SKIP,8                 RESERVED                         54288000
MPVOLENT_110,*,32        VOLUME ENTRY - 110               54324000
  MPVOLSER_110,=,6,CH    VOLUME SERIAL - 110              54360000
  MPRACK_110,*,6,CH      RACK NUMBER - 110                54396000
  MPFEAT_110,*,4,CH      FEATURE CODE - 110               54432000
  MPUNIT_110,*,8,CH      UNIT TYPE - 110                  54468000
  SKIP,8                 RESERVED                         54504000
MPVOLENT_111,*,32        VOLUME ENTRY - 111               54540000
  MPVOLSER_111,=,6,CH    VOLUME SERIAL - 111              54576000
  MPRACK_111,*,6,CH      RACK NUMBER - 111                54612000
  MPFEAT_111,*,4,CH      FEATURE CODE - 111               54648000
  MPUNIT_111,*,8,CH      UNIT TYPE - 111                  54684000
  SKIP,8                 RESERVED                         54720000
MPVOLENT_112,*,32        VOLUME ENTRY - 112               54756000
  MPVOLSER_112,=,6,CH    VOLUME SERIAL - 112              54792000
  MPRACK_112,*,6,CH      RACK NUMBER - 112                54828000
  MPFEAT_112,*,4,CH      FEATURE CODE - 112               54864000
  MPUNIT_112,*,8,CH      UNIT TYPE - 112                  54900000
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  SKIP,8                RESERVED                          54936000
MPVOLENT_113,*,32       VOLUME ENTRY - 113                54972000
  MPVOLSER_113,=,6,CH   VOLUME SERIAL - 113               55008000
  MPRACK_113,*,6,CH     RACK NUMBER - 113                 55044000
  MPFEAT_113,*,4,CH     FEATURE CODE - 113                55080000
  MPUNIT_113,*,8,CH     UNIT TYPE - 113                   55116000
  SKIP,8                RESERVED                          55152000
MPVOLENT_114,*,32       VOLUME ENTRY - 114                55188000
  MPVOLSER_114,=,6,CH   VOLUME SERIAL - 114               55224000
  MPRACK_114,*,6,CH     RACK NUMBER - 114                 55260000
  MPFEAT_114,*,4,CH     FEATURE CODE - 114                55296000
  MPUNIT_114,*,8,CH     UNIT TYPE - 114                   55332000
  SKIP,8                RESERVED                          55368000
MPVOLENT_115,*,32       VOLUME ENTRY - 115                55404000
  MPVOLSER_115,=,6,CH   VOLUME SERIAL - 115               55440000
  MPRACK_115,*,6,CH     RACK NUMBER - 115                 55476000
  MPFEAT_115,*,4,CH     FEATURE CODE - 115                55512000
  MPUNIT_115,*,8,CH     UNIT TYPE - 115                   55548000
  SKIP,8                RESERVED                          55584000
MPVOLENT_116,*,32       VOLUME ENTRY - 116                55620000
  MPVOLSER_116,=,6,CH   VOLUME SERIAL - 116               55656000
  MPRACK_116,*,6,CH     RACK NUMBER - 116                 55692000
  MPFEAT_116,*,4,CH     FEATURE CODE - 116                55728000
  MPUNIT_116,*,8,CH     UNIT TYPE - 116                   55764000
  SKIP,8                RESERVED                          55800000
MPVOLENT_117,*,32       VOLUME ENTRY - 117                55836000
  MPVOLSER_117,=,6,CH   VOLUME SERIAL - 117               55872000
  MPRACK_117,*,6,CH     RACK NUMBER - 117                 55908000
  MPFEAT_117,*,4,CH     FEATURE CODE - 117                55944000
  MPUNIT_117,*,8,CH     UNIT TYPE - 117                   55980000
  SKIP,8                RESERVED                          56016000
MPVOLENT_118,*,32       VOLUME ENTRY - 118                56052000
  MPVOLSER_118,=,6,CH   VOLUME SERIAL - 118               56088000
  MPRACK_118,*,6,CH     RACK NUMBER - 118                 56124000
  MPFEAT_118,*,4,CH     FEATURE CODE - 118                56160000
  MPUNIT_118,*,8,CH     UNIT TYPE - 118                   56196000
  SKIP,8                RESERVED                          56232000
MPVOLENT_119,*,32       VOLUME ENTRY - 119                56268000
  MPVOLSER_119,=,6,CH   VOLUME SERIAL - 119               56304000
  MPRACK_119,*,6,CH     RACK NUMBER - 119                 56340000
  MPFEAT_119,*,4,CH     FEATURE CODE - 119                56376000
  MPUNIT_119,*,8,CH     UNIT TYPE - 119                   56412000
  SKIP,8                RESERVED                          56448000
MPVOLENT_120,*,32       VOLUME ENTRY - 120                56484000
  MPVOLSER_120,=,6,CH   VOLUME SERIAL - 120               56520000
  MPRACK_120,*,6,CH     RACK NUMBER - 120                 56556000
  MPFEAT_120,*,4,CH     FEATURE CODE - 120                56592000
  MPUNIT_120,*,8,CH     UNIT TYPE - 120                   56628000
  SKIP,8                RESERVED                          56664000
MPVOLENT_121,*,32       VOLUME ENTRY - 121                56700000
  MPVOLSER_121,=,6,CH   VOLUME SERIAL - 121               56736000
  MPRACK_121,*,6,CH     RACK NUMBER - 121                 56772000
  MPFEAT_121,*,4,CH     FEATURE CODE - 121                56808000
  MPUNIT_121,*,8,CH     UNIT TYPE - 121                   56844000
  SKIP,8                RESERVED                          56880000
MPVOLENT_122,*,32       VOLUME ENTRY - 122                56916000
  MPVOLSER_122,=,6,CH   VOLUME SERIAL - 122               56952000
  MPRACK_122,*,6,CH     RACK NUMBER - 122                 56988000
  MPFEAT_122,*,4,CH     FEATURE CODE - 122                57024000
  MPUNIT_122,*,8,CH     UNIT TYPE - 122                   57060000
  SKIP,8                RESERVED                          57096000
MPVOLENT_123,*,32       VOLUME ENTRY - 123                57132000
  MPVOLSER_123,=,6,CH   VOLUME SERIAL - 123               57168000
  MPRACK_123,*,6,CH     RACK NUMBER - 123                 57204000
  MPFEAT_123,*,4,CH     FEATURE CODE - 123                57240000
  MPUNIT_123,*,8,CH     UNIT TYPE - 123                   57276000
  SKIP,8                RESERVED                          57312000
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MPVOLENT_124,*,32       VOLUME ENTRY - 124                  57348000
  MPVOLSER_124,=,6,CH   VOLUME SERIAL - 124                 57384000
  MPRACK_124,*,6,CH     RACK NUMBER - 124                   57420000
  MPFEAT_124,*,4,CH     FEATURE CODE - 124                  57456000
  MPUNIT_124,*,8,CH     UNIT TYPE - 124                     57492000
  SKIP,8                RESERVED                            57528000
MPVOLENT_125,*,32       VOLUME ENTRY - 125                  57564000
  MPVOLSER_125,=,6,CH   VOLUME SERIAL - 125                 57600000
  MPRACK_125,*,6,CH     RACK NUMBER - 125                   57636000
  MPFEAT_125,*,4,CH     FEATURE CODE - 125                  57672000
  MPUNIT_125,*,8,CH     UNIT TYPE - 125                     57708000
  SKIP,8                RESERVED                            57744000
MPVOLENT_126,*,32       VOLUME ENTRY - 126                  57780000
  MPVOLSER_126,=,6,CH   VOLUME SERIAL - 126                 57816000
  MPRACK_126,*,6,CH     RACK NUMBER - 126                   57852000
  MPFEAT_126,*,4,CH     FEATURE CODE - 126                  57888000
  MPUNIT_126,*,8,CH     UNIT TYPE - 126                     57924000
  SKIP,8                RESERVED                            57960000
MPVOLENT_127,*,32       VOLUME ENTRY - 127                  57996000
  MPVOLSER_127,=,6,CH   VOLUME SERIAL - 127                 58032000
  MPRACK_127,*,6,CH     RACK NUMBER - 127                   58068000
  MPFEAT_127,*,4,CH     FEATURE CODE - 127                  58104000
  MPUNIT_127,*,8,CH     UNIT TYPE - 127                     58140000
  SKIP,8                RESERVED                            58176000
MPVOLENT_128,*,32       VOLUME ENTRY - 128                  58212000
  MPVOLSER_128,=,6,CH   VOLUME SERIAL - 128                 58248000
  MPRACK_128,*,6,CH     RACK NUMBER - 128                   58284000
  MPFEAT_128,*,4,CH     FEATURE CODE - 128                  58320000
  MPUNIT_128,*,8,CH     UNIT TYPE - 128                     58356000
  SKIP,8                RESERVED                            58392000
MPVOLENT_129,*,32       VOLUME ENTRY - 129                  58428000
  MPVOLSER_129,=,6,CH   VOLUME SERIAL - 129                 58464000
  MPRACK_129,*,6,CH     RACK NUMBER - 129                   58500000
  MPFEAT_129,*,4,CH     FEATURE CODE - 129                  58536000
  MPUNIT_129,*,8,CH     UNIT TYPE - 129                     58572000
  SKIP,8                RESERVED                            58608000
MPVOLENT_130,*,32       VOLUME ENTRY - 130                  58644000
  MPVOLSER_130,=,6,CH   VOLUME SERIAL - 130                 58680000
  MPRACK_130,*,6,CH     RACK NUMBER - 130                   58716000
  MPFEAT_130,*,4,CH     FEATURE CODE - 130                  58752000
  MPUNIT_130,*,8,CH     UNIT TYPE - 130                     58788000
  SKIP,8                RESERVED                            58824000
MPVOLENT_131,*,32       VOLUME ENTRY - 131                  58860000
  MPVOLSER_131,=,6,CH   VOLUME SERIAL - 131                 58896000
  MPRACK_131,*,6,CH     RACK NUMBER - 131                   58932000
  MPFEAT_131,*,4,CH     FEATURE CODE - 131                  58968000
  MPUNIT_131,*,8,CH     UNIT TYPE - 131                     59004000
  SKIP,8                RESERVED                            59040000
MPVOLENT_132,*,32       VOLUME ENTRY - 132                  59076000
  MPVOLSER_132,=,6,CH   VOLUME SERIAL - 132                 59112000
  MPRACK_132,*,6,CH     RACK NUMBER - 132                   59148000
  MPFEAT_132,*,4,CH     FEATURE CODE - 132                  59184000
  MPUNIT_132,*,8,CH     UNIT TYPE - 132                     59220000
  SKIP,8                RESERVED                            59256000
MPVOLENT_133,*,32       VOLUME ENTRY - 133                  59292000
  MPVOLSER_133,=,6,CH   VOLUME SERIAL - 133                 59328000
  MPRACK_133,*,6,CH     RACK NUMBER - 133                   59364000
  MPFEAT_133,*,4,CH     FEATURE CODE - 133                  59400000
  MPUNIT_133,*,8,CH     UNIT TYPE - 133                     59436000
  SKIP,8                RESERVED                            59472000
MPVOLENT_134,*,32       VOLUME ENTRY - 134                  59508000
  MPVOLSER_134,=,6,CH   VOLUME SERIAL - 134                 59544000
  MPRACK_134,*,6,CH     RACK NUMBER - 134                   59580000
  MPFEAT_134,*,4,CH     FEATURE CODE - 134                  59616000
  MPUNIT_134,*,8,CH     UNIT TYPE - 134                     59652000
  SKIP,8                RESERVED                            59688000
MPVOLENT_135,*,32       VOLUME ENTRY - 135                  59724000
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  MPVOLSER_135,=,6,CH    VOLUME SERIAL - 135                59760000
  MPRACK_135,*,6,CH      RACK NUMBER - 135                  59796000
  MPFEAT_135,*,4,CH      FEATURE CODE - 135                 59832000
  MPUNIT_135,*,8,CH      UNIT TYPE - 135                    59868000
  SKIP,8                 RESERVED                           59904000
MPVOLENT_136,*,32        VOLUME ENTRY - 136                 59940000
  MPVOLSER_136,=,6,CH    VOLUME SERIAL - 136                59976000
  MPRACK_136,*,6,CH      RACK NUMBER - 136                  60012000
  MPFEAT_136,*,4,CH      FEATURE CODE - 136                 60048000
  MPUNIT_136,*,8,CH      UNIT TYPE - 136                    60084000
  SKIP,8                 RESERVED                           60120000
MPVOLENT_137,*,32        VOLUME ENTRY - 137                 60156000
  MPVOLSER_137,=,6,CH    VOLUME SERIAL - 137                60192000
  MPRACK_137,*,6,CH      RACK NUMBER - 137                  60228000
  MPFEAT_137,*,4,CH      FEATURE CODE - 137                 60264000
  MPUNIT_137,*,8,CH      UNIT TYPE - 137                    60300000
  SKIP,8                 RESERVED                           60336000
MPVOLENT_138,*,32        VOLUME ENTRY - 138                 60372000
  MPVOLSER_138,=,6,CH    VOLUME SERIAL - 138                60408000
  MPRACK_138,*,6,CH      RACK NUMBER - 138                  60444000
  MPFEAT_138,*,4,CH      FEATURE CODE - 138                 60480000
  MPUNIT_138,*,8,CH      UNIT TYPE - 138                    60516000
  SKIP,8                 RESERVED                           60552000
MPVOLENT_139,*,32        VOLUME ENTRY - 139                 60588000
  MPVOLSER_139,=,6,CH    VOLUME SERIAL - 139                60624000
  MPRACK_139,*,6,CH      RACK NUMBER - 139                  60660000
  MPFEAT_139,*,4,CH      FEATURE CODE - 139                 60696000
  MPUNIT_139,*,8,CH      UNIT TYPE - 139                    60732000
  SKIP,8                 RESERVED                           60768000
MPVOLENT_140,*,32        VOLUME ENTRY - 140                 60804000
  MPVOLSER_140,=,6,CH    VOLUME SERIAL - 140                60840000
  MPRACK_140,*,6,CH      RACK NUMBER - 140                  60876000
  MPFEAT_140,*,4,CH      FEATURE CODE - 140                 60912000
  MPUNIT_140,*,8,CH      UNIT TYPE - 140                    60948000
  SKIP,8                 RESERVED                           60984000
MPVOLENT_141,*,32        VOLUME ENTRY - 141                 61020000
  MPVOLSER_141,=,6,CH    VOLUME SERIAL - 141                61056000
  MPRACK_141,*,6,CH      RACK NUMBER - 141                  61092000
  MPFEAT_141,*,4,CH      FEATURE CODE - 141                 61128000
  MPUNIT_141,*,8,CH      UNIT TYPE - 141                    61164000
  SKIP,8                 RESERVED                           61200000
MPVOLENT_142,*,32        VOLUME ENTRY - 142                 61236000
  MPVOLSER_142,=,6,CH    VOLUME SERIAL - 142                61272000
  MPRACK_142,*,6,CH      RACK NUMBER - 142                  61308000
  MPFEAT_142,*,4,CH      FEATURE CODE - 142                 61344000
  MPUNIT_142,*,8,CH      UNIT TYPE - 142                    61380000
  SKIP,8                 RESERVED                           61416000
MPVOLENT_143,*,32        VOLUME ENTRY - 143                 61452000
  MPVOLSER_143,=,6,CH    VOLUME SERIAL - 143                61488000
  MPRACK_143,*,6,CH      RACK NUMBER - 143                  61524000
  MPFEAT_143,*,4,CH      FEATURE CODE - 143                 61560000
  MPUNIT_143,*,8,CH      UNIT TYPE - 143                    61596000
  SKIP,8                 RESERVED                           61632000
MPVOLENT_144,*,32        VOLUME ENTRY - 144                 61668000
  MPVOLSER_144,=,6,CH    VOLUME SERIAL - 144                61704000
  MPRACK_144,*,6,CH      RACK NUMBER - 144                  61740000
  MPFEAT_144,*,4,CH      FEATURE CODE - 144                 61776000
  MPUNIT_144,*,8,CH      UNIT TYPE - 144                    61812000
  SKIP,8                 RESERVED                           61848000
MPVOLENT_145,*,32        VOLUME ENTRY - 145                 61884000
  MPVOLSER_145,=,6,CH    VOLUME SERIAL - 145                61920000
  MPRACK_145,*,6,CH      RACK NUMBER - 145                  61956000
  MPFEAT_145,*,4,CH      FEATURE CODE - 145                 61992000
  MPUNIT_145,*,8,CH      UNIT TYPE - 145                    62028000
  SKIP,8                 RESERVED                           62064000
MPVOLENT_146,*,32        VOLUME ENTRY - 146                 62100000
  MPVOLSER_146,=,6,CH    VOLUME SERIAL - 146                62136000
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  MPRACK_146,*,6,CH      RACK NUMBER - 146                62172000
  MPFEAT_146,*,4,CH      FEATURE CODE - 146               62208000
  MPUNIT_146,*,8,CH      UNIT TYPE - 146                  62244000
  SKIP,8                 RESERVED                         62280000
MPVOLENT_147,*,32        VOLUME ENTRY - 147               62316000
  MPVOLSER_147,=,6,CH    VOLUME SERIAL - 147              62352000
  MPRACK_147,*,6,CH      RACK NUMBER - 147                62388000
  MPFEAT_147,*,4,CH      FEATURE CODE - 147               62424000
  MPUNIT_147,*,8,CH      UNIT TYPE - 147                  62460000
  SKIP,8                 RESERVED                         62496000
MPVOLENT_148,*,32        VOLUME ENTRY - 148               62532000
  MPVOLSER_148,=,6,CH    VOLUME SERIAL - 148              62568000
  MPRACK_148,*,6,CH      RACK NUMBER - 148                62604000
  MPFEAT_148,*,4,CH      FEATURE CODE - 148               62640000
  MPUNIT_148,*,8,CH      UNIT TYPE - 148                  62676000
  SKIP,8                 RESERVED                         62712000
MPVOLENT_149,*,32        VOLUME ENTRY - 149               62748000
  MPVOLSER_149,=,6,CH    VOLUME SERIAL - 149              62784000
  MPRACK_149,*,6,CH      RACK NUMBER - 149                62820000
  MPFEAT_149,*,4,CH      FEATURE CODE - 149               62856000
  MPUNIT_149,*,8,CH      UNIT TYPE - 149                  62892000
  SKIP,8                 RESERVED                         62928000
MPVOLENT_150,*,32        VOLUME ENTRY - 150               62964000
  MPVOLSER_150,=,6,CH    VOLUME SERIAL - 150              63000000
  MPRACK_150,*,6,CH      RACK NUMBER - 150                63036000
  MPFEAT_150,*,4,CH      FEATURE CODE - 150               63072000
  MPUNIT_150,*,8,CH      UNIT TYPE - 150                  63108000
  SKIP,8                 RESERVED                         63144000
MPVOLENT_151,*,32        VOLUME ENTRY - 151               63180000
  MPVOLSER_151,=,6,CH    VOLUME SERIAL - 151              63216000
  MPRACK_151,*,6,CH      RACK NUMBER - 151                63252000
  MPFEAT_151,*,4,CH      FEATURE CODE - 151               63288000
  MPUNIT_151,*,8,CH      UNIT TYPE - 151                  63324000
  SKIP,8                 RESERVED                         63360000
MPVOLENT_152,*,32        VOLUME ENTRY - 152               63396000
  MPVOLSER_152,=,6,CH    VOLUME SERIAL - 152              63432000
  MPRACK_152,*,6,CH      RACK NUMBER - 152                63468000
  MPFEAT_152,*,4,CH      FEATURE CODE - 152               63504000
  MPUNIT_152,*,8,CH      UNIT TYPE - 152                  63540000
  SKIP,8                 RESERVED                         63576000
MPVOLENT_153,*,32        VOLUME ENTRY - 153               63612000
  MPVOLSER_153,=,6,CH    VOLUME SERIAL - 153              63648000
  MPRACK_153,*,6,CH      RACK NUMBER - 153                63684000
  MPFEAT_153,*,4,CH      FEATURE CODE - 153               63720000
  MPUNIT_153,*,8,CH      UNIT TYPE - 153                  63756000
  SKIP,8                 RESERVED                         63792000
MPVOLENT_154,*,32        VOLUME ENTRY - 154               63828000
  MPVOLSER_154,=,6,CH    VOLUME SERIAL - 154              63864000
  MPRACK_154,*,6,CH      RACK NUMBER - 154                63900000
  MPFEAT_154,*,4,CH      FEATURE CODE - 154               63936000
  MPUNIT_154,*,8,CH      UNIT TYPE - 154                  63972000
  SKIP,8                 RESERVED                         64008000
MPVOLENT_155,*,32        VOLUME ENTRY - 155               64044000
  MPVOLSER_155,=,6,CH    VOLUME SERIAL - 155              64080000
  MPRACK_155,*,6,CH      RACK NUMBER - 155                64116000
  MPFEAT_155,*,4,CH      FEATURE CODE - 155               64152000
  MPUNIT_155,*,8,CH      UNIT TYPE - 155                  64188000
  SKIP,8                 RESERVED                         64224000
MPVOLENT_156,*,32        VOLUME ENTRY - 156               64260000
  MPVOLSER_156,=,6,CH    VOLUME SERIAL - 156              64296000
  MPRACK_156,*,6,CH      RACK NUMBER - 156                64332000
  MPFEAT_156,*,4,CH      FEATURE CODE - 156               64368000
  MPUNIT_156,*,8,CH      UNIT TYPE - 156                  64404000
  SKIP,8                 RESERVED                         64440000
MPVOLENT_157,*,32        VOLUME ENTRY - 157               64476000
  MPVOLSER_157,=,6,CH    VOLUME SERIAL - 157              64512000
  MPRACK_157,*,6,CH      RACK NUMBER - 157                64548000
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  MPFEAT_157,*,4,CH     FEATURE CODE - 157                64584000
  MPUNIT_157,*,8,CH     UNIT TYPE - 157                   64620000
  SKIP,8                RESERVED                          64656000
MPVOLENT_158,*,32       VOLUME ENTRY - 158                64692000
  MPVOLSER_158,=,6,CH   VOLUME SERIAL - 158               64728000
  MPRACK_158,*,6,CH     RACK NUMBER - 158                 64764000
  MPFEAT_158,*,4,CH     FEATURE CODE - 158                64800000
  MPUNIT_158,*,8,CH     UNIT TYPE - 158                   64836000
  SKIP,8                RESERVED                          64872000
MPVOLENT_159,*,32       VOLUME ENTRY - 159                64908000
  MPVOLSER_159,=,6,CH   VOLUME SERIAL - 159               64944000
  MPRACK_159,*,6,CH     RACK NUMBER - 159                 64980000
  MPFEAT_159,*,4,CH     FEATURE CODE - 159                65016000
  MPUNIT_159,*,8,CH     UNIT TYPE - 159                   65052000
  SKIP,8                RESERVED                          65088000
MPVOLENT_160,*,32       VOLUME ENTRY - 160                65124000
  MPVOLSER_160,=,6,CH   VOLUME SERIAL - 160               65160000
  MPRACK_160,*,6,CH     RACK NUMBER - 160                 65196000
  MPFEAT_160,*,4,CH     FEATURE CODE - 160                65232000
  MPUNIT_160,*,8,CH     UNIT TYPE - 160                   65268000
  SKIP,8                RESERVED                          65304000
MPVOLENT_161,*,32       VOLUME ENTRY - 161                65340000
  MPVOLSER_161,=,6,CH   VOLUME SERIAL - 161               65376000
  MPRACK_161,*,6,CH     RACK NUMBER - 161                 65412000
  MPFEAT_161,*,4,CH     FEATURE CODE - 161                65448000
  MPUNIT_161,*,8,CH     UNIT TYPE - 161                   65484000
  SKIP,8                RESERVED                          65520000
MPVOLENT_162,*,32       VOLUME ENTRY - 162                65556000
  MPVOLSER_162,=,6,CH   VOLUME SERIAL - 162               65592000
  MPRACK_162,*,6,CH     RACK NUMBER - 162                 65628000
  MPFEAT_162,*,4,CH     FEATURE CODE - 162                65664000
  MPUNIT_162,*,8,CH     UNIT TYPE - 162                   65700000
  SKIP,8                RESERVED                          65736000
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
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  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
  MPFEAT_170,*,4,CH      FEATURE CODE - 170               67392000
  MPUNIT_170,*,8,CH      UNIT TYPE - 170                  67428000
  SKIP,8                 RESERVED                         67464000
MPVOLENT_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
MPVOLENT_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
MPVOLENT_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
MPVOLENT_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
MPVOLENT_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
MPVOLENT_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
MPVOLENT_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
MPVOLENT_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
MPVOLENT_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
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  SKIP,8                RESERVED                          69408000
MPVOLENT_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
MPVOLENT_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
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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
  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
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  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
  MPVOLSER_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
  MPVOLSER_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
  MPVOLSER_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
  MPVOLSER_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
  MPVOLSER_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
  MPVOLSER_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
  MPVOLSER_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
  MPVOLSER_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
  MPVOLSER_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
  MPVOLSER_213,=,6,CH    VOLUME SERIAL - 213                76608000
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  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
  MPVOLSER_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
  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
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  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
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  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
  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
  MPVOLSER_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
  MPVOLSER_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
  MPVOLSER_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
  MPVOLSER_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
  MPVOLSER_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
  MPVOLSER_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
  MPVOLSER_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
  MPVOLSER_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
  MPVOLSER_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
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      SKIP,8                RESERVED                                  83880000
    MPVOLENT_247,*,32       VOLUME ENTRY - 247                        83916000
      MPVOLSER_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
      MPVOLSER_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
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     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
 SKIP,2                    RESERVED                                   86688000
 MRCRDATE,*,4,PD           RACK CREATE DATE - YYYYDDD                 86724000
 MRCRTIME,*,4,PD           RACK CREATE TIME - HHMMSST                 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 -  HHMMSST                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
 MRUCTIME,*,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
MRRCEND,*                  END OF MRRC                                87552000
************************************************************************ 87588000
* END OF RMM MRREC                                                    * 87624000
************************************************************************ 87660000
*                                                                      87696000
POSITION,SMFADREC          START AFTER EDGSMFAR                       87732000
************************************************************************  87768000
* 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 - HHMMSST                      88632000
 MSCRSID,*,8,CH            CREATE SYSTEM ID                           88668000
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  MSRCCDS,*,8,CH            RECORD CREATE CDS ID                        88704000
  MSLCDATE,*,4,PD           LAST CHANGE DATE  - YYYYDDD                 88740000
  MSLCTIME,*,4,PD           LAST CHANGE TIME -  HHMMSST                 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
    MSSELFLG,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
***************************************************************************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 - HHMMSST                   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 -  HHMMSST                 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
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    MVDENC,'C'                3480 COMPACTED (IDRC)                    91116000
    MVDENU,'*'                UNDEFINED                                91152000
  MVDSNNO,*,2,FI            NUMBER OF DATASETS ON VOLUME             91188000
  MVTUSE,*,4,FI             TAPE USAGE IN KBYTES                     91224000
  MVUSE,*,2,FI              VOLUME USE COUNT                         91260000
  MVSTSTAT,*,1,BI           STORE STATUS                             91296000
    MVSTS001,X'01'            TAPE LIB TO REMOTE STORE               91332000
    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
  MVVRSREL,*,1,BI           VRS RELEASE OPTIONS                      91620000
    MVVRFXDI,B'1.......'      EXPIRY DATE IGNORE                     91656000
    MVVRFSCI,B'.1......'      SCRATCH IMMEDIATE                      91692000
* FLAG BITS IN MVVRSREL SHOULD MATCH MKRLSOPT BIT SETTINGS.          91728000
  MVLABNO1,*,2,FI           LABEL NUMBER OF 1ST FILE                 91764000
  MVTDSI,*,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
    MVMEDTY,*,1,BI          TAPE MEDIA TYPE                          92052000
      MVMTYU,X'00'            UNKNOWN                                92088000
      MVMTYCS,X'01'           CST                                    92124000
      MVMTYEC,X'02'           ECCST                                  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 (HHMMSST)                  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 INITIALISED93384000
    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
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    MVFOCEAB,B'.....1..'       ABEND PROBABLY IN O/C/EOV                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                         93780000
    MVMSTFLG,B'1.......'       VOLUME IS MASTER                         93816000
    MVRLSFLG,B'.1......'       VOLUME PENDING RELEASE                   93852000
    MVVRFLG,B'..1.....'        VITAL RECORD - DO NOT RELEASE            93888000
    MVASSFLG,B'...1....'       USER TAPE (ASSIGNED BY LIB)              93924000
    MVLONFLG,B'....1...'       TAPE IS ON LOAN                          93960000
    MVOPNFLG,B'.....1..'       TAPE OPENED AND NOT YET CLOSED           93996000
    MVSCRFLG,B'......1.'       VOLUME IS SCRATCH                        94032000
    MVOCEFLG,B'.......1'       VOLUME RECORDED BY O/C/EOV               94068000
    MVEXRFLG,B'.......1'       STV RECORDED BY EXPORT                   94104000
 MVFLGB,*,1,BI               FLAGS 'B'                                  94140000
    MVDEFRET,B'1.......'       DEFAULT RETENTION PERIOD USED            94176000
    MVPPTAPE,B'.1......'       PROGRAM PRODUCT TAPE                     94212000
    MVNLTAPE,B'..1.....'       LABEL TYPE IS NL                         94248000
    MVALTAPE,B'...1....'       LABEL TYPE IS AL                         94284000
    MVSLTAPE,B'....1...'       LABEL TYPE IS SL                         94320000
    MVBLTAPE,B'......1.'       TAPE LAST WRITTEN USING BLP              94356000
    MVULTAPE,B'.......1'       SL OR AL TAPE HAS USER LABELS            94392000
  MVFLGC,*,1,BI               FLAGS 'C' - RELEASE ACTIONS               94428000
    MVRETSCR,B'1.......'       RETURN TO SCRATCH POOL - DEFAULT         94464000
    MVRELACT,B'.1111111'       RELEASE ACTIONS                          94500000
    MVREPREL,B'.1......'       REPLACE TAPE ON RELEASE                  94536000
    MVREINIT,B'..1.....'       REINITIALISE                             94572000
    MVDEGAUS,B'...1....'       DEGAUS/SECURITY ERASE                    94608000
    MVROWNER,B'....1...'       RETURN TO OWNER                          94644000
    MVNOWNER,B'.....1..'       NOTIFY OWNER                             94680000
  MVFLGD,*,1,BI               FLAGS 'D' - ACCESS                        94716000
    MVOREAD,B'1.......'        OWNER MAY READ VOLUME                    94752000
    MVOUPD,B'.1......'         OWNER MAY UPDATE VOLUME                  94788000
    MVOALT,B'..1.....'         OWNER MAY ALTER VOLUME                   94824000
    MVPROTR,B'...1....'        READ-ONLY PROTECTION                     94860000
    MVPROTU,B'....1...'        UPDATE PROTECTION                        94896000
    MVMVSUSE,B'.....1..'       MAY BE USED ON MVS SYSTEMS               94932000
    MVVMUSE,B'......1.'        MAY BE USED ON VM SYSTEMS                94968000
    MVNODSNR,B'.......1'       ONLY 1ST TAPE DS RECORDED                95004000
  MVFLGE,*,1,BI               FLAGS 'E' - ACTIONS PENDING               95040000
*   MVRETSCR,B'1.......'       RETURN TO SCRATCH POOL - DEFAULT         95076000
*   MVRELACT,B'.1111111'       RELEASE ACTIONS                          95112000
*   MVREPREL,B'.1......'       REPLACE TAPE ON RELEASE                  95148000
*   MVREINIT,B'..1.....'       REINITIALISE                             95184000
*   MVDEGAUS,B'...1....'       DEGAUS/SECURITY ERASE                    95220000
*   MVROWNER,B'....1...'       RETURN TO OWNER                          95256000
*   MVNOWNER,B'.....1..'       NOTIFY OWNER                             95292000
  MVLTYP,*,1,BI               COPY OF JFCBLTYP                          95328000
  MVALVERS,*,2,CH             ANSI LABEL VERSION                        95364000
    MVALCUR,=,1,FI            CURRENT LABEL VERSION                     95400000
    MVALREQ,*,1,FI            REQUIRED LABEL VERSION                    95436000
  MVMEDIA,*,8,CH              INSTALLATIONS MEDIA NAME                  95472000
    MVUNIT,=,8,CH             UNIT TYPE                                 95508000
  MVRACK,*,6,CH               RACK NUMBER                               95544000
  MVPVOL,*,6,CH               PREVIOUS VOLSER IF MULTI-VOL              95580000
  MVNVOL,*,6,CH               NEXT VOLSER IF MULTI-VOL                  95616000
  MVUCBTYP,*,4,BI             COPY OF UCBTYP FIELD FROM UCB             95652000
  MVERRCNT,*,8                ERROR COUNTS                              95688000
    MVTRERR,=,2,FI            TEMPORARY READ ERRORS                     95724000
    MVTWERR,*,2,FI            TEMPORARY WRITE ERRORS                    95760000
    MVPRERR,*,2,FI            PERMANENT READ ERRORS                     95796000
    MVPWERR,*,2,FI            PERMANENT WRITE ERRORS                    95832000
  MVBLKID,*,4,CH              BLOCKID RETURNED BY OCE EX@LEC            95868000
  MVPPDATA,*,18               PROGRAM PRODUCT DATA                      95904000
```

