MICRO FOCUS | SERENA

StarTool® FDM

Messages

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Table of Contents

Welcome to StarTool FDM

About This Book

This document describes StarTool® FDM (File and Data Manager) Version 7.8. It provides product message descriptions, diagnostic assistance, and error recovery recommendations for the base StarTool FDM product and all licensed product options.

StarTool FDM StarTool FDM is a multi-purpose file and data management utility for IBM® mainframe systems. It provides an ISPF-based, menu-driven, integrated interface to a variety of editors and data management tools for PDS, PDSE, VSAM, direct-access, IMS, and Db2 files. A TSO command-line interface is also supported, as well as bulk file processing in batch mode. Customizable option tables and exits make StarTool FDM highly flexible and adaptable to user needs.

Audience This document is intended for use by z/OS mainframe systems engineers and software developers who work with StarTool FDM or any of its optional licensed features.

Before You Begin

New Information Change bars in the left margin (shown at left) identify substantive changes to this publication since StarTool FDM Version 7.6.3.

Corrections and Technical Support The Readme file contains updates and corrections to this manual issued after the publication date. It also provides contact information for Micro Focus Customer Support.

Conventions

Terminology Throughout this document:

- z/OS refers to the z/OS™ and OS/390® IBM® operating systems.
- StarTool FDM may also be referenced as StarTool or FDM.

Typographic Conventions

The following textual conventions are used throughout this document to highlight special information:

Convention	Meaning
Bold	Panel title or field name.
Italics	Introduces new terms, sets off important information, or marks document titles.
UPPERCASE	Indicates keys or key combinations; for example, the ENTER key.
Bright blue	Clickable cross-reference or active hyperlink.
`Monospaced`	JCL, source code, or message text. Also used for member names, file names, and commands if these are not clear from context.
`MONOSPACED UPPERCASE`	Required value or literal in code or JCL parameter.
`monospaced lowercase`	Pattern for a field value or parameter you specify. Number of characters is significant. Upper-case characters are literals. Lower-case characters are placeholders that indicate data type, where: `y` = year `m` = month `d` = day `a` = alphanumeric `n` = numeric `x` = other or mixed `?` = one-character wild card `*` = *n*-character wild card Punctuation other than wild cards must be reproduced in the position shown.
Examples: ■ `yyyy/mm/dd` ■ `C'aa'` ■ `B'nn'` ■ `D'nn'` ■ `X'nn'`	*Examples:* ■ International calendar date with four-character year, two-character month, and two-character day separated by required slashes, such as `2010/01/01`. ■ Alphanumeric character string in user-readable form, two characters long, such as `C'K9'` ■ Binary number, two digits long, where `n = 0` to `1`, such as `B'10'` ■ Decimal number, two digits long, where `n = 0` to `9`, such as `D'10'` ■ Hexadecimal number, two digits long, where `n = 0` to `F`, such as `X'C1'`
`monospaced italics`	Descriptive placeholder for value or parameter you specify, but not a pattern; for example, *filename*.
Square braces `[ ]`	Optional parameter or choice of values. May be nested.
Vertical bar `|`	Inside braces, a vertical bar separates mutually exclusive parameter choices or values.
Ellipsis `. . .`	Optional repetitions of a pattern in a list.

Convention	Meaning
Greater-than symbol >	Separates items in a chain of menu or command selections on a GUI client. For example, **Start > All Programs > Micro Focus > *product_name***.

Documentation

You can download the complete documentation suite from the Micro Focus Customer Support Web site at https://www.microfocus.com/support-and-services/documentation/.

Related Publications

Available StarTool FDM publications include:

Title	Description
StarTool FDM Installation Guide	System requirements, installation instructions, and configuration information for StarTool FDM.
SER10TY User's Guide	Installation information for SER10TY licensing software and instructions on how to apply license key SERtificates.
StarTool FDM Quick Reference	Overview of StarTool FDM commands, with syntax details for frequently used functions. Includes PEDIT and StarBat subcommands.
StarTool FDM User's Guide	StarTool FDM concepts and facilities, with instructions for using the ISPF-based menu-driven interface.
StarTool FDM Command Reference	TSO command-line syntax and parameter reference, organized alphabetically. Interactive subcommands included for major functions.
StarTool FDM System Services	Advanced reference to operating system calls used by StarTool FDM.
StarTool FDM StarBat Option	Batch-mode interface for bulk changes to data sets. StarTool FDM functions invoked by JCL procedures.
StarTool FDM Db2 Option	StarTool FDM data management functions for DB2 relational database tables, columns, and rows, with SQL processing support.
StarTool FDM IMS Option	StarTool FDM data management functions for IMS hierarchical database files and structures.
StarTool FDM Extended Compare Option	Integrated file comparison utility based on Micro Focus Comparex. Data file versus text file comparison logic.
StarTool FDM Messages	Consolidated message reference for base product and all licensed product options, with recovery recommendations.

Using the PDF Documentation

To view PDF files, use Adobe® Reader®, which is freely available from Adobe on the World Wide Web at *http://www.adobe.com*. Reader Version 7.0.5 or higher is recommended.

TIP Be sure to download the *full version* of Reader. The more basic version does not include the cross-document search feature.

This section highlights some of the main Reader features. For more detailed information, see the Adobe Reader online help system.

The PDF manuals include the following features:

- **Bookmarks.** All of the online manuals contain predefined bookmarks that make it easy for you to quickly jump to a specific topic. By default, the bookmarks appear to the left of each online manual.
- **Links.** Cross-reference links within an online manual enable you to jump to other sections within the manual and to other manuals with a single mouse click. These links appear in blue.
- **Printing.** While viewing a manual, you can print the current page, a range of pages, or the entire manual.
- **Advanced search.** Starting with Version 6, Adobe Reader includes an advanced search feature that enables you to search across multiple PDF files in a specified directory. (This is in addition to using any search index created by Adobe Catalog—see step 3 below.)

To search across multiple PDF documents at once, perform the following steps (requires Adobe Reader Version 6 or higher):

1. In Adobe Reader, select Edit > Search (or press CTRL+F).
2. In the text box, enter the word or phrase for which you want to search.
3. Select the **All PDF Documents in** option, and browse to select the folder in which you want to search. (If you have a document open that has an Adobe Catalog index attached, you can leave the **In the index named...** option selected to search across all the manuals in the index.)
4. Optionally, select one or more of the additional search options, such as **Whole words only** and **Case-Sensitive**.
5. Click the **Search** button.

NOTE Optionally, you can click the **Use Advanced Search Options** link near the lower right corner of the application window to enable additional, more powerful search options. (If this link says **Use Basic Search Options** instead, the advanced options are already enabled.) For details, see Adobe Reader's online help.

Chapter 1
Introduction

StarTool FDM provides informational and diagnostic messages at several levels for the base product and all product options. This chapter provides the following general information about these messages.

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Message Numbering Conventions

Runtime messages originate from many possible sources, including Micro Focus middleware and management tools that are distributed with many Micro Focus products, including StarTool FDM. Such cross-product shared software includes SER10TY (for mainframe product license management) and SERNET (for cross-product communication with ChangeMan ZMF). This manual documents only those messages originating with StarTool FDM. Messages issued by shared software such as SER10TY and SERNET are documented separately with those products.

The message number identifies the originator of the message.

Licensing Messages

Micro Focus licensing error messages take the general form:

`LIC`*nnnn*

where `LIC` identifies SER10TY as the originator of the message and *nnnn* is a numeric message identifier.

These messages are documented in the *SER10TY User's Guide*.

StarTool FDM Messages

StarTool FDM message numbers for the base product take the general form:

`PDS`*nnnx*

where *nnn* is a numeric message identifier and *x* is the letter I, A, W or E (for Information, Action, Warning, or Error messages, respectively. The values of *nnn* are also grouped in numeric ranges by message type.

StarBat Option messages take the general form:

STRB*nnx*

where *nn* is a numeric message identifier and *x* is the letter I or E (for Information or Error messages).

Messages for both the base product and the StarBat Option are documented in this manual. Message organization by chapter is shown in the table below.

Message Range	Description	Source for More Information
PDS000I - PDS299I	Information messages (no action required)	Chapter 2, "Information Messages (PDS001I - PDS299I)"
PDS300A - PDS399A	Action messages (response is required)	Chapter 3, "Action Messages (PDS300A - PDS399A)"
PDS400W - PDS599W	Warning message (possible error condition)	Chapter 4, "Warning Messages (PDS400W - PDS599W)"
PDS600E - PDS999E	Error messages	Chapter 5, "Error Messages (PDS600E - PDS999E)"
STRB00I - STRB99E	StarBat Option information and error messages	Chapter 6, "StarBat Messages (STRB00I - STRB99E)"

Message Documentation Conventions

In the chapters that follow, each message number appears in numerical order in the left column. Actual message text heads the main column entry. Italicized items in the message text represent variable items that are filled in by StarTool FDM.

The message text is followed in the main column by a more detailed explanation and, where relevant, possible problem diagnoses and suggested solutions.

Return Code Customization

Many StarTool FDM messages issues return codes who default meanings are described in this manual.

Return code processing can be customized for the StarBat Option of StarTool FDM. Customized return codes take precedence over any return codes documented here for StarBat messages.

See the *StarTool FDM StarBat Option* manual for information about how to customize StarBat return code processing.

Customizing ISPF Messages

StarTool FDM messages displayed in ISPF mode can be customized. Customizable messages reside in the following members:

```
PDS#10.MSG
```

```
PDS#20.MSG
PDS#30.MSG
PDS#40.MSG
PDS#45.MSG
PDS#46.MSG
PDS#47.MSG
PDS#48.MSG
PDS#50.MSG
```

Extended Help Facility

During StarTool FDM program execution, program messages and explanations are available through an extended help facility for warning and error messages. In addition, click on any StarTool FDM message in the view log (move the cursor over the PDS*nnn* or STRB*nn* portion of the message and press RCHANGE). This displays information from the HELP data set in the view log.

To use the extended help facility after receiving a warning or error message, type the help dot-command (.? or period question-mark) at the command line. In ISPMODE, a simple question mark (?) is equivalent to the dot command (.?). Up to five warning or error message explanations from the last subcommand are requested from the HELP data set by StarTool FDM. Message explanations are placed into the view log.

To use the normal line mode help facility for any StarTool FDM message, type:

```
HE MSG MSG(PDSxxx,PDSyyy, ...)
```

where PDS*xxx* and PDS*yyy* (or STRB*xx*) are messages to be explained. You can use this facility in ISPMODE, but the results are returned in line mode and not in the view log.

StarTool FDM honors PROFILE NOMSGID by displaying the program without message identifiers. Operate with message identifiers enabled so you can reference messages using their identifiers. Type the following command to display StarTool FDM message identifiers:

```
TSO PROFILE MSGID
```

Operate your StarTool FDM sessions with PROFILE WTPMSG to ensure that you have the information you need to diagnose problems. Type the following command to obtain diagnostic messages from the operating system:

```
TSO  PROFILE  WTPMSG
```

Chapter 2

Information Messages (PDS001I - PDS299I)

PDS001I **TEST MESSAGES -- all numbered messages follow:**

Explanation: Header for CONTROL TESTMESSAGES. Following this message is a list of all numbered StarTool FDM messages. This is provided for testing purposes.

PDS002I `Default member is` *`memname`*

Explanation: Displays the default member name that is acted upon by the current subcommand. The default member name (or member group) also displays on the PDS300A message after the MEM**=** keyword.

PDS005I `End of file`

Explanation: End of file marker was encountered indicating the end of the current member.

PDS006I `End of data set`

Explanation: End of file marker was encountered indicating the end of the data set.

PDS010I `The alias has been assigned`

Explanation: An ALIAS subcommand completed resulting in a new alias name for the member. For the example ALIAS *mema memb*, member *MEMA* is referred to by either its new alias name, *MEMB* or its main member name, *MEMA*.

PDS015I `Your evaluation has been extended until` *`mmm dd, yyyy`*

Explanation: The AUTH subcommand extended your evaluation until the displayed date. When StarTool FDM is next invoked, any expiration date displayed is changed to this date.

PDS016I `The SuperEdit option can be evaluated until` *`mmm dd, yyyy`*

Explanation: The AUTH subcommand enabled the use of the StarTool FDM **SUPEREDIT** option until the displayed date. When StarTool FDM is next invoked, the number of days remaining for testing the **SUPEREDIT** option is displayed in the main menu panel.

PDS020I *`memname`* `Attributes are:` *`attrib1, attrib2, ...`*

Explanation: This ATTRIB message lists the linkage editor attributes of a load member in the form of a list of attributes. Of the displayed values, ATTRIB can modify the DC, LOAD ONLY, NOT EDIT, NOT EXEC, REFR, RENT and REUS attributes.