```
    MVPPNUM,=,8,CH          PROGRAM PRODUCT NUMBER                    95940000
    MVVER,*,6,CH            VERSION/RELEASE/MOD NUMBER                95976000
    MVFEAT,*,4,CH           FEATURE CODE                              96012000
  MVTRTCH,*,1,BI            FROM JFCTRTCH - IDRC SUPPORT              96048000
    MVTCOMP,X'08'             DSN USED 3480 IDRC                      96084000
    MVTNCOMP,X'04'            NO COMPACTION                           96120000
  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
*                                WHEN NOT SET, VOLUME IS IN LOCATION   96300000
    MVMVMODE,B'.1......'      INDICATES MANUALMOVE                    96336000
*                                WHEN NOT SET, INDICATES AUTOMOVE      96372000
    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
    MVLTSNB,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
    MVNTSNB,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
    MVDTSNB,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
    MVHTSNB,B'0101....'       STORE WITHOUT BINS                      97308000
  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
  MVMAGLAB,*,6,CH           CURRENT MAGNETIC LABEL                    97776000
  MVOLDRCK,*,6,CH           PREVIOUS RACK NUMBER                      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
```

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    MVOLD_CONTAINER,*,16,CH  OLD CONTOINER                              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
* 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
    MVACCLEN,*,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
```