Module attributes:

DC	downward compatible with linkage editor Level E
E-LEVEL	not linked with linkage editor Level F
LOAD ONLY	can only be brought into storage with a LOAD MACRO
NONE	none of the other linkage attributes
NOT EDIT	cannot be linkage edited again
NOT EXEC	not executable
OVERLAY	overlay load structure

REFR	refreshable (replaceable by a copy during execution)
RENT	reentrant (executable by several tasks simultaneously)
REUS	reusable (executable by several tasks in serial order)
SCTR	scatter load structure (like IEANUC01)
TEST	linked with the TEST option

PDS021I APF authorized

Explanation: This ATTRIB or MAP message indicates that the member is marked as authorized (AC=1) in its directory entry.

PDS022I Not APF authorized, obsolete linkage editor

Explanation: This ATTRIB message indicates that this member is not authorized since it was linked by an obsolete linkage editor. This member cannot be marked as authorized because its directory entry does not contain an area for the APF marker.

Solution: To reconstruct this member and any aliases with StarTool FDM and the linkage editor, type MAP member RELINK (and run the generated JCL in the background for the linkage editor).

PDS023I APF authorized, APF data value greater than 1

Explanation: This member was authorized by the linkage editor. The APF value exceeds one. Usually, only the data value of 1 marks a module as authorized. In this case, however, a larger value was used.

Solution: To display the directory entry, use the DIRENTRY subcommand.

PDS024I Page alignment is required

Explanation: This member requires alignment on a page boundary. You can display and change it with the ATTRIB subcommand. IEBCOPY cannot copy a member with COPYMOD if page alignment is indicated for the module.

PDS025I SSI Information: *hexvalue*

Explanation: This member has the displayed SSI information in its directory entry.

Solution: You can display and change the SSI information with the ATTRIB subcommand.

PDS026I MOD*:yyyy/mm/dd hh:mm* LEV:*num* BY *user* BASE:*yyyy/mm/dd* RD:*yyyy/mm/dd*

Explanation: This message lists PDSMAN/MVS statistics associated with this load member. This message is produced by the ATTRIB subcommand.

PDSMAN/MVS statistics:

MOD:	date and time of last modification
LEV:	modification level number in decimal
BY	updating jobname or TSO userid
BASE:	expiration base date
RD:	last date on which member was read

PDS030I Global operands: *global1*, *global2*, ...
{ALIASINFO/NOALIASINFO}
{DSNAME(dsn)/NODSNAME/SYSOUT(c)/NOSYSOUT}
{LKEDDATE/NOLKEDDATE}
{PROMPT/NOPROMPT}
{RECOVER/NORECOVER}
{TRANSLATOR/NOTRANSLATOR}

```
[NOPARSE    ]
[TESTSYNTAX ]
```

Explanation: Lists the current CONTROL global values in response to a **CONTROL** subcommand.

CONTROL global parameter values:

ALIASINFO	Alias information for MAP and ATTRIB.
NOALIASINFO	No alias information required.
DSNAME(dsn)	Names the data set receiving the session log output. This is combined with a data set status such as OLD, NEW, SHR or MOD.
NODSNAME	No session log is being output to a data set.
SYSOUT(c)	Names the SYSOUT class that is currently receiving the session log output. This is combined with FORM(*form*) or NOFORM and DEST(*destname*) or NODEST.
NOSYSOUT	No session log is output to a SYSOUT data set.
LKEDDATE	Linkage edit dates for ATTRIB.
NOLKEDDATE	No linkage edit date information is required.
PROMPT	Yes/no prompts for DELETE, FIXPDS, RENAME, RESTORE, and SUBMIT.
NOPROMPT	Yes/no prompts are not required for DELETE, FIXPDS, RENAME, RESTORE or SUBMIT (a YES reply is assumed).
RECOVER	Attempt ESTAE recovery after an ABEND.
NORECOVER	Do not attempt ESTAE recovery
TRANSLATOR	Translator IDR outputs are required from HISTORY.
NOTRANSLATOR	No translator information is required from HISTORY.
NOPARSE	Test parse code by using the TSO parser (IKJPARSE).
TESTSYNTAX	Validate syntax only (subcommands will not be executed).

PDS031I `Input buffering: `*`type`*

```
{BPAM}
{SINGLE}
{DOUBLE}
{MULTIPLE}
{RETAIN(numt)}
```

Explanation: Lists the current input buffering mode in response to a CONTROL subcommand.

CONTROL input buffering modes:

BPAM	EXCP is not used for a PDSE data set; BPAM is used instead.
SINGLE	Read single (each read obtains one physical block).
DOUBLE	Read double (each read obtains two physical blocks).
MULTIPLE	Read multiple (each read obtains an entire track).
RETAIN(numt)	Specifies the number of disk track images (one through nine) kept in storage buffers. Each new member read operation searches these buffers before performing an actual read multiple EXCP operation. EXCP operations are only saved during the execution of a single subcommand. The buffers are reset for each new subcommand.

The input buffering type (BPAM, SINGLE, DOUBLE, MULTIPLE or RETAIN) is reset for each data set allocated according to the data set organization or the device type on which the data set resides. RETAIN buffering is used for device types that support the READ

MULTIPLE CCW and DOUBLE is used otherwise. BPAM mode is automatically selected for PDSE data sets and cannot be selected explicitly.

Solution: For maxium I/O efficiency, use RETAIN buffering since only a single I/O is required to input a track of data. You can avoid many EXCPs if the disk track buffers already contain the requested information.

PDS032I `TESTCPULOOP -- CPU loop follows:`

Explanation: CONTROL TESTCPULOOP – performs a CPU loop for program testing.

PDS033I `TESTABEND -- System 0C1 follows:`

Explanation: CONTROL TESTABEND – performs an ABEND (S0C1 or other ABEND) for program testing.

PDS034I `TESTOUTLOOP -- This data repeats`

Explanation: CONTROL TESTOUTLOOP – performs an output loop for program testing. The message line is repeated indefinitely.

PDS035I `TESTREAD -- EXCP Return Code=`*`nn`*`; NEXT TTR ADDRESS IS `*`ttraddr`*

Explanation: CONTROL TESTREAD verifies the operation of the input EXCP routine by using an initial TTR of 000001 for each of the following EXCP tests. The TESTREAD Return code should be zero.

CONTROL EXCP tests:

BPAM	Read using a BPAM DCB for PDSE data sets only. The other tests are not executed for PDSE data sets. The return code should be 00 and NEXT TTR ADDRESS should be 000001 (it is not set).
SINGLE	Read single (each read obtains one physical block). The NEXT TTR ADDRESS should be 000002 if sufficient data is available.
DOUBLE	Read double (each read obtains two physical blocks). The NEXT TTR ADDRESS should be 000003 if sufficient data is available.
MULTIPLE	Read multiple (each read obtains an entire track). If the disk unit supports the READ MULTIPLE CCW, the NEXT TTR ADDRESS should be 000101 if sufficient data is available. If this disk unit does not support the READ MULTIPLE CCW, a PDS892E message displays, and the NEXT TTR ADDRESS is 000003 (double buffering is actually used).

Return codes from EXCP have the following meanings:

RC=00	Successful read
RC=04	End of member
RC=08	End of data set
RC=12	I/O error

PDS036I `Largest free storage area is `*`nnn`*`K`

Explanation: Displays the size of the largest free storage area fragment in 1024-byte or K-byte units. This message is in response to each CONTROL subcommand.

PDS037I Installation defaults from *modname yyyy/mm/dd hh:mm*

Explanation: A header for a list of StarTool FDM installation defaults loaded from the defaults CSECT. It also shows the date and time of the defaults module assembly. It is in response to a CONTROL DEFAULTS command.

The modname is PDS#OPT4. During the initialization process, a CSV003I REQUESTED MODULE PDS#OPT4 NOT FOUND message (or equivalent) is issued by MVS to document a failure in loading PDS#OPT4.

PDS038I Use of *subname* is restricted

Explanation: During the StarTool FDM installation process, your installation chose to restrict your use of the listed subcommand or subcommand/operand combination.

Solution: If you need this restricted resource, contact the person responsible for StarTool FDM installation. This message is in response to a CONTROL RESTRICTED command.

PDS040I *memname* has been deleted

Explanation: DELETE completed and the identified member name was removed from the data set directory.

PDS041I THIS DATA SET IS A PDSE; IT WILL BE REORGANIZED

Explanation: The COMPRESS subcommand reorganizes PDSE data sets by copying all members to a temporary PDSE data set. The system resets the source data set and copies the copied members back into the source data set.

This sets the PDSE data set equivalent to a newly allocated PDSE data set before copying the members back in. Data set fragmentation and the high-used page for this data set is reduced so that a TRIM operation or FIXPDS RELEASE can return unused disk space to the system.

PDS042I No members are in the data set

Explanation: This data set has no member names in its directory; this is an empty PDS.

PDS046I Largest area above the line is *nnnn* M

Explanation: Displays the size of the largest free storage fragment in 1024K bytes or 1 Megabyte units. This message is in response to each CONTROL subcommand.

PDS049I Concatenation *nn* of *mm*

Explanation: This CHANGE message is feedback when file allocation is performed to provide the current NUM(nn) operand and the maximum NUM(mm) operand.

PDS050I *memname1* will be moved

Explanation: Used by FIXPDS to identify members that need to be moved out of the way of a changed member directory in response to a FIXPDS subcommand with a EXPANDDIR or FREEDIR keyword.

PDS051I *memname* was {moved/copied/replaced/combined/separated}; input=*count*

Explanation: Issued by the COMBINE, COPY, DUP, FIXPDS, REPRO and SEPARATE subcommand to identify members copied or moved, and their status and record counts.

PDS052I **Real storage is *nnnM*; expanded storage is *nnnM***

Explanation: This CONTROL LISTENV message displays the amount of real and expanded storage on the active processor in 1024K bytes or 1 MB units.

Storage values may not be accurate when VARY STOR commands are in progress.

PDS053I **LOAD parameter is '*uuuuxxln*'|blank**

Explanation: This CONTROL LISTENV message displays the LOAD parameter used to initiate the last IPL from the system control (SYSCTL) frame. If all defaults were taken, `blank` displays. Otherwise, the displayed parameter value takes the form *uuuuxxln*, where:

uuuu = UCB device name

xx = Suffix for LOAD*xx*

l = Message processing character

n = Alternate NUCLEUS identifier (`0-9`)

IPL uses the UCB device name to locate the I/O definition file (VSAM) data sets. If no device name is specified, IPL assumes the LOAD*xx* member resides on the system residence (`SYSRES`) volume and it searches that volume for a `SYS`*n*`.IPLPARM` or `SYS1.PARMLIB` data set.

The `LOAD`*xx* member specifies information about your I/O configuration, an alternate NUCLEUS identifier, a NUCLST*xx* member, information about the master catalog, and the IEASYS*xx* member that the operating system is to use to configure your system.

You can type the message processing character as:

`P`	Do not display informational messages and prompt operator (overrides LOAD*xx*)
`A`	Display all messages and prompt the operator (overrides LOAD*xx*)
`M`	Display all messages but do not prompt operator (the system uses LOAD*xx*). Do not display informational messages and do not prompt operator (the system uses LOAD*xx*).

You can type the alternate NUCLEUS identifier (`0-9`) to request an IPL from a NUCLEUS other than `IEANUC01`.

PDS054I **Totals - Memebers=*nn*; Input=*mm*; characters=*ll***

Explanation: Issued after a COMBINE, COPY or SEPARATE subcommand to summarize the number of members processed, the total records input, and the total characters output. SEPARATE does not count `"./ ADD"` lines in record or character counts.

PDS059I

```
Storage map     START       END         SIZE
-----------   --------   --------   ----------
E-PRIVATE     09100000   7FFFFFFF   1,948,672K
 . . .         . . .      . . .      . . .
```

Explanation: This CONTROL LISTENV message maps the various types of system storage on your processor. The displayed LISTENV fields are:

LABEL	Name of the storage area (an E- prefix means extended)
START	Hexadecimal start address for this storage area

END	Hexadecimal end address for this storage area
SIZE	Size of this storage area in 1024 or K-byte units.

A V=R region is mapped if it is present on your system even though it is mapped over the beginning of the PRIVATE area.