Appendix B. DFSMSrmm Mapping Macros

DFSMSrmm provides the macros identified in this appendix as programming interfaces for customers.

Attention:

Do not use as programming interfaces any DFSMSrmm macros other than those identified in this book.

- 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 186
  "Extract Data Set Header Record: EDGRHEXT" on page 189
  "Extract Data Set Vital Record Specification Record: EDGRKEXT" on page 190
  "Extract Data Set Owner Record: EDGROEXT" on page 192
  "Extract Data Set Software Product Record: EDGRPEXT" on page 194
  "Extract Data Set Rack Record: EDGRREXT" on page 195
  "Extract Data Set Volume Report Record: EDGRVEXT" on page 198

- 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 204
  "SMF Security Record Information: EDGSMFSR" on page 205
  "SMF Action Record Information: EDGSAREC" on page 213
  "SMF Data Set Information: EDGSDREC" on page 215
  "SMF Vital Record Specification Information: EDGSKREC" on page 219
  "SMF Owner Information: EDGSOREC" on page 222
  "SMF Software Product Information: EDGSPREC" on page 225
  "SMF Library Shelf Location Information: EDGSRREC" on page 227
  "SMF Storage Location Shelf Location Information: EDGSSREC" on page 229
  "SMF Volume Information: EDGSVREC" on page 231

General-use Programming Interface Mapping Macros

"General-use Programming Interface Mapping Macros" contains General-use Programming Interface and Associated Guidance Information.

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 6 for more information about the DFSMSrmm extract data set.

Offsets Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	STRUCTURE	477	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	RDLCUID	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	RDDSNSEQ	DATA SET SEQUENCE NUMBER
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	DATASET 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	RDVRSTYP	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	RDDDNAME	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	RDLABNO	LABEL NUMBER LABEL=(xx,ll)
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	RDVRSSCH	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	0	RDRCEND	END 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
RDDSNSEQ	6E		2
RDDSSIZE	15C		2
RDEXT	0		1
RDLABNO	16C		2
RDLCDATE	48		2
RDLCSID	60		2
RDLCTIME	52		2
RDLCUID	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
RDRCEND	1DD		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
RDVOLSER	68		2
RDVRSJBN	132		2
RDVRSNAM	106		2
RDVRSR	168		2
RDVRSSCH	170		2
RDVRSTYP	105		2
RDVRSVAL	DD		2

Name	Offset	Hex Tag	Level
RDVRSXDS	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 6 for more information about the DFSMSrmm extract data set.

Offsets Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	STRUCTURE		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’
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
105	(69)	CHARACTER	100	*	RESERVED
205	(CD)	CHARACTER	0	RHRCEND	END 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

EDGSDREC

Name	Offset	Hex Tag	Level
RHCRSID	40		2
RHCRTIME	3A		2
RHDATEFORM	68		2
RHEXT	0		1
RHRCEND	CD		2
RHTYPE	0		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 6 for more information about the DFSMSrmm extract data set.

Offsets Dec	Hex	Type	Len	Name (Dim)	Description
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
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	RKCRTJBN	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

Offsets Dec	Hex	Type	Len	Name (Dim)	Description
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	8		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
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
END OF REPORT EXTRACT VRS RECORD					
206	(CE)	CHARACTER 11.. 111.	1	RKRCEND(0) RKRCLNG	END OF RKEXT ″RKRCEND-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	206	RKRCLNG	CB LENGTH

EDGRKEXT Cross Reference

Name	Offset	Hex Tag	Level
RKCOUNT	8F		2
RKCRDATE	30		2

EDGRKEXT

Name	Offset	Hex Tag	Level
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
RKLCUID	58		2
RKLOC	7F		2
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 6 for more information about the DFSMSrmm extract data set.

Offsets Dec	Offsets 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

Offsets Dec	Hex	Type	Len	Name (Dim)	Description
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
82	(52)	CHARACTER	6	ROLCTIME	LAST CHANGE TIME (HHMMSS) of owner record
88	(58)	CHARACTER	8	ROLCUID	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
ROLCUID	58		2
ROOWNAD1	B8		2
ROOWNAD2	E0		2
ROOWNAD3	108		2

EDGROEXT

Name	Offset	Hex Tag	Level
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 6 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 (vvrrmm) 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

Offsets Dec	Hex	Type	Len	Name (Dim)	Description
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)	END OF RPEXT
		1.11		RPRCLNG	″RPRCEND-RPEXT″ MAX LENGTH OF RPEXT

EDGRPEXT Cross Reference

Name	Offset	Hex Tag	Level
RPCRDATE	30		2
RPCRSID	40		2
RPCRTIME	3A		2
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 6 for more information about the DFSMSrmm extract data set.

Offsets Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	STRUCTURE		RREXT	
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.					
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

EDGRREXT

Offsets Dec	Hex	Type	Len	Name (Dim)	Description
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
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	1	RRRCEND(0)	END OF RREXT
		.11. 111.		RRRCLNG	″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 6 for more information about the DFSMSrmm extract data set.

Offsets Dec	Hex	Type	Len	Name (Dim)	Description
0	(0)	STRUCTURE		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:
		11.. .1.1		RSTYPER	″C'E'″ E - EMPTY BIN
		111. .1..		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
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	ASSIGNED VOLUME SERIAL NUMBER
END OF REPORT EXTRACT STORAGE LOCATION BIN RECORD					
110	(6E)	CHARACTER	1	RSRCEND(0)	END OF RSEXT
		.11. 111.		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
RSLCDATE	48		2
RSLCSID	60		2
RSLCTIME	52		2

EDGRSEXT

Name	Offset	Hex Tag	Level
RSLCUID	58		2
RSRCEND	6E		2
RSRCLNG	6E	6E	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 6 for more information about the DFSMSrmm extract data set.

Offsets					
Decimal	**Hex**	**Type**	**Length**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	771	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	RVLCTIME	LAST CHANGE TIME HHMMSS of volume record
88	(58)	CHARACTER	8	RVLCUID	LAST CHANGE USER ID of volume record
96	(60)	CHARACTER	8	RVLCSID	LAST CHANGE SYSTEM ID of volume record
104	(68)	CHARACTER	10	RVEXPDTO	EXPIRATION DATE - original
114	(72)	CHARACTER	10	RVEXPDT	EXPIRATION DATE - current
124	(7C)	CHARACTER	4	RVDEN	RECORDING DENSITY

Offsets Decimal	Hex	Type	Length	Name (Dim)	Description
128	(80)	CHARACTER	1	RVCOMP	COMPACTION USED - Y/N
129	(81)	CHARACTER	4	RVDSNNO	NUMBER OF DATASETS ON VOLUME
133	(85)	CHARACTER	10	RVTUSE	TAPE USAGE IN KBYTES
143	(8F)	CHARACTER	4	RVUSE	VOLUME USE COUNT
147	(93)	CHARACTER	4	RVLABNO1	LABEL NO OF FIRST FILE
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	STORE BIN NUMBER
173	(AD)	CHARACTER	6	RVOBIN	OLD BIN NUMBER
179	(B3)	CHARACTER	10	RVSTDATE	DATE STORED
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	RVCRUID	CREATING USERID
267	(10B)	CHARACTER	8	RVCRJOB	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

EDGRVEXT

Offsets Decimal	Hex	Type	Length	Name (Dim)	Description
330	(14A)	CHARACTER	1	RVDEFRET	PARMLIB DEFAULT RETENTION USED TO GENERATE THE VOLUME EXPDT - Y/N
331	(14B)	CHARACTER	1	RVPPTAPE	PROGRAM PRODUCT TAPE - Y/N
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 RVACTION 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)	CHARACTER	8	RVUNIT	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, BLANK
579	(243)	CHARACTER	1	RVDESTYP	DESTINATION TYPE. ONE OF: A-AUTO, M-MANUAL, S-STORE, BLANK
580	(244)	CHARACTER	8	RVOLOC	THE PREVIOUS LOCATION NAME
588	(24C)	CHARACTER	8	RVSGNAME	STORAGE GROUP NAME

Offsets Decimal	Hex	Type	Length	Name (Dim)	Description
596	(254)	CHARACTER	8	RVMEDREC	VOLUME RECORDING FORMAT. 18TRACK, 36TRACK, 128TRACK or 256TRACK
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	DATA SET RECORDING Y=YES, N=NO
674	(2A2)	CHARACTER	2	RVALVERS	ANSI LABEL VERSIONS
674	(2A2)	CHARACTER	1	RVALCUR	CURRENT LABEL VERSION
675	(2A3)	CHARACTER	1	RVALREQ	REQUIRED LABEL VERSION
676	(2A4)	CHARACTER	8	RVBMEDN	BIN MEDIA NAME
684	(2AC)	CHARACTER	8	RVOBMEDN	OLD BIN MEDIA NAME
692	(2B4)	CHARACTER	8	RVNLOC	NEXT LOCATION NAME
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	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	DATASET 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
716	(2CC)	CHARACTER	8	RVVRSREL	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 IS RETAINED BY SET Y/N
755	(2F3)	CHARACTER	1	RVSTACKVOL_ENABLED	

EDGRVEXT

Offsets Decimal	Hex	Type	Length	Name (Dim)	Description
					STACKED VOLUME RECORDS ENABLED AND SYNCHRONIZED
756	(2F4)	CHARACTER	8	RVEXPTOKEN	UNIQUE VALUE CREATED AT START OF EXPORT TO A NEW STACKED VOLUME.
764	(2FC)	SIGNED	4	RVSTACKED_VOLCOUNT	COUNT OF VOLUMES STACKED ON A VOLUME.
768	(300)	CHARACTER	3	RVPERCENT	Volume percentage full
771	(303)	CHARACTER	0	RVRCEND	END 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		3
RVACTINI	2C3		3
RVACTION	2C0		2
RVACTNOT	2C5		3
RVACTREP	2C1		3
RVACTRET	2C2		3
RVACTRSV	2C6		3
RVACTSCR	2C0		3
RVALCUR	2A2		3
RVALREQ	2A3		3
RVALVERS	2A2		2
RVASDATE	EB		2
RVASTIME	F5		2
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
RVDEFRET	14A		2
RVDEN	7C		2
RVDEST	9F		2
RVDESTYP	243		2
RVDSNAM1	274		2

Name	Offset	Hex Tag	Level
RVDSNNO	81		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	93		2
RVLCDATE	48		2
RVLCSID	60		2
RVLCTIME	52		2
RVLCUID	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
RVOBIN	AD		2
RVOBMEDN	2AC		2
RVOCER	149		2
RVOLNLOC	CF		2
RVOLOC	244		2
RVOPEN	148		2
RVOWNAC	15C		2
RVOWNID	FB		2
RVPENDRS	145		2
RVPERCENT	300		2
RVPPNUM	17E		2
RVPPTAPE	14B		2
RVPRERR	176		2
RVPVOL	A		2
RVPWERR	17A		2
RVRACK	168		2
RVRBYSET	2F2		2
RVRCEND	303		2
RVRELIXD	2CC		3

EDGRVEXT

Name	Offset	Hex Tag	Level
RVRELRSV	2CE		3
RVRELSI	2CD		3
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		3
RVUSE	8F		2
RVUSEFLD	1B8		2
RVUSERAC	15D		2
RVVER	186		2
RVVMUSE	15E		2
RVVOLSEQ	139		2
RVVOLSER	4		2
RVVOLTYPE	2CB		2
RVVRS	146		2
RVVRSREL	2CC		2

SMF Audit Record Header Information: EDGSMFAR

EDGSMFAR maps the DFSMSrmm SMF audit record header. See “Using the Audit Report” on page 40 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.

Offsets Dec	Hex	Type	Len	Name (Dim)	Description
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
SMFADREC	2B		2
SMFADRSD	1E		2
SMFADRST	1A		2
SMFADRTY	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 39 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 **

EDGSMFSR

Offsets Dec	Hex	Type	Len	Name (Dim)	Description
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 **
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	4	SMFSEND(0)	** END OF SMFSR **
		1... 11..		SMFSLNG	″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

Name	Offset	Hex Tag	Level
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

"Product-sensitive Programming Interface Mapping Macros" contains Product-sensitive Programming Interface and Associated Guidance Information. The macros in this section are broken down into:

- 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 7 for information about using the ACTIVITY file.