Unused storage areas are not displayed. For example, the following example does not show a FLPA data line.

```
 PDS059I Storage map         START       END        SIZE
      PDS059I -----------      --------  --------  ----------
      PDS059I E-PRIVATE        09100000  7FFFFFFF  1,948,672K
      PDS059I E-CSA            042C7000  090FFFFF     80,100K
      PDS059I E-MLPA           042C6000  042C6FFF          4K
      PDS059I E-FLPA           042C3000  042C5FFF         12K
      PDS059I E-PLPA           02837000  042C2FFF     27,184K
      PDS059I E-SQA            01A9F000  028366BD     13,920K
      PDS059I E-NUCLEUS (R/W)  012E3000  01A9EFFF      7,920K
      PDS059I E-NUCLEUS (R/O)  01000000  012E24FF      2,956K
      PDS059I --------- 16 Megabyte Boundary Line -----------
      PDS059I NUCLEUS (R/O)    00FDD000  00FFFFFF        140K
      PDS059I NUCLEUS (R/W)    00F92000  00FDC70F        300K
      PDS059I SQA              00E82000  00F91FFF      1,088K
      PDS059I PLPA             00C85000  00E81FFF      2,036K
      PDS059I MLPA             00C82000  00C84FFF         12K
      PDS059I CSA              00800000  00C81FFF      4,616K
      PDS059I PRIVATE          00005000  007FFFFF      8,172K
      PDS059I V=R AREA         00005000  00024FFF        128K
      PDS059I System           00001000  00004FFF         16K
      PDS059I PSA              00000000  00000FFF          4K
```

PDS060I Translator history by CSECT -
csect yyyy/mm/dd translatorname vermod [*yyyy/mm/dd plstrans vermod*]

Explanation: Issued in response to a HISTORY subcommand with the TRANSLATOR keyword (or without the keyword if CONTROL TRANSLATOR is the default). Output for the PDS060I message is in order by creation date (descending) and CSECT name (ascending).

A header for assembler or compiler IDR records. The second half of a translator detail line is output only if a CSECT was processed by a PLS translator.

In the following messages, two CSECTS are reported on. Both were processed by Assembler H:

```
PDS060I Translator history by CSECT -
     IKJEFT03   1994/09/22   5741SC103-ASMH  V02 M02
     IEFBR14    1993/11/22   5741SC103-ASMH  V02 M02
```

PDS061I AMASPZAP update history by CSECT -
csect yyyy/mm/dd userid/idrdata

Explanation: Issued in response to a HISTORY subcommand with the ZAP keyword (or ZAP default). Output for the PDS061I message is in order by ZAP date (descending) and CSECT name (ascending).

A header for AMASPZAP IDR records. Example CSECT IEFBR14 has only a single ZAP recorded while CSECT IKJEFT03 has two different ZAPs (both on the same date):

```
PDS061I AMASPZAP update history by CSECT -
     IEFBR14      1994/06/14    HABLX
     IKJEFT03     1993/11/04    HABL
     IKJEFT03     1993/11/04    HABL
```

PDS062I **User-supplied update history by CSECT -**
csect yyyy/mm/dd identifier

Explanation: Issued in response to a HISTORY subcommand that is displaying USERDATA (or SYSMOD) data. Output for the PDS062I message is in order by date (descending) and CSECT name (ascending).

A header for user-supplied IDR records. In the following messages, CSECT IKJEFT03 has user-supplied data of UZ65337 and CSECT IEFBR14 has user-supplied data of UZ54057:

```
PDS062I User-supplied update history by CSECT -
     IKJEFT03     1992/12/04    UZ65337
     IEFBR14      1991/11/29    UZ54057
```

PDS063I **ChangeMan module *modname* package *packageid* date *yyyy/mm/dd* time *hh:ss***

Explanation: Displays ChangeMan ZMF information from the IDR record. It is issued in response to a HISTORY subcommand for a ChangeMan ZMF module.

modname	name of the ChangeMan ZMF module
package-id	package identifier
yyyy/mm/dd	date of the last update
hh:ss	time of the last update

PDS064I **Last link-edited on *yyyy/mm/dd* by LKED *lkname-type Vnn Mmm***

Explanation: Displays the last linkage edit date and linkage editor identification information. This message is issued in response to an ATTRIB or HISTORY subcommand for a load member.

yyyy/mm/dd	date of the last linkage edit
lkedname	translator code for the linkage editor
-type	linkage editor type by common name (this output is only provided by the HISTORY subcommand. It is S360LKED, MVSLKED(F), MVSLKED, DFPLKED, DFP370LKED or BINDER).
V*nn*	linkage editor version number
M*mm*	linkage editor modification level

The LKED value is replaced with a coded value to represent the actual linkage editor or program binder used for the listed CSECT. StarTool FDM determines this through inspection of the IBM component codes carried in the load module. The component codes, values displayed by StarTool FDM, and the related operating systems are shown in the table below.

Link Editor Display Code	Component Code	Operating Systems
S360LKED	360E521	OS/370 Linkage Editor
MVSLKED	5752SC104	MVS 3.8 Base Linkage Editor

Link Editor Display Code	Component Code	Operating Systems
MVSLKED	5741SC104	MVS, SVS Linkage Editor
DFPLKED	566528408	DFP Link Edit (MVS/SP, XA, ESA)
DFP370LKED	566529508	DFP/370 Link Edit
BINDER	5695DF108	DFSMS/MVS Program Binder (OS/390, z/OS)
BINDERz/OS	5695PMB01	z/OS Release 3, 4 Program Binder

PDS065I `Main member name updated for member: memname`

Explanation: Issued in response to a **RENAME** subcommand for a load member that has aliases. The directory entry of each alias entry must be updated to point to the new main member name. The PDS065I message is issued for each alias of the main member that is being renamed to document the directory entry changes.

PDS066I `Member is an alias for: memname`

Explanation: Issued by the **MAP** subcommand if CONTROL ALIASINFO is the default. It is also issued in response to an **ATTRIB** subcommand with the **ALIASINFO** keyword (or without the keyword if CONTROL ALIASINFO is the default). This member is an alias. The main member is identified in the PDS066I message.

PDS067I `Member has n1 IDR blocks with space for n2 IDR entries`

Explanation: Issued as a summary message in the **HISTORY** subcommand for AMASPZAP IDR records. AMASPZAP IDR records are initialized by the linkage editor and used by AMASPZAP and other programs like StarTool FDM to keep track of changes to a module by CSECT, date and userid.

The first number (*n1*) is the total number of AMASPZAP IDR records present in this member. The second number (*n2*) is 19 times the first number because each AMASPZAP IDR record contains space for 19 ZAP IDR entries.

PDS068I `n1 IDR entries are in use; n2 are available for use`

Explanation: Issued as a summary message in the **HISTORY** subcommand for AMASPZAP IDR record entry usage. AMASPZAP IDR records are initialized by the linkage editor and used by AMASPZAP and other programs such as StarTool FDM to keep track of changes to a module by CSECT, date and userid.

The first number (*n1*) is the total number of AMASPZAP IDR entries used in this member. The second number (*n2*) is the number of AMASPZAP IDR entries that are still available for use.

PDS071I `The following options are available:`

Explanation: Issued in response to an **OPTIONS** subcommand to list the subcommands that can be used on the current data set. A header for the list of available subcommands.

PDS072I `CLIST conversion is being performed`

Explanation: CLIST libraries are RECFM(FB) with LRECL(80) or RECFM(VB) with LRECL(255). The DUP subcommand performs a CLIST conversion on the current members while copying them to the other library. The resulting members are usable by the CLIST processor.

CLIST conversion entails assigning new sequence numbers to each line and breaking up long lines into multiple short lines while maintaining normal CLIST format rules.

PDS073I *memname* has been refreshed

Explanation: The **LLA** subcommand completed successfully. The LLA directory entry for this member was refreshed and its directory entry was updated to point to a new member.

If the operating system level does not support LLACOPY (system level is below MVS Version 3.1.3), the BLDL macro is executed instead. For this message, it means that the member is present in the data set.

PDS074I *memname* has been removed

Explanation: The **LLA** subcommand completed successfully. The LLA directory entry for this member was removed because the member is no longer present in this data set.

If the operating system level does not support LLACOPY (system level is below MVS Version 3.1.3), the BLDL macro is executed instead. For this message, it means that the member is not present in the data set.

PDS075I CLIST conversion requires VB,255 and FB,80 data sets

Explanation: For the COPY or DUP subcommand, a CLIST keyword was specified but the data sets were not suitable for a StarTool FDM CLIST conversion; normal member copies are still performed.

The source data set must have DCB=(RECFM=VB,LRECL=255) or DCB=(RECFM=FB,LRECL=80) and the target data set must have the opposite characteristics. The COPY and DUP subcommands can only convert between FB CLIST data sets and VB CLIST data sets.

PDS080I {*OUTCOPY/LOGCOPY*} DCB is closed

Explanation: Issued in response to either an OUTCOPY subcommand with the keyword CLOSE or a CONTROL subcommand with a NODSNAME or NOSYSOUT keyword. This message means that the OUTCOPY file or the session copy data set was closed successfully.

PDS082I Volume name: *volser* UNIT = *ucb* TYPE = *unittype*

Explanation: Issued by the VUSE subcommand to identify the volume name, address and unittype (for example, 3380K or 3390M3).

PDS083I Volume status: *mntstat usestat allocstat onlinstat*

Explanation: Issued by the VUSE subcommand to indicate how the volume is currently being used. The following data values are displayed in each status field.

mntstat:	'REMOVABLE RESERVED RESIDENT
usestat:	'PRIVATE PUBLIC STORAGE
allocstat:	'ALLOCATED UNALLOCATED
onlinstat:	'ONLINE OFFLINE OFFLINE PENDING

PDS085I Blank DSCB's:*nmf* or *nmp*%

Explanation: Issued by the VUSE subcommand to indicate the number and percent of available DSCBs in the volume VTOC. These free DSCBs are available to represent new data sets (with Format 1 DSCBs) or additional extents (with Format 3 DSCBs) for current data sets.

nmf	total number of free DSCBs on this volume
nmp	percentage of DSCBs on this volume which are free

If the free DSCBs reach zero on a volume, you cannot add data sets to the volume (even if space is available).

PDS086I `Free indexed VTOC VIR's: number`

Explanation: Issued by the VUSE subcommand to indicate that this volume contains an indexed VTOC and the number of available VTOC Index Records in the VTOC index. Index records build data set index tables. These are managed and searched instead of the traditional VTOC which is a BDAM data set.

If this number reaches zero for a volume, you cannot add data sets to the volume (even if space is available).

PDS087I `Free space: mt tracks or mp%; me extents including mc full cylinders`

Explanation: Issued by the VUSE subcommand to indicate the total free space available on a volume.

mt	total free space in tracks on this volume
mp	percentage of disk tracks on this volume that are free
me	total number of free extents on this volume
mc	total full free cylinders on this volume

PDS088I `Volume record definition dump:`

Explanation: Issued by the VUSE subcommand to indicate that this volume is SMS managed and as a header for a dump of the SMS volume record definition area. Following this dump, useful fields are interpreted with PDS186I messages.

```
PDS089I LARGEST EXTENTS:     #1       #2       #3       #4       #5
PDS089I     CYL.TRKS      228.06   134.14    10.00     3.02
2.01
PDS089I     TRACKS         3426     2024     150       47       31
```

This message is issued by the VUSE subcommand to display up to five of the largest free extents in sorted order in CYL.TRKS and TRACKS notation. The above sample shows a volume with multiple free extents. The message is interpreted as follows:

Extent 1 (largest):	3426 tracks with 228 cylinders and 6 tracks
Extent 2 (next):	2024 tracks with 134 cylinders and 14 tracks
Extent 3 (next):	150 tracks with 10 cylinders and no tracks
Extent 4 (next):	47 tracks with 3 cylinders and 2 tracks
Extent 5 (next):	31 tracks with 2 cylinders and 1 track

PDS090I *mem1* `has been renamed to` *mem2*

Explanation: RENAME completed successfully. MEM1 is now known as MEM2.

PDS091I *memname* `has been restored`

Explanation: RESTORE completed successfully. The identified member name is added to the data set directory. You can use the member for any purpose.

PDS092I {*AMODE/RMODE*} `information updated for member:` *memname*

Explanation: Issued in response to an ATTRIB subcommand with an RMODE (RMODEANY or RMODE24) or AMODE (AMODEANY, AMODE24, or AMODE31) keyword for a load member that has aliases.

The directory entry of each alias entry must be updated to reflect the new AMODE/RMODE

of the main member name. The PDS092I message is issued for each updated alias of the main member.

AMODE operands affect the module's addressing mode and the RMODE operands control the module's residence mode (above or below the 16 Megabyte line).

PDS093I ADDRESS MODULE LENGTH TYPE APF ESR NP ASS AR LOCKS AMODE DESC
SVC *nnn hexaddr module hexlen t APF ESR NP ASS AR lcosd 24/31 doc*
or
ESR*(mm) hexaddr module hexlen t APF NP ASS AR lcosd 24/31 doc*

Explanation: Documents an SVC or ESR entry as output by SVCMAP.

SVC nnn	SVC entry *nnn* (where *nnn* varies from 0 through 255).
ESR(mm)	ESR entry *mm* (where *mm* varies from 0 through ESR limit).
ADDRESS	Hexadecimal entry point.
MODULE	The name of the module containing the entry point displayed. If the module displays as ???, it was not found in the nucleus LPA or MLPA. This means that this SVC was dynamically added. If an SVC entry is unused, the module name is IGCERROR. For unused ESR entries, the module name is IGXERROR.
LENGTH	Hexadecimal length of the module if known; 0 otherwise.
TYPE	SVC type (1, 2, 6 or 3/4).
APF	Flag if APF authorization is required.
ESR	Flag if the SVC is a ESR (Router).
NP	Flag if the SVC is non-preemptive.
ASS	Flag if the SVC can be assisted.
AR	Flag if the SVC can be issued in AR ASC.
LOCKS	Flags for locks needed as follows: L Local lock C CMS lock O OPT lock S SALLOC lock D Dispatcher lock
AMODE	Addressing mode of this routine (24 or 31).
DESCRIPTION	MACRO associated with this SVC.

PDS094I *module* Dump, LENGTH=*length*

Explanation: A header for a dump of a SVC module.

If module is ???, the module could not be located in the nucleus, LPA, or MLPA and only the DEFAULT length of the module is dumped. Occurs if this SVC was dynamically added.

Length is the decimal length of the module that is dumped in the following lines. The dump begins at the offset of the module indicated by the address from the SVCTABLE entry. The start of an SVC module is always known but the length may be incorrect since it is calculated to be the rest of the module regardless of other entry points.

The format of the dump is six or eight bytes of storage address, six bytes of hexadecimal offset into the module, followed by sixteen hexadecimal bytes of the module at that offset, and the character equivalent surrounded by asterisks.

PDS095I *module* Disassembly, LENGTH=*length*

Explanation: A header for a disassembly of a SVC module. If module is ???, the module could not be located in the nucleus, LPA or MLPA and that only the DEFAULT length of the module is displayed. It means that this SVC was dynamically added.

Length is the decimal length of the module that is formatted in the following lines. The display begins at the offset of the module indicated by the address from the SVCTABLE entry. The start of an SVC module is always known but the length may be incorrect since it is calculated to be the rest of the module regardless of other entry points.

The format of the display is six or eight bytes of storage address, six bytes of hexadecimal offset into the module, followed by the operation code, reconstructed operands, the hexadecimal bytes of the module at that offset, and the character equivalent surrounded by asterisks.

PDS096I

```
DEVICE MB/VOL TRACKS  #CYLS TRK/CYL BYTE/TRK DSCB/TRK PDS/TRK
3390M3  2,838 50,085  3,339      15   56,664       50     45
```

Explanation: Issued by the VUSE subcommand to display device characteristics and capacity information for the current disk volume. This message shows the device capacity for an actual disk of this type. The actual device capacity may be smaller.

If the ALL keyword is requested, device characteristics and capacity information is provided for all supported devices.

The above sample shows a sample output for a triple-density 3390; with fields as follows:

DEVICE	Device name (normally four characters model number and model type).
MB /VOL	Volume capacity in Million Bytes. This is from BYTE/TRK * TRACKS / 1000000.
TRACKS	Volume capacity in tracks.
#CYLS	Volume capacity in cylinders.
TRK/CYL	Number of tracks in a cylinder.
BYTE/TRK	Maximum number of bytes that can fit on a track.
DSCB/TRK	Maximum number of DSCB blocks (for a VTOC) per track.
PDS/TRK	Maximum number of PDS directory blocks per track.

PDS100I *STARTOOL/type* -- Version *v.r.m yyyy.yyy*

Explanation: Displays the name by which the program was called, the release level and Julian release date of the StarTool FDM program. This message displays at program initialization and is the first message from each **CONTROL** subcommand.

This message indicates how StarTool FDM is licensed:

/Lite	StarTool FDM Lite installed; PEDIT is not available.
/SuperEdit	StarTool FDM installed; PEDIT and PBROWSE supported.

PDS101I Deleted member found at TTR: *hexttr*

Explanation: Issued in response to a RESTORE subcommand. It indicates that a previously deleted member was found at the displayed TTR address.

PDS103I Entry point at *hexaddress* -- *symbol*

Explanation: Displays the hexadecimal offset of the entry point for the member and the corresponding entry symbol name (if it is available).

PDS104I Module length *hexlength* -- *decimalK*

Explanation: Displays the length of the module in hexadecimal and in K units (units of 1024 bytes using the next higher boundary of 1024).

PDS110I *nn,nnn* logical records were input

Explanation: This VERIFY message displays a count of the logical input records.

PDS111I *nn,nnn* physical blocks were input

Explanation: This VERIFY message displays a count of the physical input records.

PDS112I *nn,nnn* characters in the largest physical block

Explanation: This VERIFY message displays the maximum physical blocksize read.

PDS113I *nn,nnn* characters per average physical block

Explanation: This VERIFY message displays the average number of characters in a physical block. The average is from (total characters read)/(total blocks read);

PDS114I *nn,nnn* tracks could be regained by compressing this data set

Explanation: This VERIFY message displays the number of tracks containing deleted members. If a compress is performed on the data set, these tracks become available for use.

PDS115I *nn,nnn* members were checked

Explanation: This VERIFY message indicates the number of members processed.

PDS116I Data set was checked

Explanation: This VERIFY message indicates that this sequential data set has been processed.

PDS117I *nn* members counted; cumulative size from statistics is *nn* records

nn members counted; cumulative size is *nn* records and *nn* characters

Explanation: The first message format above is used by the ATTRIB and VERIFY subcommands if NOREAD is used. The size information is calculated from members with ISPF statistics.

The second message format is used by the VERIFY subcommand if READ is used to actually input member records.

The output from ATTRIB and VERIFY differ in that VERIFY includes statistics for an alias member if the alias member is an orphan. In addition, if VERIFY READ is requested, statistics are accumulated for members according to their actual size (not dependent on ISPF statistics). This reporting logic is summarized in the following table.

Subcommand	Include aliases?	ISPF statistics used?
ATTRIB	never	yes, only source of data
VERIFY (with NOREAD)	if an orphan	yes, only source of data
VERIFY (with READ)	if an orphan	no, input counts are used

PDS118I *nnnn* members RMODE24; size is *nnnnK*

Explanation: Lists the number and size of RMODE 24 members to show the cumulative size of non-alias members below the 16 MEG line.

The output from ATTRIB and VERIFY differ in that VERIFY includes statistics for an alias member if the alias member is an orphan.

PDS119I *nnnn* members RMODEANY; size is *nnnnK*

Explanation: Lists the number and size of RMODE ANY load members to show the cumulative size of non-alias members above the 16 MEG line.

The output from ATTRIB and VERIFY differ in that VERIFY includes statistics for an alias member if the alias member is an orphan.

PDS120I MVS/XA Residence mode is *rmode* -- ADDRESSING MODE IS *amode*

Explanation: This ATTRIB message shows the RMODE and AMODE values of the module:

RMODE24	Residence mode is 24-bit (below the 16M line)
RMODEANY	Residence mode is 24-bit (above the 16M line)
AMODE24	Addressing mode specifies 24-bit addresses
AMODE31	Addressing mode specifies 31-bit addresses
AMODE64	Addressing mode specifies 64-bit addresses
AMODEANY	Addressing mode allows 24-bit, 31-bit, or 64-bit addresses

PDS121I Association *type--dsname*

Explanation: Lists data sets associated with the current data set, where:

type	is AIX, CATALOG, CLUSTER, DATA, INDEX, PATH or UPGRADE.
dsname	is the associated data set name.

PDS130I The following is a track usage map of the data set *ddxxx...xxl....*

Explanation: This VERIFY message displays when you perform a VERIFY : operation. The message gives a pictorial view of the current data set usage by track, where the printed characters have the following meanings:

d =	directory track (one or more directory blocks are on this track)
x =	used track (this track has actual member data on it).
. =	unused track (this track may contain deleted members).
l =	DS1LSTAR track (this is the end of the space used).

PDS140I {BLOCK/DUMP} RECORD *nn,nnn* LENGTH *nn,nnn* TTR *hexttr*

{BLOCK/DUMP} RECORD *nn,nnn* LENGTH *nn,nnn type number*

Explanation: A header for BLOCK-format (first message text format) or DUMP -format (second message text format) output from the LIST, FIND and REPLACE subcommands.

RECORD	Current physical record number.
LENGTH	Length of the current physical record.
TTR	Disk address of this record in hexadecimal.
type	Describes the value displayed by the *number* field. Values: RRN Relative record number (VSAM data set) RRDS Relative record number (VSAM data set) RBA Relative byte address (non-VSAM data set)

CI-RBA	Relative byte address of the control interval, if control interval access is used for a DATA or INDEX component.
number	RRN (relative record number) or RBA (relative byte address), as specified in *type* field.

PDS141I AT *hexaddr* CSECT *csectname* LENGTH *hexlen*

AT *hexaddr* ENTRY *entryname*

Explanation: The first message format is a header for DISASM-format or LBLOCK/LDUMP-format outputs by the LIST, FIND and REPLACE subcommands for a CSECT in a load module.

The second message format is a header for DISASM-format or LBLOCK/LDUMP-format outputs by the LIST, FIND and REPLACE subcommands for an ENTRY within a CSECT in a load module.

AT	start of this CSECT or ENTRY in the load module
CSECT	name of this CSECT
ENTRY	name of this ENTRY
LENGTH	length of this CSECT

PDS142I *nn,nnn* lines/blocks/CSECTS in this member

Explanation: This DISASM, FIND, LIST, or REPLACE message means that an end of file marker has been recognized and it summarizes the amount of data input for the member:

lines	number of logical records read
blocks	number of physical records read
CSECTS	number of CSECTs input through the BINDER interface

PDS143I *membername* Directory entry, Length=*nn*

Explanation: This DIRENTRY message is a header for a dump of a member's directory entry. The length of the directory entry is shown in decimal.

PDS144I Data line *nn*:

Explanation: This RESTORE message is a header for the display of one line from this deleted member.

PDS145I *nn,nnn* blocks updated

Explanation: This REPLACE message displays the number of physical records updated for this member or data set.

PDS146I *nn,nnn* strings found

Explanation: This FIND or REPLACE message displays the number of string matches encountered.

PDS147I *nn,nnn* members searched

Explanation: Displays the number of members searched for this member group. Issued by IF, FIND and REPLACE. It is also issued by MAP, HISTORY, XREF or MEMLIST when a search criteria such as MODULE(xx) is specified.

PDS148I *nn,nnn* members found

Explanation: Displays the number of members found for this search. Issued by IF, FIND and REPLACE. It is also issued by MAP, HISTORY, XREF or MEMLIST when a search criteria such as MODULE(xx) is specified.

PDS149I *nn,nnn* total strings found

Explanation: This FIND or REPLACE message displays the total number of string matches encountered in this member group.

PDS150I JOB *xxxxxxxx*(J*nnnnnnn*) submitted

Explanation: Job name *xxxxxxxx* was successfully submitted to JES for execution. The job number returned by JES is *nnnnnnn*.

PDS160I Aliases for this member are: *alias1*, *alias2*, ...

Explanation: This ATTRIB message displays the aliases associated with this main member.

PDS161I Members to be renamed are: *member1*, *member2*, ...

Explanation: This RENAME message displays the group of members that are renamed if you type **y** to the next prompt.

PDS162I Members to be deleted are: *member1*, *member2*, ...

Explanation: This DELETE message displays the group of members that are deleted if you type **y** to the next prompt.

PDS163I Associated members to be deleted are: *member1*, *member2*, ...

Explanation: This DELETE message displays the associated (alias, apparent alias and main) members that are deleted if you type y to the next prompt.

PDS164I CSECTS are: *csect1*, *csect2*, ...

Explanation: This RESTORE message displays the CSECT names found in this deleted member.

PDS165I Members are: *member1*, *member2*, ...

Explanation: Displays the names of the members in the current member group. Issued in response to a COMPDIR, MEMBERS or SUBLIST subcommand; an IF or FIND subcommand with THEN(SUBLIST/ MEMLIST) or ELSE(SUBLIST/ MEMLIST); or a REPLACE, HISTORY, MAP or VERIFY subcommand with a ML, MEMLIST, NEWML or SUBLIST operand.

PDS166I *csectname* from: *csect1*, *csect2*, ...

Explanation: This XREF message displays a list of all CSECTs that reference csectname.

PDS168I *csectname* to: *csect1[<entry1>]*, *csect2[<entry2>]*, ...

Explanation: This XREF message displays a list of all CSECTs and ENTRY names that are referenced by csectname. If entry name OVERTBL within CSECT LINEONE is called, a reference like LINEONE<OVERTBL> is generated in the reference list.

PDS169I *entryname* entry called by: *csect1*, *csect2*, ...

Explanation: This XREF message displays a list of all CSECTs that contain references to entryname.

PDS170I ATTRIB will change the following members: *member1*, *member2*, ...

Explanation: Displays the names of the members that are to be modified by the ATTRIB subcommand if you type y to the next prompt.