Offsets					
Decimal	**Hex**	**Type**	**Length**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	443	ACTRC	activity record
0	(0)	CHARACTER	4	ACTRC_RDW	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)	CHARACTER	4	ACTRC_PREFIX	common prefix
4	(4)	CHARACTER	1	ACTRC_PRE_TYPE	activity file record type
5	(5)	CHARACTER	3	*	reserved
8	(8)	CHARACTER	435	ACTRC_DATA	overlay for details areas
Header Record					
8	(8)	CHARACTER	73	ACTRC_HDR_DATA	header data
8	(8)	CHARACTER	10	ACTRC_HDR_RUN_DATE	inventory mgmt date
18	(12)	CHARACTER	6	ACTRC_HDR_RUN_TIME	inventory mgmt time
24	(18)	CHARACTER	10	ACTRC_HDR_VERIFY_DATE	inv mgmt VERIFY date
34	(22)	CHARACTER	16	ACTRC_HDR_EXEC	execution parameters
34	(22)	CHARACTER	1	ACTRC_HDR_BACKUP	BACKUP: Y/N
35	(23)	CHARACTER	1	ACTRC_HDR_DSTORE	DSTORE: Y/N

EDGACTRC

Offsets Decimal	Hex	Type	Length	Name (Dim)	Description
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	VERIFY DATE: Y/N
41	(29)	CHARACTER	1	ACTRC_HDR_DATEFORM	DATEFORM:
42	(2A)	CHARACTER	1	ACTRC_HDR_CATSYNCH	CATSYNCH: Y/N
43	(2B)	CHARACTER	7	*	reserved
50	(32)	CHARACTER	31	ACTRC_HDR_OPTIONS	
50	(32)	CHARACTER	1	ACTRC_HDR_VRSJOBNAME	VRSJOBNAME:
51	(33)	CHARACTER	1	ACTRC_HDR_VRSCHANGE	VRSCHANGE:
52	(34)	CHARACTER	4	ACTRC_HDR_CATRETPD	CATRETPD hours
56	(38)	CHARACTER	10	ACTRC_HDR_VRSMIN_COUNT	VRSMIN count
66	(42)	CHARACTER	1	ACTRC_HDR_VRSMIN_ACTION	VRSMIN action:
67	(43)	CHARACTER	1	ACTRC_HDR_OPT_VRSEL	VRSEL: New/Old
68	(44)	CHARACTER	1	ACTRC_HDR_UNCATALOG	UNCATALOG:
69	(45)	CHARACTER	1	ACTRC_HDR_TPRACF	TPRACF:
70	(46)	CHARACTER	8	ACTRC_HDR_SYSID	SYSID:
78	(4E)	CHARACTER	1	ACTRC_HDR_CATSYSID	CATSYSID:
79	(4F)	CHARACTER	1	ACTRC_HDR_OPT_RETAINBY	RETAINBY:
80	(50)	CHARACTER	1	ACTRC_HDR_OPT_MOVEBY	MOVEBY:
Data Set Record					
8	(8)	CHARACTER	435	ACTRC_DSN_DATA	data set details data
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	ACTRC_DSN_DSEQ	data set sequence
70	(46)	CHARACTER	4	ACTRC_DSN_FILESEQ	physical file sequence
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

Offsets Decimal	Hex	Type	Length	Name (Dim)	Description
98	(62)	CHARACTER	8	ACTRC_DSN_DEST	volume destination
106	(6A)	CHARACTER	8	ACTRC_DSN_SMS_MC	SMS mgmt class name
114	(72)	CHARACTER	8	ACTRC_DSN_VRS_MV	VRS mgmt value name
122	(7A)	CHARACTER	1	ACTRC_DSN_CATLG	data set catlg status
123	(7B)	CHARACTER	10	ACTRC_DSN_CYCLE	primary vrs data set cycle number
133	(85)	CHARACTER	10	ACTRC_DSN_2CYCLE	second. 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	second. subchain drop reason
145	(91)	CHARACTER	1	ACTRC_DSN_OLD_CATLG	old catlg status
146	(92)	CHARACTER	1	ACTRC_DSN_NEW_CATLG	new catlg status
147	(93)	CHARACTER	31	*	reserved
178	(B2)	CHARACTER	8	ACTRC_DSN_CHANGE	Changes to data set
178	(B2)	CHARACTER	1	ACTRC_DSN_CHNG_VRS	vital 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	cat status: Y/N
183	(B7)	CHARACTER	3	*	reserved
186	(BA)	CHARACTER	1	ACTRC_DSN_OLD_VITAL	old vital status: Y/N
187	(BB)	CHARACTER	1	ACTRC_DSN_NEW_VITAL	new vital status: Y/N
188	(BC)	CHARACTER	1	ACTRC_DSN_DROP	non-retention reason
189	(BD)	CHARACTER	8	ACTRC_DSN_NEW_LOC	new required location
197	(C5)	CHARACTER	10	ACTRC_DSN_OLD_RETDATE	old retention date:
207	(CF)	CHARACTER	10	ACTRC_DSN_NEW_RETDATE	new retention date: Format: as DATEFORM() Special date formats: - WHILECATLG - CYCL/nnnnn - CATRETPD
217	(D9)	CHARACTER	113	ACTRC_DSN_OLD_MATCH	old matching VRS
217	(D9)	CHARACTER	1	ACTRC_DSN_OLD_MTYPE	old primary VRS type:
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 mask

EDGACTRC

Offsets Decimal	Hex	Type	Length	Name (Dim)	Description
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 mask
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	new matching VRS
330	(14A)	CHARACTER	1	ACTRC_DSN_NEW_MTYPE	new matching VRS
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 mask
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 mask
399	(18F)	CHARACTER	8	ACTRC_DSN_NEW_MNAME	new primary VRS subchain NAME
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
Volume Record					
8	(8)	CHARACTER	0	ACTRC_VOL_DATA	volume data
8	(8)	CHARACTER	0	*	

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	

Len	Type	Value	Name	Description
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	
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		4
ACTRC_DSN_CHANGE	B2		4
ACTRC_DSN_CHNG_CATALOG	B6		5
ACTRC_DSN_CHNG_MATCH	B4		5
ACTRC_DSN_CHNG_RETDATE	B3		5
ACTRC_DSN_CHNG_SUBCHAIN	B5		5
ACTRC_DSN_CHNG_VRS	B2		5
ACTRC_DSN_CRDATE	4A		4
ACTRC_DSN_CRTIME	54		4
ACTRC_DSN_CYCLE	7B		4
ACTRC_DSN_DATA	8		3
ACTRC_DSN_DEST	62		4
ACTRC_DSN_DROP	BC		4
ACTRC_DSN_DSEQ	42		4
ACTRC_DSN_DSNAME	8		4
ACTRC_DSN_FILESEQ	46		4
ACTRC_DSN_JOBNAME	34		4
ACTRC_DSN_LOC	5A		4
ACTRC_DSN_NEW_CATLG	92		4
ACTRC_DSN_NEW_LOC	BD		4
ACTRC_DSN_NEW_MATCH	14A		4
ACTRC_DSN_NEW_MDATE	197		5
ACTRC_DSN_NEW_MJOB	177		5

EDGACTRC

Name	Offset	Hex Tag	Level
ACTRC_DSN_NEW_MMASK	14B		5
ACTRC_DSN_NEW_MNAME	18F		5
ACTRC_DSN_NEW_MTYPE	14A		5
ACTRC_DSN_NEW_M2DATE	1A9		5
ACTRC_DSN_NEW_M2JOB	187		5
ACTRC_DSN_NEW_M2MASK	17F		5
ACTRC_DSN_NEW_M2NAME	1A1		5
ACTRC_DSN_NEW_RETDATE	CF		4
ACTRC_DSN_NEW_VITAL	BB		4
ACTRC_DSN_OLD_CATLG	91		4
ACTRC_DSN_OLD_MATCH	D9		4
ACTRC_DSN_OLD_MDATE	126		5
ACTRC_DSN_OLD_MJOB	106		5
ACTRC_DSN_OLD_MMASK	DA		5
ACTRC_DSN_OLD_MNAME	11E		5
ACTRC_DSN_OLD_MTYPE	D9		5
ACTRC_DSN_OLD_M2DATE	138		5
ACTRC_DSN_OLD_M2JOB	116		5
ACTRC_DSN_OLD_M2MASK	10E		5
ACTRC_DSN_OLD_M2NAME	130		5
ACTRC_DSN_OLD_RETDATE	C5		4
ACTRC_DSN_OLD_VITAL	BA		4
ACTRC_DSN_SMS_MC	6A		4
ACTRC_DSN_SUBCHAIN_DROP	8F		4
ACTRC_DSN_VOL	3C		4
ACTRC_DSN_VRS_MV	72		4
ACTRC_DSN_2CYCLE	85		4
ACTRC_DSN_2SUBCHAIN_DROP	90		4
ACTRC_HDR_BACKUP	22		5
ACTRC_HDR_CATRETPD	34		5
ACTRC_HDR_CATSYNCH	2A		5
ACTRC_HDR_CATSYSID	4E		5
ACTRC_HDR_DATA	8		3
ACTRC_HDR_DATE	28		5
ACTRC_HDR_DATEFORM	29		5
ACTRC_HDR_DSTORE	23		5
ACTRC_HDR_EXEC	22		4
ACTRC_HDR_EXPROC	24		5
ACTRC_HDR_OPT_MOVEBY	50		5
ACTRC_HDR_OPT_RETAINBY	4F		5
ACTRC_HDR_OPT_VRSEL	43		5
ACTRC_HDR_OPTIONS	32		4
ACTRC_HDR_RPTEXT	25		5
ACTRC_HDR_RUN_DATE	8		4
ACTRC_HDR_RUN_TIME	12		4
ACTRC_HDR_SYSID	46		5
ACTRC_HDR_TPRACF	45		5
ACTRC_HDR_UNCATALOG	44		5
ACTRC_HDR_VERIFY	27		5
ACTRC_HDR_VERIFY_DATE	18		4
ACTRC_HDR_VRSCHANGE	33		5
ACTRC_HDR_VRSEL	26		5
ACTRC_HDR_VRSJOBNAME	32		5
ACTRC_HDR_VRSMIN_ACTION	42		5

Name	Offset	Hex Tag	Level
ACTRC_HDR_VRSMIN_COUNT	38		5
ACTRC_PRE_TYPE	4		3
ACTRC_PREFIX	4		2
ACTRC_RDW	0		2
ACTRC_RDW_LEN	0		3
ACTRC_RDW_SEG	2		3
ACTRC_VOL_DATA	8		3

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 **
		11.. ..11		MATYPEID	″C’C’″ ** ACTION RECORD ID SYMBOL **
1	(1)	CHARACTER	1	MATYPE1	** **
		11.. ...1		MATYPE1_ACTION	″C’A’″ ** ACTION SUB-TYPE **
		11.1 .1..		MATYPE1_MOVE	″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 **

EDGSAREC

Offsets Dec	Hex	Type	Len	Name (Dim)	Description
FLAG BYTES					
116	(74)	BITSTRING	1	MACFLG	** CONTROL FLAGS 1 **
		1...		MADELFLG	″X'80'″ ** RECORD DELETED **
		...1		MASELFLG	″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	MASFLAG	** STATUS OF MOVES AND ACTIONS **
		1...		MASCOMP	″X'80'″ ** STATUS = COMPLETED **
		.1..		MASPEND	″X'40'″ ** STATUS = PENDING **
		..1.		MASCONF	″X'20'″ ** STATUS = CONFIRMED **
		...1		MASUNK	″X'10'″ ** STATUS = UNKNOWN **
129	(81)	CHARACTER	7	MARESVD	** RESERVED **
END OF ACTION RECORD SPECIFICATION FILE RECORD					
136	(88)	SIGNED	4	MARCEND(0)	** END OF MAREC **
		1... 1...		MARCLNG	″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
MADELFLG	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
MASELFLG	74	10	2

Name	Offset	Hex Tag	Level
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 Dec	Offsets Hex	Type	Len	Name (Dim)	Description
0	(0)	STRUCTURE	512	MDREC	
0	(0)	CHARACTER	56	MDRECORD	EDGSDREC INFORMATION
0	(0)	CHARACTER	1	MDTYPE	DSN INFO ID: 'D'
1	(1)	CHARACTER	44	MDDSNAME	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)	CHARACTER	2	MDPAD1	RESERVED - BINARY ZEROS
56	(38)	SIGNED	2	MDRECLN	RECORD LENGTH
58	(3A)	SIGNED	2	*	RESERVED
60	(3C)	CHARACTER	4	MDCRDATE	DSN CREATE DATE - YYYYDDD
64	(40)	CHARACTER	4	MDCRTIME	DSN CREATE TIME - HHMMSST
68	(44)	CHARACTER	8	MDCRSID	CREATE SYSTEM ID
76	(4C)	CHARACTER	8	MDRCCDS	RECORD CREATE CDS ID
84	(54)	CHARACTER	4	MDLCDATE	LAST CHANGE DATE - YYYYDDD
88	(58)	CHARACTER	4	MDLCTIME	LAST CHANGE TIME - HHMMSST
92	(5C)	CHARACTER	8	MDLCUID	LAST CHANGE USER ID
100	(64)	CHARACTER	8	MDLCSID	LAST CHANGE SYSTEM ID
108	(6C)	CHARACTER	4	MDUCDATE	LAST ″USER″ CHANGE DATE
112	(70)	CHARACTER	4	MDUCTIME	LAST ″USER″ CHANGE TIME
116	(74)	BITSTRING	1	MDCFLG	CONTROL FLAGS 1
		1...		MDDELFLG	RECORD DELETED
		.1..		MDPDLFLG	RECORD PREVIOUSLY DELETED
		..1.			*
		...1		MDSELFLG	SELECT - PROC BY SATELLITE UPDT
		.... 1...		MDDUMMY	DUMMY RECORD - ALLOW TSO ADD
		.... .111		*	
117	(75)	BITSTRING	1	MDRECLEV	RECORD LEVEL NUMBER
118	(76)	CHARACTER	6	*	RESERVED
124	(7C)	SIGNED	4	MDTOTAL_BLKS	Total block count across all volumes containing ds
128	(80)	UNSIGNED	1	MDSTART_POSN	File start media position
129	(81)	UNSIGNED	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