PDS171I {*COPY/COMPRESS*} has completed; RC=00

Explanation: The COPY or COMPRESS subcommand finished normally, with a zero return code.

PDS172I *externalname* is the entry point

Explanation: This XREF message displays the CSECT or ENTRY symbol that is the entry point for this module.

PDS174I *'userid.data.set'* has been created on volume *volname*

Explanation: The data set was created on the indicated DASD volume. Issued by the CREATE subcommand or the COMBINE, COPY, DUP or SEPARATE subcommands if a new data set is created.

PDS175I The *member* {*names/data/directory entries*} have been compared

Explanation: The COMPDIR subcommand completed successfully and an action was taken as requested.

PDS176I *nnn* members checked; *kkk* members do not match the condition

Explanation: A COMPDIR feedback message. There were *nnn* members checked for the condition coded (EXIST, NOEXIST, DIRCHANGE, NODIRCHANGE, CHANGED or NOCHANGED). Of these, *kkk* members did not match the condition tested.

PDS180I

```
Data set: CREATED     EXPIRES      LAST USE    UPDATED      SECURITY
         yyyy/mm/dd yyyy/mm/dd yyyy/mm/dd YES|NO|date type|time

Data set: CREATED     EXPIRES      LAST USE    UPDATED     SECURITY ASM2ID
         yyyy/mm/dd yyyy/mm/dd yyyy mm/dd yyyy/mm/dd type    userid

Data set: CREATED     EXPIRES      LAST USE    UPDATED     LASTUSE FIRSTUSE
         yyyy/mm/dd yyyy/mm/dd yyyy/mm/dd yyyy/mm/dd userid userid

Data set: CREATED     EXPIRES      LAST USE    UPDATED  BACK# OLD  ABRFLAG
         yyyy/mm/dd yyyy/mm/dd yyyy/mm/dd yes/no   ###  yes flag
```

Explanation: Lists data set properties for systems with no DASD manager or for DASD managed by DFHSM (first message format), CA-ASM2 (second message format), DMS/OS (third message format), or FDR/ABR (fourth message format).

Format 1: Systems with DFHSM or no DASD manager:

CREATED	Creation date for dataset.
EXPIRES	Expiration date for dataset. (*PERMANENT displays for datasets marked for permanent retention.)
LAST USE	Date last opened.
UPDATED	Date of last update for VSAM data sets. YES if non-VSAM data set was opened for output or update. NO otherwise.
SECURITY	Type of security according to the DSCB entry, or: TIME for VSAM data sets, the time of the last update. NONE if no data set password security bit is set. WRITE if the dataset is protected from output use.

READ	if the dataset is protected from input use.
RACF	if the dataset RACF bit is on.

Format 2: For systems with CA-ASM2, the following changes apply:

UPDATED	Date of last update.
ASM2ID	User ID of last updater.

*Format 3: **F**or systems with DMS/OS, the following changes apply:*

UPDATED	Date of last data set update.
LASTUSE	Last user of this data set.
FIRSTUSE	Job that first used this data set.

Format 4: For systems with FDR/ABR, the following changes apply:

BACK#	Current backup number; or NONE if no backup number available.
OLD	YES if an old backup is available; otherwise NO.
ABRFLAG	Any of the following values (see FDR/ABR documentation):
NOABR	Exclude from ABR (OPTIONS=EX)
NOARCH	Normal backup/no archive (OPTIONS=ND)
ALWAYS	Always backup/no archive (OPTIONS=AD)
ARCHIV	Archive this data set (ARCH=ON)

PDS181I `Extents in tracks: nnn, nnn, ...`

Explanation: This USAGE message lists the size of each data set extent in tracks.

PDS182I
```
Tracks: ALLOCATED   USED   FREE   EXTENTS   CATALOGED
        nnnnn       nnnn   nnnn   nnnn      vol1 vol2 . . .
```

Explanation: This USAGE message lists disk allocation characteristics:

ALLOCATED	Number of allocated disk tracks.
USED	Number of in-use disk tracks.
FREE	Number of free disk tracks.
EXTENTS	Number of disk storage extents.
CATALOGED	Up to 10 volume names as cataloged to the data set name, regardless of how the current data set is used.

PDS183I
```
Directory: BLOCKS    USED   FREE  TRACKS  MEMBERS  ALIASES
           nnnn      nnnn   nnnn  nnnn    nnnn     nnnn
```

Explanation: This USAGE message lists the following directory statistics:

BLOCKS	Number of allocated directory blocks.
USED	Number of in-use directory blocks.
FREE	Number of free directory blocks.
TRACKS	Number of tracks occupied by directory blocks.
MEMBERS	Number of members in the data set.
ALIASES	Number of aliases in the data set.

PDS184I
```
EXTENT UCB LO TT-HI TT TRKS    LOW CCHH-HIGH CCHH  BOUNDARY
------ --- ----- ----- ---- ----------- ---------- --------
  nn ccc tt.tt tt.tt  nnn   cc.cc.hh.hh cc.cc.hh.hh type...
```

Explanation: This USAGE message lists data from each extent of the dataset:

EXTENT	Number of this extent.
UCB	UCB for this extent.
LO TT	TT (of TTR) address for the first track in this extent.
HI TT	TT (of TTR) address for the last track in this extent.

TRACKS	Number of disk tracks in this extent.
LOW CCHH	CCHH address of the first track of this extent.
HIGH CCHH	CCHH address of the last track of this extent.
BOUNDARY	CYL if the extent is on a cylinder boundary; TRK otherwise.

PDS185I `Format {1/3/4}DSCB at cchhr-addr`

```
        0    4    8    C   10   14   18   1C   20   24   28   2C   30   34   ...
character.data
hexadecimal.over.row
hexadecimal.under.row
```

Explanation: This USAGE message outputs a Format 1, 3 or 4 DSCB (Data Set Control Block) for an allocated data set or a volume record definition map for an SMS managed volume. Data is displayed in a combined character and hexadecimal over/under display. Two over/under messages are required to output the entire 140 bytes of the DSCB.

NOTE The second header line for PDS185I is a hexadecimal column header. Columns are 0-origin as decribed in the *MVS Debugging Handbook*. For example, hex column 2C has value X'F1' and is documented under topic DSCB1 for hexadecimal offset 2C.

The following sample shows PDS185I messages to display the DSCB for C911407.LINK.LOAD.

```
PDS185I Format 1 DSCB at 01B9000722:
     PDS185I 0   4   8   C  10  14  18  1C  20  24  28  2C  30  34  38  3C  40  44
     PDS185I C911407.LINK.LOAD
     101T.............C911407
     PDS185I
     CFFFFFF4DCDD4DDCC4444444444444444444444444FFFE50A00503000000CFFFFFF4
     PDS185I
     3911407B3952B3614000000000000000000000000000101390A0190000020039114070

     PDS185I  48  4C  50  54  58  5C  60  64  68  6C  70  74  78  7C  80  84  88
     PDS185I C911407.......{.”8.&...b........
     1....2.............._..................
     PDS185I
     CFFFF50A000800C07F050008800500024F0000F000000000600060000000000000000
     PDS185I
     3911490A000F2001F800000200001FA30101022033404113808 3D0C000000000000000
```

PDS186I

LOC	NAME	VALUE	DESCRIPTION
off	*dname*	*dvalue*	*dnotes*

Explanation: This USAGE message interprets data from a Format 1, 3 or 4 DSCB (Data Set Control Block) for an allocated data set, or a volume record definition map for an SMS managed volume. Displayed values are:

off	Hexadecimal offset of field.
dname	Name of field from the *MVS Debugging Handbook* (see DSCB1, DSCB3, or SCB4).

dvalue Character, decimal, or hexadecimal representation of DSCB data.
dnotes Interpretation of displayed data.

NOTE Character data is provided for DS1DSNAM, DS1DSSN and DS1SYSCD. However, if the DS1DSSN or DS1SYSCD fields have non-character data, these fields are dumped using hexadecimal instead. Any decimal data is formatted with a trailing period. DS1EXT1, DS1EXT2 and DS1EXT3 fields are displayed in hexadecimal with periods between each of the CCHH subfields.

The following example shows PDS186I messages with actual values.

```
PDS186I LOC NAME     VALUE        DESCRIPTION
     PDS186I --- ----     -----        -----------
     PDS186I 00  DS1DSNAM C911407.LINK.LOAD
     PDS186I 2C  DS1FMTID F1           FORMAT IDENTIFIER
     PDS186I 2D  DS1DSSN  F0F1E35900AA DATA SET SERIAL NUMBER
     PDS186I 33  DS1VOLSQ 1.          VOLUME SEQUENCE NUMBER
     PDS186I 35  DS1CREDT 590030       CREATION DATE
```

PDS187I `This data set is managed by LLA; refresh updated members with the LLA subcommand`

Explanation: Issued when you modify or move members in an LLA-managed data set (message PDS189I was previously received on the CHANGE to the data set). This message may be issued by the ALIAS, ATTRIB, DELETE, COMPRESS, FIXPDS (if members are moved), RENAME, REPRO and RESTORE subcommands.

Solution: Enter members deleted by the DELETE subcommand in an LLA subcommand to notify LLA that they no longer exist. For the RENAME subcommand, enter both the original name and the new name of a member in an LLA subcommand to notify LLA of their new status. At the end of processing for this subcommand, inform LLA that these members changed status. Use the LLA subcommand or some other method of refreshing LLA for these members.

PDS188I `The output data set is managed by LLA; refresh updated members with the LLA subcommand`

Explanation: Issued when you add or replace members in a LLA managed data set with the COPY or DUP subcommands.

Solution: At the end of processing for this subcommand, inform LLA that these members were added or updated. Use the LLA subcommand or some other method of refreshing LLA for these members.

PDS189I `This data set is managed by LLA`

Explanation: Issued when you enter a data set or request a USAGE subcommand. A data set is assumed to be managed by the LLA started task if LLA has the data set ENQUEUED on the same system and the data set is cataloged. If a data set is managed by LLA and it is a linklist library, StarTool FDM provides additional information on modules that are not present in the data set but are known to LLA (see message PDS728E).

PDS190I `An alias named` *`memname`* `is already at this TTR`

Explanation: The identified alias member resides at this location – RESTORE continues if only alias members are found at this TTR address.

PDS191I `STORAGE CLASS  MGMT CLASS  DATA CLASS  DSNTYPE`
`sclass` *`mclass`* *`dclass`* `PDS|LIBRARY`

Explanation: This USAGE message provides feedback on SMS managed data sets showing their STORCLAS, MGMTCLAS, DATACLAS and DSNTYPE for a PDS (identified by PDS) or a PDSE (identified by LIBRARY).

PDS193I `This group contains` *`nn,nnn`* `members`

Explanation: This message shows the number of members in the member group just displayed by the previous PDS165I message. Issued in response to a COMPDIR, MEMBERS or SUBLIST subcommand; an IF or FIND subcommand with THEN(SUBLIST/ MEMLIST) or ELSE(SUBLIST/ MEMLIST); or a REPLACE, HISTORY, MAP or VERIFY subcommand with a ML, MEMLIST, NEWML or SUBLIST operand.

PDS194I `Security instructions from` *`modname yyyy/mm/dd hh:mm`*

Explanation: A header for a list of customized StarTool FDM security instructions loaded from the security module and the time and date of its assembly. Issued in response to a CONTROL SECURITY command.

The modname is normally PDS#SECI; however, PDS#DFLS is substituted if it is not available and a `CSV003I REQUESTED MODULE PDS#SECI NOT FOUND` message (or equivalent) is issued by the system.

The following example shows PDS194I messages with actual values.

```
>------>control security
     PDS100I STARTOOL/SuperEdit -- Version 5.2.0   1997.084

     PDS030I Global operands: NOPROMPT, NOTRANSLATOR, ALIASINFO, LKEDDATE,
     RECOVER
     PDS030I Global operands: NODSNAME, NOSYSOUT, NOFORM, NODEST
     PDS031I Input buffering: RETAIN(9)
     PDS036I Largest free storage area is 3264K
     PDS046I Largest area above the line is 2010M

     PDS194I Security instructions from PDS#SECI 1997/04/01 08.31:
      Access control method            RACF 1.8
      Security tables                  SYSTEMSE SYSTEMSN APPLEXP  OTHERS

     For PDS#SECI installation, refer to topic "XXXX and PDS#SECI"
     in the Installation Guide. Following is a summary of installation steps:
       1. ...
```

PDS195I *`type  span  imbed  replicate  shroptns(n,m)`*

Explanation: Issued by the USAGE command to show VSAM dataset attributes. The fields by position are as follows:

type	INDEXED for a key-sequenced data set NONINDEXED for an entry-sequenced data set NUMBERED for a fixed or variable relative data set LINEAR for a linear data set NOTUSABLE for any other VSAM data set
span	SPANNED if logical records span control interval boundaries NONSPANNED otherwise
imbed	IMBED if sequence set (lowest level of index) is embedded with data NOIMBED otherwise Not output for ESDS, LDS or fixed RRDS data sets

replicate Not output for ESDS, LDS or fixed RRDS data sets.
REPLICATE if each index record is written on a track multiple times
NOREPLICAT otherwise

shr(n,m) Listed as SHROPTNS(*n,m*) to specify how a component or cluster can be shared among users.