EDGSDREC

Offsets Dec	Hex	Type	Len	Name (Dim)	Description
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
161	(A1)	BITSTRING	1	MDTRTCH	FROM JFCTRTCH - IDRC SUPPORT
		1...		*	
		.1..		*	
		..1.		*	
		...1		*	
		.... 1...		MDTCOMP	DSN USED 3480 IDRC
		.... .1..		MDTNCOMP	NO COMPACTION
162	(A2)	CHARACTER	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)	CHARACTER	4	MDLRDATE	DATE LAST READ - YYYYDDD
180	(B4)	CHARACTER	4	MDLWDATE	DATE LAST WRITTEN YYYYDDD
184	(B8)	BITSTRING	1	MDFLAG	FLAG BYTE
		1...		MDFCAT	DATA SET IS CATALOGED
		.1..		MDFVRSR	DATA SET IS RET. BY VRS
		..1.		MDFNOTCAT	INDICATES DS WAS FOUND NOT TO BE CATALOGED DURING VRS
		...1		*	RESERVED
		.... 1...		MDFABEND	ABEND IN PROCESS WHEN DATA SET CLOSED
		.... .1..		MDFOCEAB	ABEND PROBABLY IN O/C/EOV
		.... ..1.		MDFORCE	FORCE SUPPLIED
		1		*	RESERVED
185	(B9)	CHARACTER	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	MANAGEMENT CLASS NAME
196	(C4)	CHARACTER	8	MDVRSVAL	VRS MANAGEMENT VALUE
204	(CC)	CHARACTER	308	*	
204	(CC)	CHARACTER	92	MDLEV0VS	LEVEL 0 VARIABLE SECTION
204	(CC)	CHARACTER	308	*	
204	(CC)	CHARACTER	88	MDLEV1SC	LEVEL 1 SECTION
204	(CC)	CHARACTER	8	MDACSSG	STORAGE GROUP NAME
212	(D4)	CHARACTER	8	MDACSSC	STORAGE CLASS NAME
220	(DC)	CHARACTER	8	MDACSDC	DATA CLASS NAME
228	(E4)	CHARACTER	8	MDCRTJBN	CREATING JOBNAME
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	MDDDNAME	CREATING DDNAME
264	(108)	CHARACTER	8	MDPVSCH	PRIMARY VRS SUBSEQUENT SUBCHAIN NAME
272	(110)	CHARACTER	4	MDPVSDTE	PRIMARY VRS SUBSEQUENT SUBCHAIN START DATE
276	(114)	CHARACTER	4	MDEXPDT	EXPIRATION DATE
280	(118)	CHARACTER	4	MDEXPDTO	ORIGINAL EXPIRATION DATE

Offsets Dec	Hex	Type	Len	Name (Dim)	Description
284	(11C)	CHARACTER	8	*	RESERVED
292	(124)	CHARACTER	220	*	
292	(124)	CHARACTER	136	MDLEV1VS	LEVEL 1 VARIABLE SECTION
292	(124)	CHARACTER	220	*	
292	(124)	CHARACTER	56	MDLEV2SC	LEVEL 2 SECTION
292	(124)	UNSIGNED	4	MDBLKIDS	FILE START BLOCKID
296	(128)	UNSIGNED	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
348	(15C)	CHARACTER	164	MDVARSEC	VARIABLE LENGTH SECTION
348	(15C)	UNSIGNED	1	MDPDSNL	LENGTH OF PREVIOUS DSNAME
349	(15D)	UNSIGNED	1	MDNDSNL	LENGTH OF NEXT DSNAME
350	(15E)	UNSIGNED	1	MDVRSNML	LENGTH OF MATCHING VRS NAME
351	(15F)	UNSIGNED	1	MD2VMTCL	LENGTH OF SECOND. VRS FLDS
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	SECONDARY VRS DETAILS
484	(1E4)	CHARACTER	8	MD2VNAME	SECONDARY VRS MASK
492	(1EC)	CHARACTER	8	MD2VJBNM	SECONDARY VRS JOBNAME MASK
500	(1F4)	CHARACTER	8	MD2VSCH	SECONDARY VRS SUBSEQUENT SUBCHAIN NAME
508	(1FC)	CHARACTER	4	MD2VSDTE	SECONDARY VRS SUBSEQUENT SUBCHAIN START DATE
512	(200)	CHARACTER	0	MDRCEND	END OF 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		5
MDACSMC	BC		2
MDACSSC	D4		5
MDACSSG	CC		5
MDBLKCNT	94		2
MDBLKIDE	128		7
MDBLKIDS	124		7
MDBLKSZ	90		2
MDCFLG	74		2
MDCPGM	12C		7
MDCRDATE	3C		2

EDGSDREC

Name	Offset	Hex Tag	Level
MDCRSID	44		2
MDCRTIME	40		2
MDCRTJBN	E4		5
MDDDNAME	100		5
MDDELFLG	74	80	3
MDDSNAME	1		3
MDDSNSEQ	34		3
MDDSSIZE	AC		2
MDDUMMY	74	08	3
MDEND_POSN	81		2
MDEXPDT	114		5
MDEXPDTO	118		5
MDFABEND	B8	08	3
MDFCAT	B8	80	3
MDFILSEQ	A2		2
MDFLAG	B8		2
MDFNOTCAT	B8	20	3
MDFOCEAB	B8	04	3
MDFORCE	B8	02	3
MDFVRSR	B8	40	3
MDLCDATE	54		2
MDLCSID	64		2
MDLCTIME	58		2
MDLCUID	5C		2
MDLDDNM	14C		7
MDLDEVN	154		7
MDLEV0VS	CC		3
MDLEV1SC	CC		4
MDLEV1VS	124		5
MDLEV2SC	124		6
MDLJOB	13C		7
MDLPGM	134		7
MDLRDATE	B0		2
MDLRECL	8C		2
MDLSTEP	144		7
MDLWDATE	B4		2
MDNDSN	18C		7
MDNDSNL	15D		7
MDOWNDSN	98		2
MDPAD1	36		3
MDPDLFLG	74	40	3
MDPDSN	160		7
MDPDSNL	15C		7
MDPVSCH	108		5
MDPVSDTE	110		5
MDRCCDS	4C		2
MDRCEND	200		2
MDREC	0		1
MDRECFM	88		2
MDRECLEV	75		2
MDRECLN	38		2
MDRECORD	0		2
MDRETDAT	F4		5
MDSECLEV	A0		2

Name	Offset	Hex Tag	Level
MDSELFLG	74	10	3
MDSTART_POSN	80		2
MDSTEPNM	F8		5
MDTCOMP	A1	08	3
MDTNCOMP	A1	04	3
MDTOKEN	A4		2
MDTOTAL_BLKS	7C		2
MDTRTCH	A1		2
MDTYPE	0		3
MDUCDATE	6C		2
MDUCTIME	70		2
MDUNITAD	84		2
MDVARSEC	15C		6
MDVOLSEQ	82		2
MDVOLSER	2D		3
MDVRSJBN	EC		5
MDVRSNAM	1B8		7
MDVRSNML	15E		7
MDVRSTYP	BB		2
MDVRSVAL	C4		2
MD2VJBNM	1EC		8
MD2VMTC	1E4		7
MD2VMTCL	15F		7
MD2VNAME	1E4		8
MD2VSCH	1F4		8
MD2VSDTE	1FC		8

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
		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

EDGSKREC

Offsets Dec	Hex	Type	Len	Name (Dim)	Description
60	(3C)		4	MKCRDATE	* VRS create date - YYYYDDD
64	(40)		4	MKCRTIME	* VRS create time - HHMMSST
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 - HHMMSST
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...		MKDELFLG	″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
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

Offsets Dec	Hex	Type	Len	Name (Dim)	Description
		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
MKCRTJBN	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
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

EDGSKREC

Name	Offset	Hex Tag	Level
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
MKRETNC	7C	80	2
MKRETNCD	7C	2	2
MKRETND	7C	40	2
MKRETNR	7C	20	2
MKRETNW	7C	10	2
MKRETNX	7C	8	2
MKRETNXD	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.

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 **

Offsets Dec	Hex	Type	Len	Name (Dim)	Description
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 - HHMMSST **
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 - HHMMSST **
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		MOSELFLG	″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 **
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					

EDGSOREC

Offsets Dec	Hex	Type	Len	Name (Dim)	Description
		.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
MOOWNAD3	11C		2
MOOWNDEP	A4		2
MOOWNDET	7C		2
MOOWNER	1		2
MOOWNFST	90		2
MOOWNNOD	168		2

Name	Offset	Hex Tag	Level
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
MOVOLDET	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	Offsets 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 - HHMMSST **
68	(44)	CHARACTER	8	MPCRSID	** CREATE SYSTEM ID **
76	(4C)	CHARACTER	8	MPRCCDS	** RECORD CREATE CDS ID ** ** **
84	(54)		4	MPLCDATE	** LAST CHANGE DATE - YYYYDDD **

EDGSPREC

Offsets Dec	Hex	Type	Len	Name (Dim)	Description
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
MPCRSID	44		2
MPCRTIME	40		2
MPDELFLG	74	80	2
MPDUMMY	74	8	2
MPFEAT	110		2

Name	Hex Offset	Hex Value	Level
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 Dec	Hex	Type	Len	Name (Dim)	Description
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					
56	(38)	SIGNED	2	MRRECLN	** RECORD LENGTH **
58	(3A)	SIGNED	2		** RESERVED **
60	(3C)		4	MRCRDATE	** RACK CREATE DATE - YYYYDDD **

EDGSRREC

Offsets Dec	Hex	Type	Len	Name (Dim)	Description
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		MRSELFLG	″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)	** END OF MRRC **
		1... 11..		MRRCLNG	″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
MRRCLNG	8C	8C	2
MRRECLN	38		2
MRRECORD	0		2
MSSELFLG	74	10	2

Name	Offset	Hex Tag	Level
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		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 **
		111. ..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 **
		111. .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 - HHMMSST **
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 - HHMMSST **
114	(72)	CHARACTER	8	MSLCUID	** LAST CHANGE USER ID **
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 **

EDGSSREC

Offsets Dec	Hex	Type	Len	Name (Dim)	Description
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)	** END OF MSRC **
		1.1. .1..		MSRCLNG	″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
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
MSUBINNO	48		2

Name	Offset	Hex Tag	Level
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					
Decimal	**Hex**	**Type**	**Length**	**Name (Dim)**	**Description**
0	(0)	STRUCTURE	752	MVREC	
0	(0)	CHARACTER	0	MVRECORD	EDGSVREC INFORMATION
0	(0)	CHARACTER	56	MVKEY	
0	(0)	CHARACTER	1	MVTYPE	'V' - VOLUME INFO TYPE
1	(1)	BITSTRING	1	*	RESERVED
2	(2)	CHARACTER	6	MVVOLSER	VOLUME SERIAL NUMBER
8	(8)	CHARACTER	48	MVPAD1	RESERVED - BINARY ZEROS
56	(38)	SIGNED	2	MVRECLN	RECORD LENGTH
58	(3A)	SIGNED	2	*	RESERVED
60	(3C)	CHARACTER	4	MVCRDATE	VOL CREATE DATE - YYYYDDD
64	(40)	CHARACTER	4	MVCRTIME	VOL CREATE TIME - HHMMSST
68	(44)	CHARACTER	8	MVCRSID	CREATE SYSTEM ID
76	(4C)	CHARACTER	8	MVRCCDS	RECORD CREATE CDS ID
84	(54)	CHARACTER	4	MVLCDATE	LAST CHANGE DATE - YYYYDDD
88	(58)	CHARACTER	4	MVLCTIME	LAST CHANGE TIME - HHMMSST
92	(5C)	CHARACTER	8	MVLCUID	LAST CHANGE USER ID
100	(64)	CHARACTER	8	MVLCSID	LAST CHANGE SYSTEM ID
108	(6C)	CHARACTER	4	MVUCDATE	LAST ″USER″ CHANGE DATE
112	(70)	CHARACTER	4	MVUCTIME	LAST ″USER″ CHANGE TIME
116	(74)	BITSTRING	1	MVCFLG	CONTROL FLAGS 1
		1...		MVDELFLG	RECORD DELETED
		.1..		*	
		..1.		*	
		...1		MVSELFLG	SELECT - PROC BY SATELLITE UPDT
		.... 1...		MVDUMMY	DUMMY RECORD - ALLOW TSO ADD
117	(75)	BITSTRING	1	MVRECLEV	RECORD LEVEL NUMBER
118	(76)	CHARACTER	6	*	RESERVED
124	(7C)	CHARACTER	4	MVEXPDTO	EXPIRATION DATE - ORIGINAL
128	(80)	CHARACTER	4	MVEXPDT	EXPIRATION DATE - YYYYDDD
132	(84)	BITSTRING	1	MVRDEN	COPY OF JFCBDEN
133	(85)	CHARACTER	1	MVDEN	RECORDING DENSITY:
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:
143	(8F)	BITSTRING	1	MVVRSREL	VRS RELEASE OPTIONS
		1...		MVVRFXDI	EXPIRY DATE IGNORE
		.1..		MVVRFSCI	SCRATCH IMMEDIATE
		..11 1111		*	RESERVED