The first parameter (*n*) describes cross-region sharing with the following codes:

1 Data set can be shared by any number of users for read processing, or the data set can be accessed by only one user for read and write processing. VSAM ensures complete data integrity for the data set.

2 Dataset can be shared by any number of users for read processing and the data set can be accessed by one user for write processing. VSAM ensures write integrity by obtaining exclusive control for a control interval when data set is to be updated.

3 Dataset can be fully shared by any number of users. Each user is responsible for maintaining both read and write integrity for the data accessed. This option requires advanced programming methods.

4 Dataset can be fully shared by any number of users. Buffers used for direct processing are refreshed for each request. This option requires advanced programming methods.

The second parameter (*m*) describes cross-system sharing with the following codes:

1 Reserved (not currently used).

2 Reserved (not currently used).

3 Dataset can be fully shared by any number of users. Each user is responsible for maintaining both read and write integrity for the data accessed. This option requires advanced programming methods.

4 Dataset can be fully shared by any number of users. Buffers used for direct processing are refreshed for each request. Output processing is limited to update and/or add processing that does not change either the high-used RBA (relative byte address) or the RBA of the high-key data control interval if DISP=SHR allocation is used.

PDS196I *erase writechk speed reuse ordered uniquekey upgrade*

Explanation: Issued by the USAGE command to show VSAM dataset attributes. The fields by position are as follows:

erase ERASE if the cluster's data component is to be overwritten with binary zeros when its catalog entry is deleted.
NOERASE otherwise.

writechk WRITECHK if each write operation is to be followed by a read (without data transfer) to test for a data check condition. (WRITECHK is not necessary for modern DASD devices.)
NOWRITECHK otherwise.

speed	SPEED if the data component's space is not preformatted; its contents are unpredictable if a job terminates abnormally. RECOVERY if the data component's space is preformatted; its contents are predictable if a job terminates abnormally.
reuse	REUSE if the cluster can be opened as a reusable cluster. When a reusable cluster is opened with an access control block specifying the RESET attribute, the high-used RBA (relative byte address) is set to zero. NOREUSE if the cluster cannot be opened as reusable.
ordered	ORDERED if the volumes for the dataset are to be used in the order listed in the VOLUMES parameter. UNORDERED otherwise.
uniquekey	UNIQUEKEY if a key value for the alternate index can point to only one data record in the base cluster. NONUNIQKEY otherwise, meaning a key value for the alternate index can point to more than one data record in the base cluster. Reported only for alternate index data sets.
upgrade	UPGRADE if the alternate index is to be upgraded to reflect changed data when the base cluster is added to, updated or erased. NOUPGRADE otherwise. Reported only for alternate index data sets.

PDS197I Key length: *keylength*
Key offset: *offset*
AIX key offset: *aixoffset*
Average LRECL: *avglrecl*
Maximum LRECL: *maxlrecl*
Data set owner: *userid*
Creation date: *cccc.jjj*
Expiration date: *cccc.jjj*
Update date: *cccc.jjj*
Buffer space: *bufspace*
Volume count: *numvolumes*
Records per CI: *numrecs*
Maximum records: *maxrecs*

Explanation: Issued by the USAGE command to show VSAM data set attributes. These messages are as follows:

Key length	Length of dataset key in bytes. Only issued for key-sequenced or alternate index datasets.
Key offset	Displacement of the key in bytes from the beginning of the record. Only issued for key-sequenced or alternate index datasets.
AIX key offset	Displacement of the key in bytes from the beginning of the record in the base cluster. Only issued for alternate index datasets.
Average LRECL	Average logical record length as specified when the dataset was defined.

Maximum LRECL	Maximum logical record length as specified when the dataset was defined. VSAM enforces this value.
Data set owner	User ID of the data set owner.
Creation date	Julian creation date for the dataset.
Expiration date	Julian expiration date for the dataset.
Update date	Julian date of the last dataset update.
Buffer space	Minimum I/O buffer space required in bytes.
Volume count	Number of volumes spanned by the data component of the data set.
Records per CI	Number of records that fit in a control interval. Issued only for fixed relative record data sets.
Maximum records	Maximum number of logical records that can be contained in the data set. Issued only for fixed relative record data sets.

PDS198I

```
DATA space usage:  TRACKS KILOBYTES    CA's    CI's  PERCENT
Allocated space:       nn       nnnn       n     nnn
High used space:       nn        nnn       n     nnn    nn.n
Real used space:        n         nn       n      nn     n.n
INDEX space usage: TRACKS KILOBYTES    CA's    CI's PERCENT
Allocated space:       nn        nnn      nn     nnn
High used space:       nn        nnn      nn     nnn    nn.n
```

Explanation: Issued by the USAGE command to show VSAM DATA and INDEX space usage as follows:

TRACKS	Shows usage in disk tracks for the DATA and INDEX. Components:	
	Allocated	Disk space allocated.
	High used	Disk space actually used by data (from high RBA).
	Real used	Disk space actually used including access method overhead. Calculated by counting the control intervals that contain one or more records.
KILOBYTES	Same information expressed in kilobytes.	
CA's	Same information expressed in number of control areas.	
CI's	Same information expressed in number of control intervals.	
PERCENT	Percent of allocated disk space actually used.	

PDS199I

```
Records: TOTAL  DELETED  UPDATED  INSERTED  RETRIEVED  EXCP'S
         nnnn        n        n         n     nnnnn    nnnn
```

Explanation: Issued by the USAGE command to show VSAM record statistics for the DATA component.

TOTAL	Number of records in the data set.
DELETED	Number of records deleted.
UPDATED	Number of records updated with PUT operations.
INSERTED	Number of records inserted.
RETRIEVED	Number of records read with GET operations.
EXCP'S	Number of EXCP operations executed.

PDS200I

```
DISP UNIT OPT RECFM LRECL BLKSIZE ALLOCTRK   FREETRK SECONDARY  FREEDIR
disp unit opt fmt   len   blk    #ext alloc  free    alloc typ  #dir

DISP UNIT OPT RECFM LRECL BLKSIZE ALLOCTRK   FREETRK SECONDARY  DSORG
disp unit opt fmt   len   blk    #ext alloc  free    alloc typ  org

DISP UNIT RECFM LRECL   BLKSIZE  ALLOCTRK    FREETRK SECONDARY  DSORG
disp unit VSAM  avg_rec max_rec  #ext alloc  free    alloc typ  VS-org
```

Explanation: Documents the current data set allocation. This format can be specifically requested by typing `DSNAME MSG`.

The first message format is used with PDSs (Partitioned Data Sets) and PDSEs (Extended Partitioned Data Sets), while the second format is used with other non-VSAM data sets. Headers have the following meanings:

DISP	SHR or OLD disposition.
UNIT	Disk unit device type.
OPT	Optional processing code (OPTCD) from the DCB (Data Control Block). Code meanings vary by access method. (See IBM's *z/OS MVS JCL Reference* for code meanings.)
RECFM	Record format from the DCB.
LRECL	Logical record length in bytes from the DCB.
BLKSIZE	Physical block size from the DCB.
ALLOCTRK	Disk space allocated in tracks: *#ext* Number of disk extents allocated *alloc* Total tracks allocated
FREETRK	Number of available disk tracks.
SECONDARY	Secondary disk allocation: *alloc* Amount of secondary storage allocated *typ* CYL if secondary allocation is in cylinders TRK if secondary allocation is in tracks
FREEDIR	if a PDS, the number of available directory blocks. if a PDSE, the keyword NOLIMIT.
DSORG	If the data set is not partitioned (that is, the value of DSORG in the DCB is not `PO`*x*), StarTool FDM reports the data set organization exactly as recorded in the DCB: DA Direct access IS Indexed sequential (ISAM) PS Physical sequential PSU Physical sequential unmovable VSAM Virtual sequential (VSAM) If the data set is partitioned (that is, the value of DSORG in the DCB is `PO`*x*), StarTool FDM distinguishes QSAM and BSAM data sets from other partitioned data sets. Values reported are: PO Partitioned POU Parititioned unmovable PQ QSAM PX BSAM

For VSAM data sets, the third message format is used. The following changes apply to the values reported under these headings:

RECFM	VSAM for any VSAM data set.
LRECL	Average logical record length for the data set.
BLKSIZE	Maximum logical record length for the data set.
ALLOCTRK	Disk space allocated in tracks for the DATA component: *#ext* Number of disk extents allocated *alloc* Total tracks allocated
FREETRK	Number of available disk tracks for the DATA component.
SECONDARY	Secondary disk allocation for the DATA component: *alloc* Amount of secondary storage allocated *typ* CYL if secondary allocation is in cylinders TRK if secondary allocation is in tracks
DSORG	VS- for VSAM followed by one of the following data set types: IX Alternate index data set. ESDS Entry-sequenced data set. KSDS Key-sequenced data set. LDS Linear data set. PATH Path over an alternate index, KSDS, or ESDS. RRDS Relative record number data set. VRRDS Variable relative record number data set.

The following example shows PDS200I messages with actual values.

```
PDS200I DISP UNIT RECFM LRECL BLKSIZE   ALLOCTRK FREETRK SECONDARY FREEDIR
    PDS200I SHR  3380 FB       80    9040   3X    47      10    40 TRK      25
              or for VSAM:
    PDS200I DISP UNIT RECFM LRECL BLKSIZE   ALLOCTRK FREETRK SECONDARY DSORG
    PDS200I SHR  3390 VSAM     45    3010   3X   150      42     1 CYL VS-KSDS
```

PDS210I **ALLOC F(*ddname*) DA('*dsn*') *disp* UNIT(*unit*) -**
RECFM(*x x*) LRECL(*nnn*) BLKSIZE(*blk*) OPTCD(*opt*) DSORG(*dsorg*) VOLUME(*volid*) -
EXPDT(*yyyy/ddd*) DSNTYPE(*type*) STORCLAS(*sc*) DATACLAS(*dc*) MGMTCLAS(*mc*) -
***type* SPACE(*tot*,*sec*) DIR(*nn*) /*FREE TRK=*nn*,FREE DIR=*nn**/**

Explanation: Documents the current data set allocation. This format can be specifically requested by typing `DSNAME TSO`.

F(*ddname*)	Current DDNAME value
DA(*'dsn'*)	Data set name
disp	SHR or OLD disposition
UNIT(*unit*)	Disk unit device type
RECFM(*xx*)	Record format from the DCB (Data Control Block).
LRECL(*nnn*)	Logical record length from the DCB.
BLKSIZE(*nnnn*)	Physical block size from the DCB.
OPTCD(*xx*)	Optional processing code (OPTCD) from the DCB (Data Control Block). (See IBM's *z/OS MVS JCL Reference* for code meanings.)
DSORG(*dsorg*)	If the data set is not partitioned (that is, the value of DSORG is not `PO`*x*), StarTool FDM reports the data set organization as recorded in the DCB: DA Direct access IS Indexed sequential PS Physical sequential PSU Physical sequential unmovable VSAM VSAM (virtual storage access method)

If the data set is partitioned (that is, the value of DSORG in the DCB is PO*x*), StarTool FDM distinguishes QSAM and BSAM data sets from other partitioned data sets. Values reported are:

PO	Partitioned
POU	Parititioned unmovable
PQ	QSAM
PX	BSAM

VOLUME(*volid*)	Volume name.
EXPDT(*yyyy/dd*)	Julian expiration date.
DSNTYPE(*type*)	Directory-oriented data set type. Values: EXT MVS extended-format data set managed by DFSMS HFS Hierarchical File System data set (for z/OS Unix) LIBRARY PDSE (Partitioned Data Set, Extended) PDS PDS (Partitioned Data Set)
STORCLAS(*sc*)	Storage class of an SMS-managed data set for purposes of defining the storage service level (replaces VOLUME and UNIT).
DATACLAS(*dc*)	Data class for a generation data set. May or may not be SMS-managed.
MGMTCLAS(*mc*)	Management class of an SMS-managed data set for purposes of migration, backup, deletion, and garbage collection.
type	Type of storage allocation units: CYL cylinders TRK tracks
SPACE(*tot,sec*)	Amount of disk space allocated, in *type* units. *tot* total space allocated *sec* secondary allocation size
DIR(*nn*)	Number of directory blocks (partitioned data sets, DSORG=PO).
FREE TRK=	Number of available disk tracks.
FREE DIR=	Number of available directory blocks (partitioned data sets, DSORG=PO).