EDGSVREC

Offsets Decimal	Hex	Type	Length	Name (Dim)	Description
FLAG BITS IN MVVRSREL SHOULD MATCH MKRLSOPT BIT SETTINGS.					
144	(90)	SIGNED	2	MVLABNO1	LABEL NUMBER OF 1ST FILE
146	(92)	CHARACTER	4	MVTDSI	TAPE MEDIA TYPE INFORMATION
146	(92)	BITSTRING	1	MVMEDREC	RECORDING FORMAT. ONE OF: X'00' - NON CARTRIDGE X'01' - 18TRACK X'02' - 36TRACK X'03' - 128TRACK X'04' - 256TRACK
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:
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)	CHARACTER	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)	CHARACTER	4	MVLRDDAT	DATE VOLUME LAST READ (YYYYDDD)
196	(C4)	CHARACTER	4	MVLWTDAT	DATE VOLUME LAST WRITTEN
200	(C8)	CHARACTER	8	MVASDATM	ASSIGNED DATE AND TIME
200	(C8)	CHARACTER	4	MVASDATE	ASSIGNED DATE (YYYYDDD)
204	(CC)	CHARACTER	4	MVASTIME	ASSIGNED DATE (HHMMSST)
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...		MVGVCFLG	SCRATCH VOL CLAIMED VIA GETVOL
		.1..		MVXINFLG	SCRATCH VOLUME HAS NEVER BEEN INITIALISED
		..1.		MVINIFLG	SCRATCH VOLUME WITH INIT ACTION PENDING
		...1		MVENTFLG	SCRATCH VOLUME WAITING TO ENTER ATL
		.... 1...		MVFABEND	ABEND IN PROCESS WHEN A DATA SET CLOSED
		.... .1..		MVFOCEAB	ABEND PROBABLY IN O/C/EOV
		.... ..1.		MVATIFLG	INIT REQUIRED FOR ATL VOL
		1		MVFORCE	FORCE SUPPLIED
234	(EA)	SIGNED	2	MVVOLSEQ	VOLUME SEQUENCE NUMBER
236	(EC)	CHARACTER	1	*	
236	(EC)	BITSTRING	1	MVFLGA	FLAGS 'A' - STATUS
		1...		MVMSTFLG	VOLUME IS MASTER

Offsets Decimal	Hex	Type	Length	Name (Dim)	Description
		.1..		MVRLSFLG	VOLUME PENDING RELEASE
		..1.		MVVRFLG	VITAL RECORD - DO NOT RELEASE
		...1		MVASSFLG	USER TAPE (ASSIGNED BY LIB)
		.... 1...		MVLONFLG	TAPE IS ON LOAN
		.... .1..		MVOPNFLG	TAPE OPENED AND NOT YET CLOSED
		.... ..1.		MVSCRFLG	VOLUME IS SCRATCH
		1		MVOCEFLG	VOLUME RECORDED BY O/C/EOV
236	(EC)	BITSTRING	1	*	FLAGS 'A' - STATUS
		1111 111.		*	
		1		MVEXRFLG	STV RECORDED BY EXPORT
237	(ED)	BITSTRING	1	MVFLGB	FLAGS 'B'
		1...		MVDEFRET	DEFAULT RETENTION PERIOD USED
		.1..		MVPPTAPE	PROGRAM PRODUCT TAPE
		..1.		MVNLTAPE	LABEL TYPE IS NL
		...1		MVALTAPE	LABEL TYPE IS AL
		.... 1...		MVSLTAPE	LABEL TYPE IS SL
		.... .1..		*	
		.... ..1.		MVBLTAPE	TAPE LAST WRITTEN USING BLP
		1		MVULTAPE	SL OR AL TAPE HAS USER LABELS
238	(EE)	BITSTRING	1	MVFLGC	FLAGS 'C' - RELEASE ACTIONS
		1...		MVRETSCR	RETURN TO SCRATCH POOL -DEFAULT
		.111 1111		MVRELACT	RELEASE ACTIONS
		.1..		MVREPREL	REPLACE TAPE ON RELEASE
		..1.		MVREINIT	REINITIALISE
		...1		MVDEGAUS	DEGAUS/SECURITY ERASE
		.... 1...		MVROWNER	RETURN TO OWNER
		.... .1..		MVNOWNER	NOTIFY OWNER
		11		*	RESERVED
239	(EF)	BITSTRING	1	MVFLGD	FLAGS 'D' - ACCESS
		1...		MVOREAD	OWNER MAY READ VOLUME
		.1..		MVOUPD	OWNER MAY UPDATE VOLUME
		..1.		MVOALT	OWNER MAY ALTER VOLUME
		...1		MVPROTR	READ-ONLY PROTECTION
		.... 1...		MVPROTU	UPDATE PROTECTION
		.... .1..		MVMVSUSE	MAY BE USED ON MVS SYSTEMS
		.... ..1.		MVVMUSE	MAY BE USED ON VM SYSTEMS
		1		MVNODSNR	ONLY FIRST DATA SET RECORDED
240	(F0)	BITSTRING	1	MVFLGE	FLAGS 'E' - ACTIONS PENDING
		1...		MVRETSCR	
		.111 1111		MVRELACT	
		.1..		MVREPREL	
		..1.		MVREINIT	
		...1		MVDEGAUS	
		.... 1...		MVROWNER	
		.... .1..		MVNOWNER	
		11		*	
241	(F1)	BITSTRING	1	MVLTYP	COPY OF JFCBLTYP

EDGSVREC

Offsets Decimal	Hex	Type	Length	Name (Dim)	Description
242	(F2)	CHARACTER	2	MVALVERS	ANSI LABEL VERSION IN BINARY
242	(F2)	UNSIGNED	1	MVALCUR	CURRENT LABEL VERSION
243	(F3)	UNSIGNED	1	MVALREQ	REQUIRED LABEL VERSION
244	(F4)	CHARACTER	8	MVMEDIA	INSTALLATIONS MEDIA NAME
244	(F4)	CHARACTER	8	MVUNIT	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)	CHARACTER	4	MVUCBTYP	COPY OF UCBTYP FIELD FROM UCB
274	(112)	CHARACTER	8	MVERRCNT	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	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...		*	
		.1..		*	
		..1.		*	
		...1		*	
		.... 1...		MVTCOMP	DSN COMPACTION
		.... .1..		MVTNCOMP	NO COMPACTION
305	(131)	CHARACTER	6	MVTPVOL	RESERVED FOR O/C/EOV
311	(137)	CHARACTER	8	MVTOKEN	RESERVED FOR O/C/EOV
319	(13F)	BITSTRING	1	MVLOCFLG	FLAG BYTE FOR LIBRARY SUPPORT
		1...		MVTRNFLG	INDICATES VOLUME IN TRANSIT. WHEN NOT SET, VOLUME IS IN LOCATION.
		.1..		MVMVMODE	MOVE MODE B'0' - AUTOMOVE B'1' - MANUALMOVE
		..11		*	
		 1111		MVLTYFLG	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)	CHARACTER	2	MVTYPFLG	FLAGS FOR LOCATION TYPE INFORMATION
320	(140)	BITSTRING	1	*	

Offsets Decimal	Hex	Type	Length	Name (Dim)	Description
		1111		MVNTYFLG	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	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	1	MVHTYFLG	
		1111		MVHTYFLG	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
322	(142)	SIGNED	2	MVRQPRTY	REQ. 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 NUMBER
374	(176)	CHARACTER	8	MVUBMDN	SHELF MANAGED STORE BIN MEDIA NAME
382	(17E)	CHARACTER	6	MVUSOBIN	SHELF MANAGED STORE OLD BIN NUMBER
388	(184)	CHARACTER	8	MVUOBMDN	SHELF MANAGED STORE OLD BIN MEDIA NAME
396	(18C)	CHARACTER	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)	UNSIGNED	1	MVVOLTYPE	VOLUME TYPE
421	(1A5)	BITSTRING	1	MVFLGF	FLAGS 'F'
		1...		MVRBYSET	RETAINED BY VOLUME/SET
		.111 1111		*	RESERVED
422	(1A6)	CHARACTER	9	*	RESERVED
431	(1AF)	BITSTRING	1	MVLAST_POSN	Last file end media position
432	(1B0)	UNSIGNED	4	MV_STV_VOLCOUNT	VOLUME COUNT
422	(1A6)	CHARACTER	8	MVDCRSID	1ST DATA SET CREATE SYSID
430	(1AE)	CHARACTER	16	MVCONTAINER	CONTAINER
430	(1AE)	CHARACTER	6	MVCONTAINER_STV	STACKED VOLUME
446	(1BE)	CHARACTER	16	MVOLD_CONTAINER	OLD CONTAINER
462	(1CE)	CHARACTER	8	MVEXPTOKEN	EXPORT TOKEN
470	(1D6)	CHARACTER	9	*	RESERVED

EDGSVREC

Offsets Decimal	Hex	Type	Length	Name (Dim)	Description
479	(1DF)	UNSIGNED	1	MVLAST_POSN	LAST FILE END MEDIA POS
480	(1E0)	UNSIGNED	4	MV_STV_VOLCOUNT	VOLUME COUNT
484	(1E4)	CHARACTER	268	MVVARSEC	VARIABLE LENGTH SECTION
484	(1E4)	UNSIGNED	1	MVDSN1L	LENGTH FIRST DSN ON VOLUME
485	(1E5)	UNSIGNED	1	MVDSNLL	LENGTH LAST DSN ON VOLUME
486	(1E6)	UNSIGNED	1	MVACCLEN	LENGTH OF A/C FIELD (OR 0)
487	(1E7)	UNSIGNED	1	MVUSELEN	LENGTH OF USER DATE (OR 0)
488	(1E8)	UNSIGNED	1	MVACCLST	NUM OF ACCESS LIST ENTRIES
489	(1E9)	CHARACTER	7	*	RESERVED
496	(1F0)	CHARACTER	44	MVDSN1	DSNAME OF FIRST FILE
540	(21C)	CHARACTER	44	MVDSNL	DSNAME OF LAST FILE
584	(248)	CHARACTER	40	MVACCINF	ACCOUNTING INFORMATION
624	(270)	CHARACTER	30	MVDESC	USER DESCRIPTION
624	(270)	CHARACTER	30	MVUSEFLD	USER DESCRIPTION
654	(28E)	CHARACTER	2	*	RESERVED
656	(290)	CHARACTER	96	MVAUTIDS	AUTHORISED USER IDS AREA
656	(290)	CHARACTER	8	MVAUTHID	FIRST AUTH. USER ID SLOT
752	(2F0)	CHARACTER	0	MVAUTHND	AUTH FIELD END MARKER
752	(2F0)	CHARACTER	0	MVRCEND	END OF MVRC

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

Len	Type	Value	Name	Description
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
MV_STV_VOLCOUNT	1B0		4
MVACCINF	248		3
MVACCLEN	1E6		3
MVACCLST	1E8		3
MVALCUR	F2		3
MVALREQ	F3		3
MVALTAPE	ED	10	3
MVALVERS	F2		2
MVASDATE	C8		3
MVASDATM	C8		2
MVASSFLG	EC	10	4
MVASTIME	CC		3
MVATIFLG	E9	02	3
MVAUTHID	290		4
MVAUTHND	2F0		3
MVAUTIDS	290		3
MVBLTAPE	ED	02	3
MVCAPACITY	144		2
MVCFLG	74		2
MVCONTAINER	1AE		2
MVCONTAINER_STV	1AE		3
MVCRDATE	3C		2
MVCRJOB	E0		2
MVCRSID	44		2
MVCRTIME	40		2
MVCRUID	D8		2
MVDCRSID	1A6		2
MVDEFRET	ED	80	3
MVDEGAUS	F0	10	4
MVDEGAUS	EE	10	4
MVDELFLG	74	80	3
MVDEN	85		2
MVDESC	270		3
MVDEST	160		2
MVDSNL	21C		3

EDGSVREC

Name	Offset	Hex Tag	Level
MVDSNLL	1E5		3
MVDSNNO	86		2
MVDSN1	1F0		3
MVDSN1L	1E4		3
MVDTYFLG	140	0F	4
MVDUMMY	74	08	3
MVENTFLG	E9	10	3
MVERRCNT	112		2
MVEXPDT	80		2
MVEXPDTO	7C		2
MVEXPTOKEN	1CE		2
MVEXRFLG	EC	01	4
MVFABEND	E9	08	3
MVFEAT	12C		3
MVFLGA	EC		3
MVFLGAX	E9		2
MVFLGB	ED		2
MVFLGC	EE		2
MVFLGD	EF		2
MVFLGE	F0		2
MVFLGF	1A5		2
MVFOCEAB	E9	04	3
MVFORCE	E9	01	3
MVGVCFLG	E9	80	3
MVHLOC	148		2
MVHTYFLG	141	F0	4
MVINIFLG	E9	20	3
MVLABNO1	90		2
MVLAST_POSN	1DF		2
MVLAST_POSN	1AF		4
MVLCDATE	54		2
MVLCSID	64		2
MVLCTIME	58		2
MVLCTOKN	19C		2
MVLCUID	5C		2
MVLOC	158		2
MVLOCFLG	13F		2
MVLONFLG	EC	08	4
MVLONLOC	B0		2
MVLRDDAT	C0		2
MVLTYFLG	13F	0F	3
MVLTYP	F1		2
MVLUDEV	AC		2
MVLWTDAT	C4		2
MVMEDATR	95		3
MVMEDCMP	94		3
MVMEDIA	F4		2
MVMEDREC	92		3
MVMEDTY	93		3
MVMSTFLG	EC	80	4
MVMVMODE	13F	40	3
MVMVSUSE	EF	04	3
MVNLOC	98		2
MVNLTAPE	ED	20	3

Name	Offset	Hex Tag	Level
MVNODSNR	EF	01	3
MVNOWNER	EE	04	4
MVNOWNER	F0	04	4
MVNSTRID	97		2
MVNTYFLG	140	F0	4
MVNVOL	108		2
MVOALT	EF	20	3
MVOBIN	A4		2
MVOCEFLG	EC	01	4
MVOLD_CONTAINER	1BE		2
MVOLNLOC	B8		2
MVOLOC	168		2
MVOPNFLG	EC	04	4
MVOREAD	EF	80	3
MVOUPD	EF	40	3
MVOWNID	D0		2
MVPAD1	8		3
MVPPDATA	11E		2
MVPPNUM	11E		3
MVPPTAPE	ED	40	3
MVPRERR	116		3
MVPROTR	EF	10	3
MVPROTU	EF	08	3
MVPVOL	102		2
MVPWERR	118		3
MVRACK	FC		2
MVRBYSET	1A5	80	3
MVRCCDS	4C		2
MVRCEND	2F0		2
MVRDEN	84		2
MVREC	0		1
MVRECLEV	75		2
MVRECLN	38		2
MVRECORD	0		2
MVREINIT	F0	20	4
MVREINIT	EE	20	4
MVRELACT	F0	7F	3
MVRELACT	EE	7F	3
MVREPREL	F0	40	4
MVREPREL	EE	40	4
MVRETDAT	18C		2
MVRETSCR	EE	80	3
MVRETSCR	F0	80	3
MVRLSFLG	EC	40	4
MVROWNER	EE	08	4
MVROWNER	F0	08	4
MVRQPRTY	142		2
MVSCRFLG	EC	02	4
MVSECLEV	E8		2
MVSELFLG	74	10	3
MVSGNAME	150		2
MVSLTAPE	ED	08	3
MVSTBIN	A0		2
MVSTDATE	A8		2

EDGSVREC

Name	Offset	Hex Tag	Level
MVSTORID	96		2
MVSTSTAT	8E		2
MVTCOMP	130	08	3
MVTDSI	92		2
MVTNCOMP	130	04	3
MVTOKEN	137		2
MVTPVOL	131		2
MVTRERR	112		3
MVTRNFLG	13F	80	3
MVTRTCH	130		2
MVTUSE	88		2
MVTWERR	114		3
MVTYPE	0		3
MVTYPFLG	140		2
MVUBMDN	176		2
MVUCBTYP	10E		2
MVUCDATE	6C		2
MVUCTIME	70		2
MVULTAPE	ED	01	3
MVUNIT	F4		3
MVUOBMDN	184		2
MVUSBIN	170		2
MVUSE	8C		2
MVUSEFLD	270		4
MVUSELEN	1E7		3
MVUSOBIN	17E		2
MVVARSEC	1E4		2
MVVER	126		3
MVVMUSE	EF	02	3
MVVOLSEQ	EA		2
MVVOLSER	2		3
MVVOLTYPE	1A4		2
MVVRFLG	EC	20	4
MVVRFSCI	8F	40	3
MVVRFXDI	8F	80	3
MVVRSREL	8F		2
MVXINFLG	E9	40	3

Appendix C. Using DFSMSrmm Samples

DFSMSrmm provides several samples in SAMPLIB, SMPSTS, and SYS1.SEDGEXE1. Table 10 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 10. 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

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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 *IBM Dictionary of Computing* located at:

http://www.ibm.com/networking/nsg/nsgmain.htm

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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 *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. 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. See also *tape library*. Contrast with *manual 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. See *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 3494 Tape Library Dataserver, IBM 3495 Tape Library Dataserver, or an IBM Model M10 3495 Tape Library Dataserver 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 dataserver, the act of logically removing a tape cartridge from the manual tape library dataserver by deleting or updating the tape volume record in the tape configuration database.

cartridge entry. For either an IBM 3494 Tape Library Dataserver, IBM 3495 Tape Library Dataserver, or a IBM Model M10 3495 Tape Library Dataserver, 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 3494 Tape Library Dataserver and IBM 3495 Tape Library Dataserver 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 3494 Tape Library Dataservers only.

convenience input station. A transfer station, used by the operator to add tape cartridges to the IBM 3494 Tape Library Dataserver or an IBM 3495 Tape Library Dataserver, which is accessible from outside the enclosure area.

convenience output. The process of removing a small number of tape cartridges from the IBM 3494 Tape Library Dataserver or an IBM 3495 Tape Library Dataserver 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 dataset is the date that the dataset 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. See *data control block*.

device. This term is used interchangeably with unit. You mount a tape on a unit or device, such as a 3490.

system-managed storage 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 system-managed storage environment for OS/390, the function is provided by DFSORT, RACF, and the combination of DFSMS and OS/390.

DFSMSdfp. A DFSMS functional component or base element of OS/390, 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 OS/390, used to copy, move, dump, and restore data sets and volumes.

DFSMShsm. A DFSMS functional component or base element of OS/390, 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* and *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 OS/390, 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* and *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 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 dataserver, the volume is not moved, but the tape configuration database is updated to show the volume no longer resides in the manual tape library dataserver.

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. Expanded output occurs 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.

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.

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. 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. See *generation data group*.

GDS. See *generation data set*.

giga (G). The information-industry meaning depends upon the context:

1. G = 1,073,741,824(2^{30}) for real and virtual storage
2. G = 1,000,000,000 for disk storage capacity (e.g., 4 Gb fixed disk)
3. G = 1,000,000,000 for transmission rates

GPR. General purpose register

GRS. Global resource serialization

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. See *hardware configuration definition.*.

high capacity input station. A transfer station, used by the operator to add tape cartridges to the IBM 3494 Tape Library Dataserver or IBM 3495 Tape Library Dataserver, 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 dataserver, 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. DFSORT's multipurpose data processing and reporting utility.

ID. Identifier

IDRC. See *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* and *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 is in transit when it 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.

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. See *Interactive Problem Control System*.

IPL. Initial program load.

ISPF. See *Interactive System Productivity Facility*.

ISMF. See *Interactive Storage Management Facility*.

ISO. See *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 (e.g., 4000 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 on hardcopy output.

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.

M

management class. A collection of management attributes that are defined by the storage administrator, used to control the release of allocated but unused space: to control the retention, migration, and backup of data sets: to control the retention and backup of aggregate groups, and to control the retention, backup, and class transition of objects. If assigned by ACS routine to system-managed tape volumes, it 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 dataserver. 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. A manual tape library is an installation-defined set of tape drives and the set of volumes that can be mounted on the drives. The IBM implementation includes one or more 3490 subsystems, each connected by a Library Attachment Facility to a processor running the Library Manager application, and a set of volumes, defined by the installation as part of the library, which resides in shelf storage located near the 3490 subsystems.

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 parmlib MASTEROVERWRITE operand.

media format. The type of volume, recording format and techniques used to create the data on the volume.

media library. See *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(2^{20}) for real and virtual storage
2. M = 1,000,000 for disk storage capacity (e.g., 4000 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* and 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* and *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* and *migration level 1*.

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 *Using Next*.

NL. No label

non-scratch 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. See *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. See *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.

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. Physical volumes have a one-to-one association with physical tape media and are used directly by MVS applications. They may reside in an automated tape library dataserver or be kept on shelf storage either at vault sites or within the data center where they 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* and *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 dataserver. The rack number identifies the pool, the external volume serial, and shelf location number for a volume not residing in an automated tape library dataserver. 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 generation zero is the latest generation of a tape; Relative generation -1 is the previous generation of that tape. Relative generation -2 is the generation before the previous one.

REMOTE. A DFSMSrmm built-in storage location ID. See *built-in storage location*.

removable media. See *volume*.

removable media library. The volumes that are available for immediate use, and the shelves where they could reside.

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. See *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

SMP/E. System Modification Program Extended

stacked volume. Stacked volumes have a one-to-one association with physical tape media and are used in a Virtual Tape Server to store logical volumes. Stacked volumes are not used by MVS applications but by the Virtual Tape Server and its associated utilities. They 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. Standard output is the amount of variable data displayed, printed or put into a REXX variable in response to a subcommand. When you specify OUTPUT=LINES or EXPAND=NO with OUTPUT=FIELDS, your application program receives standard output as opposed to expanded output.

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 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*.

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 *DFSMShsm-managed volume* and *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* and *automated tape library*.

Tape Library Control System (TLCS). IBM program offering 5785-EAW. DFSMSrmm replaces TLCS.

Tape Library Dataserver. A hardware device that maintains the tape inventory associated with a set of tape drives. An automated tape library dataserver also manages the mounting, removal, and storage of tapes. An automated or manual tape library that supports system-managed storage of tape volumes. IBM's automated tape library dataservers include the IBM 3494 Tape Library Dataserver and the IBM 3495 Tape Library Dataserver. IBM's manual tape library dataserver is the IBM Model M10 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. See *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(2^{40}) for real and virtual storage
2. T = 1,000,000,000,000 for disk storage capacity (e.g., 4 TB of DASD storage)
3. T = 1,000,000,000,000 for transmission rates

TLCS. See *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. Mark 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 Magstar 3494 Tape Library, 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. See *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). 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. In DFSMSrmm, volume serial numbers do not have to match rack numbers.

VTS. See *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. See *write-to-operator*.

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OS/390
DFSMSrmm Reporting

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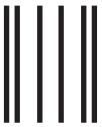

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