The following example shows the PDS210I message with actual values.

```
PDS210I ALLOC F(SYS00134) DA('C911407.LIB.TEST') SHR UNIT(3380) -
PDS210I    RECFM(F B) LRECL(80) BLKSIZE(9040) OPTCD(C) VOLUME(STR815) -
PDS210I    TRK SPACE(47,40) DIR(30)         /*FREE TRK=10,FREE DIR=25*/
```

PDS220I

```
//ddname DD     DSN=datasetname,DISP=disp,UNIT=unit,
// DCB=(RECFM=r,LRECL=l,BLKSIZE=b,OPTCD=opt,DSORG=org),VOL=SER=vol,
// LABEL=EXPDT=dt,DSNTYPE=typ,STORCLAS=sc,DATACLAS=dc,MGMTCLAS=mc,
// SPACE=(type,(tot,sec,nn))   /*FREE TRK=##,FREE DIR=##*/
```

Explanation: Documents the current data set allocation. This format can be specifically requested by typing DSNAME JCL.

ddname	Current DDNAME value.
DSN=	Data set name.
DISP=	SHR or OLD disposition.
UNIT=	Disk unit device type.
RECFM=	Record format from the DCB (Data Control Block).
LRECL=	Logical record length from the DCB.
BLKSIZE=	Physical block size from the DCB.

OPTCD= Optional processing code from the DCB (Data Control Block). (See IBM's *z/OS MVS JCL Reference* for code meanings.)

DSORG= If the data set is not partitioned (that is, the value of DSORG in the DCB is not PO*x*), StarTool FDM reports the data set organization exactly as recorded in the DCB:

DA	Direct access
IS	Indexed sequential (ISAM)
PS	Physical sequential
PSU	Physical sequential unmovable
VSAM	Virtual sequential (VSAM)

If the data set is partitioned (that is, the value of DSORG in the DCB is PO*x*), StarTool FDM distinguishes QSAM and BSAM data sets from other partitioned data sets. Values reported are:

PO	Partitioned
POU	Parititioned unmovable
PQ	QSAM
PX	BSAM

VOLUME= Volume name.

EXPDT= Julian expiration date.

DSNTYPE= Directory-oriented data set type. Values:

EXT	MVS extended-format data set managed by DFSMS
HFS	Hierarchical File System data set (for z/OS Unix)
LIBRARY	PDSE (Partitioned Data Set, Extended)
PDS	PDS (Partitioned Data Set)

STORCLAS= Storage class of an SMS-managed data set for purposes of defining the storage service level (replaces VOLUME and UNIT).

DATACLAS= Data class for a generation data set. May or may not be SMS-managed.

MGMTCLAS= Management class of an SMS-managed data set for purposes of migration, backup, deletion, and garbage collection.

SPACE= Amount of disk space allocated, where:

type	is CYL or TRK allocation
tot	is the total space allocated in *type* units
sec	is the secondary allocation size in *type* units
nn	is the number of directory blocks (DSORG=PO)

FREE TRK= Number of available disk tracks.

FREE DIR= Number of available directory blocks (partitioned data sets, DSORG=PO).

The following example shows the PDS220I message with actual values.

```
PDS220I //SYS00134  DD  DSN=C91407.LIB.TEST,DISP=SHR,UNIT=3380,
     PDS220I //  DCB=(RECFM=FB,LRECL=80,BLKSIZE=9040),VOL=SER=STR815,
     PDS220I //  SPACE=(TRK,(47,40,30))     /*FREE TRK=10,FREE DIR=25*/
```

PDS222I Block allocation: SPACE=(*rsize*,(*prim*,*sec*,*dir*))

Explanation: Issued for data sets allocated by blocks when you enter the data set or type a USAGE subcommand. The PDS200I, PDS210I or PDS220I messages report block-allocated data sets in equivalent track units.

rsize	Record length
prim	Total primary storage allocated
sec	Secondary storage allocated
dir	Directory blocks allocated (partitioned data sets, DSORG=PO)

PDS223I **This is a [linklist|lpalist] data set [; all linklist libraries are authorized]**

Explanation: Issued when you enter a data set or request a USAGE subcommand, if the data set is in the active system link list or in the LPA library concatenation. If the linklist message is followed by "; all linklist libraries are authorized" then the data set is also APF authorized because LNKAUTH=LNKLST was specified or defaulted in the IEASYS*xx* member of SYS1.PARMLIB.

Normally, for linklist data sets, this message is followed by the message "PDS189I This data set is managed by LLA" to indicate that the LLA started task is managing access to members in this library.

PDS224I **This data set is APF authorized**

Explanation: Issued when you enter a data set or request a USAGE subcommand, if the data set is in the active system list of APF authorized data sets.

PDS225I **This data set is in *number* extents**

Explanation: This warning message is issued when you enter a data set or request a USAGE subcommand, if the data set is in seven or more extents. A normal MVS data set contains as many as 16 extents but processing efficiency is degraded as you get more extents. A PDSE data set can contain up to 123 extents.

PDS226I **This data set has *number* free directory blocks**

Explanation: This warning message is issued when you enter a data set or request a USAGE subcommand, if the data set is a partitioned data set with three or fewer free directory blocks.

Solution: Issue a FIXPDS EXPANDDIR or FREEDIR subcommand to avoid "full directory" errors later.

PDS227I **This data set has *number* free tracks**

Explanation: This warning message is issued when you enter a data set or request a USAGE subcommand, if the data set is a partitioned data set with ten percent or less of its allocated disk space free.

Solution: Compress the data set or review your secondary allocation type and amounts to insure that you can obtain free space when you need it.

PDS228I **This data set is an alias for *real.data.set.name***

Explanation: Indicates that the current data set is an alias and displays the actual data set name.

Solution: StarTool FDM saves the actual data set name so it can invoke system services that do not support aliases as data set names.

PDS230I

```
MEMBER      VER.MOD   CREATED     LAST MODIFIED    SIZE  INIT MOD  ID
memname[-A] vv.mm yyyy/mm/dd yyyy/mm/dd hh:mm size init mod user

MEMBER      VER.MOD   CREATED     LAST MODIFIED    SIZE  LASTREAD    ID
memname[-A] vv.mm yyyy/mm/dd yyyy/mm/dd hh:mm size yyyy/mm/dd user

MEMBER      VER.MOD   CREATED     LAST MODIFIED    SIZE  INIT MOD  ID
memname[-A] SSI: hexvalue
```

Explanation: This ATTRIB or HISTORY message displays directory information for a source member. Displayed information may consist of ISPF statistics or SSI information (these are mutually exclusive).

The first message format is used to report ISPF statistics. Fields may be blank if ISPF does not track statistics for aliases.

member	Member name.
-A	Appended to member name if it is an alias.
VER.MOD	Version and modification level.
CREATED	Creation date in international date format.
LAST MODIFIED	Date and time last modified in international date format.
SIZE	Current number of records in the member.
INIT	Initial number of records in the member.
MOD	Number of changed records in the member.
ID	TSO user ID of user who last updated this member.

The second message format reports both ISPF and PDSMAN/MVS statistics. It is displayed if customers have installed PDSMAN/MVS and specify the LASTREAD operand with the ATTRIB or HISTORY command. The following changes apply:

LASTREAD	Date of most recent access to member from PDSMAN/MVS. This field is provided instead of INIT and MOD.

The third message format is used to report SSI (System Status Index) information. The following changes apply:

SSI:	8 bytes of SSI hexadecimal data replaces all ISPF fields.

The following example shows PDS230I messages with actual values.

```
PDS230I MEMBER    VER.MOD   CREATED    LAST MODIFIED  SIZE  INIT  MOD   ID
     PDS230I RESCPY     01.01 1993/06/14 1995/11/29 15:37    12    11   11
     WSER07 PDS230I RESCOMP    SSI: 047088AB
     PDS230I RESCOMPL-A
```

PDS232I

```
NAME      ALIASOF    CREATED   SIZE  SSI     ATTRIBUTES
modname   realname   lkeddate  size  hexssi  attribs
 ...
```

Explanation: This ATTRIB message displays abbreviated module information for load members.

NOTE If this message format is requested, many standard module checks are not performed and an incorrectly created or modified load module may not be detected.

NAME	Load member name (may be alias).
ALIASOF	Real member name if the module name is an alias. If real member cannot be found, ?UNKNOWN displays.
CREATED	Member link-edit date in *yyyy/mm/dd* format.

SIZE	Module size in bytes if less than 100,000 bytes; otherwise, rounded to the next higher kilobyte value (K=1024 bytes).
SSI	SSI (System Status Index) data in hexadecimal.
ATTRIBUTES	Comma-delimited list of attributes for this load module from the following set:

AC=1	APF authorized
A24	addressing mode 24
A31	addressing mode 31
AANY	addressing mode any
DC	downward compatible with E level linkage editor
E-LEVEL	not linked by the F level linkage editor
LOAD ONLY	LOAD use only
OVERLAY	overlay structure
NOT EDIT	not editable
NOT EXEC	not executable
PAGE	page aligned
R24	residence mode 24 (below the 16 Megabyte line)
RANY	residence mode any (above the 16 Megabyte line)
REFR	refreshable
RENT	reentrant
REUS	reusable
SCTR	scatter structure (like `IEANUC01`)
TEST	test symbols
NONE	none of the above

The following example shows the PDS232I message with actual values.

```
PDS232I NAME     ALIASOF     CREATED  SIZE SSI      ATTRIBUTES
     PDS232I ASTL              1995/12/29   968 CB296112 NONE
     PDS232I ASIDZN   ?UNKNOWN 1996/06/15  3120          RANY, A31
     PDS232I PDSPGM            1996/06/10  436K          RANY, A31, RENT
     PDS232I WHAT     PDSPGM   1996/06/10  436K          RANY, A31, RENT
```

PDS235I **MEMBER PRODUCT FROM DESCRIPTION**
member product from description

Explanation: This PGMDOC message reports load member information in a single-line format:

MEMBER	Load member name.
PRODUCT	Name of any associated product.
FROM	Name of the vendor supplying this product.
DESCRIPTION	Brief description of the load member (40 bytes).

If the description includes the word "Prefix", the PGMDOC subcommand did not match the entire load member name. Instead, PGMDOC matched some initial portion of the member name and is providing this information as a possible clue to module origin.

The following example shows PDS235I messages with actual values.

```
PDS235I  PRODUCT  FROM                DESCRIPTION
     DSNTTTTT MVS      IBM                 DB2 Prefix
     XYZ456   UNKNOWN                      (THIS MODULE NAME WAS NOT FOUND)
     ISRFR77  ISPF/PDF IBM                 3277 French Translate Table
     ISRFR77A ISPF/PDF IBM                 3277 French APL Translate
     JBB2217  MVSFMID  IBM                 MVS/SP R2.1.7           5752
```

Solution: The product, vendor, and description data for PGMDOC come from many sources. Contact Micro Focus Customer Support with corrections or to suggest new product/vendor/description sources.

PDS241I

```
CI Space: FREESPACE  SPLITS  %SPLITS
              10       2     20.0
CA Space: FREESPACE  SPLITS  %SPLITS
              10       0      0.0
```

Explanation: Issued by the USAGE command to report on CI (control interval) and CA (control area) usage for alternate index, key-sequenced, and variable RRDS VSAM data sets.

FREESPACE	Percentage of FREESPACE specified for the DEFINE CLUSTER.
SPLITS	Number of current CI or CA splits found.
%SPLITS	Percentage of splits relative to number of CIs or CAs. Calculated as: (number_splits*100)/(number_CIs_or_CAs)

PDS242I

```
Attributes for  DATA    INDEX
CI size:        4096     1536
CI's per CA:     168       26
Block size:     4096     1536
Blocks/track:     12       26
Tracks/CA:        15        1
Allocation: CYLINDER CYLINDER
Primary:           2        1
Secondary:         1        1
Volume:       SER004   SER004
Extents:             2        1
```

Explanation: Issued by the USAGE command to report on DATA and INDEX attributes for a VSAM data set. If there is no INDEX component, the INDEX column is suppressed.

CI size	Size of a control interval in bytes.
CI's per CA	Number of control intervals in each control area.
Block size	Physical block size used by VSAM on disk.
Blocks/track	Number of physical blocks which fit on a track.
Tracks/CA	Number of disk tracks needed to make a control area.
Allocation	Type of allocation (TRACKS or CYLINDER).
Primary	Amount of primary space for data set in `Allocation` units.
Secondary	Amount of secondary space for data set in `Allocation` units.
Volume	First volume on which data set resides.
Extents	Number of disk extents for the data set.

PDS243I

```
Index: LEVELS  RECORDS  HI-LEVEL
           1        1         0
```

Explanation: Issued by the USAGE command to report on INDEX component usage for alternate index, key-sequenced, and variable RRDS VSAM data sets.

LEVELS	Number of index levels.
RECORDS	Number of index records.
HI-LEVEL	Number of index records not in the sequence set.

PDS244I

```
CA splits/CI  CI splits/insert  Inserts/read
12.0              25.0          10.0

CA splits/CI
23.0
```

Explanation: Issued by the USAGE command to suggest when to adjust FREESPACE values for VSAM data sets.

The first message format is issued for alternate index and key-sequenced datasets.

CA splits/CI	Percentage of CI (control interval) splits that cause CA (control area) splits, calculated as follows: (number CA splits*100)/ (number CI splits).
CI splits/insert	Percentage of inserts that cause CI splits, calculated as follows: (number CI splits*100)/(number inserted records).
Inserts/read	Percentage of record load activity involving inserts. Percentage is obtained from (number of inserts*100)/(number of records read). The number of records read serves as a proxy for the number of records loaded plus the number of records inserted; deleted records are ignored.

The second message format is issued for variable RRDS datasets.

CA splits/CI	Percentage of CI (control interval) splits that cause CA (control area) splits, calculated as follows: (number CA splits*100)/ (number CI splits).

PDS246I

```
NOWRITE is in effect; no updates will be performed
```

Explanation: This REPLACE subcommand does not update data because the WRITE or UPDATE keyword was not explicitly specified.

Solution: To update the data, reenter the REPLACE subcommand and add the WRITE or UPDATE keyword.

PDS250I

```
CSECT___VER_COUNT_FLOW_STATE_TEST_TRACE_RES_ENDJOB_SYMD_OBJ_OPTIMIZE
csectnm  ver vs_cobol_attributes

CSECT___VER_COUNT_FLOW_STATE_TEST_TRACE_RES_ENDJOB_SYMD_OBJ_OPTIMIZE
csectnm  ver nnnnnnnynnnynnynnnnnnnnn
```

Explanation: This HISTORY message documents COBOL compiler options in effect when this CSECT was compiled. There are two message formats, depending on whether or not the GENERATE parameter was issued with the HISTORY command.

The first message format is used in the absence of the GENERATE parameter. Values:

CSECT	CSECT name
VER	COBOL compiler version
COUNT	COUNT option
FLOW	FLOW option
STATE	STATE option
TEST	TEST option
TRACE	READY TRACE statement found in the module
RES	RESIDENT option

ENDJOB	ENDJOB option
SYMD	SYMDMP option
OBJ	370 if OBJ370 was specified in the program
OPTIMIZE	Optimization level as follows: COBOL if optimized by the COBOL compiler CAPEX if optimized by the CAPEX product CAP/DTECT if the CAPEX DTECT option was used
HEXOPT	All three flag bytes in hexadecimal. 080000 SYMDMP 040000 FLOW 020000 STATE 010000 OPTIMIZE 001000 TEST 002000 Unknown (seems to always be set) 000080 RESIDENT (this is an inverse setting) 000040 ENDJOB 000020 OBJ370 000008 COUNT (VS COBOL only) 000004 READY TRACE statement found in the module (VS COBOL only)

If the GENERATE parameter is issued, the second message format is used. CSECT name and compiler version information is the same; however, the compiler attributes are expressed as a string of y (for YES) and n (for NO) values. The particular attribute associated with each value is position-dependent, as follows:

Start Column	Value
9	CSECT name
18	COBOL compiler version
27	SYMDMP setting (y/n)
28	FLOW setting (y/n)
29	STATE setting (y/n)
30	OPTIMIZE setting (y/n)
34	TEST setting (y/n)
39	RESIDENT setting (y/n — this is an inverse setting)
40	ENDJOB setting (y/n)
41	OBJ370 setting (y/n)
43	COUNT setting (y/n — for VS COBOL only)
44	READ TRACE in the member

The following example shows the PDS250I message with actual values.

```
PDS250I CSECT____VER_COUNT_FLOW_STATE_TEST_TRACE_RES_ENDJOB_SYMD_OBJ_OPTIMIZE
    PDS250I CZARVSX  VS2       FLOW STATE TEST       RES ENDJOB SYMD 370 CAPEX
    PDS250I CZARVSY  VS2       FLOW       TEST       RES ENDJOB SYMD 370
    OPTIMIZE
```

PDS251I *csectnm typ*

c*sectnam* V*nn* M*mm useridrdata*

Explanation: The HISTORY GENERATE option creates this HISTORY message to document non-COBOL CSECTS in a load member after system routines beginning with DFH, DFS, DSN, IBM, IEL, IGZ, ILB, ILC, ISP or PLI are dropped. CSECTS whose names begin or end with an asterisk (*) are also dropped. Modules that contain CSECTS beginning with DSN are considered DB2, CSECT names beginning with DFS are IMS and CSECT names beginning with DFH are ONLINE.

The first message format is used with non-PL/I load members. For example:

```
PDS251I H481ASM4 ASD
```

In this example, H481ASM4 is the CSECT name, AS is the CSECT type (where the type may be ASM, FOR, RPG, REX, C37, MAP or ???), and D shows the module type:

D	DB2
O	ONLINE
B	Both DB2 and ONLINE
I	IMS
S	Secondary if the CSECT name is not the same as the module name

The second message format is used with PL/I CSECTs. This message is formatted as follows:

Start Column	Value
9	CSECT name
18	PL/I translator name (5734-PL1, 5668-910 or 5688-235)
29	Compiler Version number
32	Compiler Modification number
36	USERIDR data associated with this CSECT (40 bytes)

PDS255I Run-time options:
v2.cobol.run-time.options

Explanation: This HISTORY message documents several COBOL V2 compiler options in effect as run-time options from the OPTTBL.

DEBUG or NODEBUG
SSRANGE or NOSSRANGE
STAE or NOSTAE
AIXBLD or NOAIXBLD
SPOUT or NOSPOUT
RTEREUS or NORTEREUS
LIBKEEP or NOLIBKEEP
WSCLEAR or NOWSCLEAR
MIXRES or NOMIXRES
SIMVRD or NOSIMVRD

The following example shows the PDS255I message with actual values.

```
** HISTORY  COBOLV2
     PDS260I
     CSECT___VER_TEST_SSRANG_OPT_CMPR2_ZWB_NUMPR_TRUNC_RES_RENT_DYNAM_DATA
     PDS260I DSN0MGF IID      SSRANG OPT       ZWB NOPFD (STD) RES RENT      31/
     CA
     PDS260I DSN0MGZ IID      SSRANG OPT       ZWB (PFD) (BIN) RES RENT      31/
     CA
     PDS255I Run-time options:
     DEBUG, SSRANGE, STAE, NOAIXBLD, NOSPOUT, NORTEREUS, NOLIBKEEP, NOWSCLEAR,
     NOM
     PDS064I Last link-edited on 1993/01/25  by LKED 566528408-DFPLKED  V03 M01
```

With the GENERATE option, this message changes to the following:

Run-time options: ***NNNNNNNNNNNNNNNYNYYYYYYYNNNNNNNNYYNNNNNN***

Start Column	Value
43	N for DEBUG (inverse setting)
44	N for SSRANGE (inverse setting)
45	N for STAE (inverse setting)
46	Y for AIXBLD
47	Y for SPOUT
48	Y for RTEREUS
49	Y for LIBKEEP
50	Y for WSCLEAR
59	Y for MIXRES
60	Y for SIMVRD

PDS260I **CSECT___VER_TEST_SSRANGE_OPT_CMPR2_ZWB_NUMPR_TRUNC_RES_RENT_DYNAM_DATA**
PDS260I ***csectnm ZOD cobol.attributes***

Explanation: This HISTORY message documents several COBOL compiler options in effect when this CSECT was compiled:

CSECT — CSECT name

VER — Compiler version code, consisting of a two-byte body and a one-byte suffix.

Bytes 1-2:
- II -COBOL II
- MV -COBOL for MVS
- OS -COBOL for OS/390
- ZO -COBOL for z/OS

Byte 3:
- B -Both DB2 and online
- D -DB2 (assumed if CSECT name begins with DSN)
- I -IMS (assumed if CSECT name begins with DFS)
- O -Online (assumed if CSECT name begins with DFH)
- S -Secondary (CSECT name is not identical to module name

TEST	TEST option
SSRANGE	SSRANGE option
OPT	OPTIMIZE option
CMPR2	CMPR2 option
ZWB	ZWB option
NUMPROC	NUMPROC option (PFD), (MIG) or NOPFD
TRUNC	TRUNC option (STD), (OPT) or (BIN)
RES	RESIDENT option
RENT	RENT option
DYNAM	DYNAM option
DATA	31 if DATA 31; blank if DATA 24; /CA is appended for CA-Optimizer II

ALL OPTION 5 flag bytes in hexadecimal (this field in displayed on the right side of the message). From LY27-9522-3 VS COBOL II Diagnosis Reference page 182, all

8000000000	ADV
4000000000	APOST
2000000000	DATA(31), DATA(24) otherwise
1000000000	DECK
0800000000	DUMP
0400000000	DYNAM
0200000000	FASTSRT
0100000000	FDUMP (COBOL II only)
0080000000	LIB
0040000000	LIST
0020000000	MAP
0010000000	NUMBER
0008000000	OBJECT
0004000000	OFFSET
0002000000	OPTIMIZE
0001000000	OUTDD specified
0000800000	NUMPROC(PFD)
0000400000	RENT
0000200000	RESIDENT (COBOL II; set on otherwise)
0000100000	SEQUENCE
0000080000	SIZE(MAX)
0000040000	SOURCE
0000020000	SSRANGE
0000010000	TERM
0000008000	TEST
0000004000	TRUNC(STD)
0000002000	WORD
0000001000	VBREF
0000000800	XREF(SHORT) or XREF(FULL)
0000000400	ZWB
0000000200	NAME(NOALIAS), NONAME otherwise
0000000100	CMPR2
0000000080	NUMPROC(MIG)
0000000040	NUMCLS(ALT)
0000000020	DBCS
0000000010	AWO
0000000008	TRUNC(BIN)
0000000004	EVENTS (not for COBOL II)

0000000000	TRUNC(OPT) - assumed if not STD or BIN
0000000000	NUMPROC(NOPFD) - assumed if not PFD or MIG

The following additional bits are added for COBOL for MVS and VM and COBOL for OS/390 and VM:

8000	RMODE(ANY)
4000	TEST(STMT)
2000	TEST(PATH)
0000	TEST(BLOCK)
0800	OPT(FULL)
0400	INTDATE(LILIAN)
0080	PGMNAME(LONGUPPER)
0040	PGMNAME(LONGMIXED)
0008	DATEPROC

The following example shows the PDS260I message with actual values.

```
PDS260I CSECT___VER_TEST_SSRANGE_OPT_CMPR2_ZWB_NUMPR_TRUNC_RES_RENT_DYNAM_DATA
     PDS260I CZARONE II       SSRANGE     CMPR2 ZWB (MIG) (STD) RES RENT DYNAM 31
     PDS260I CZARTWO II       SSRANGE OPT       ZWB NOPFD (BIN) RES RENT DYNAM 31
```

With the GENERATE option, this message changes to the following format:

CSECTNAM MVD YYNNYNNNNNYNNNNNYYYNYNNYNNNNNNNNYYYYNNNN

Start Column	Value
9	CSECT name
18	II, MVS or OS depending on compiler level
20	D (for DB2), O (for ONLINE), B (for both), I (for IMS) or S (secondary)
23	Y for ADV
24	Y for APOST
25	Y for DATA(31)
26	Y for DECK
27	Y for DUMP
28	Y for DYNAM
29	Y for FASTSRT
30	Y for FDUMP
31	Y for LIB
32	Y for LIST
33	Y for MAP
34	Y for NUMBER
35	Y for OBJECT
36	Y for OFFSET
37	Y for OPTIMIZE
38	Y for OUTDD
39	Y for NUMPROC(PFD)

Start Column	Value
40	Y for RENT
41	Y for RESIDENT
42	Y for SEQUENCE
43	Y for SIZE(MAX)
44	Y for SOURCE
45	Y for SSRANGE
46	Y for TERMINAL
47	Y for TEST
48	Y for TRUNC(STD)
49	Y for WORD
50	Y for VBREF
51	Y for XREF
52	Y for ZWB
53	Y for NAME
54	Y for CMPR2
55	Y for NUMPROC(MIG)
56	Y for NUMCLS(ALT)
57	Y for DBCS
58	Y for AWOD
59	Y for TRUNC(BIN)
60	Y for EVENTS - not for COBOL II
63	Y for RMODE(ANY) - not for COBOL II
64	Y for TEST(STMT) - not for COBOL II
65	Y for TEST(PATH) - not for COBOL II
66	Y for TEST(BLOCK) - not for COBOL II
67	Y for OPT(FULL) - not for COBOL II
68	Y for INTDATE(LILIAN) - not for COBOL II
71	Y for PGMNAME(LONGUPPER) - not for COBOL II
72	Y for PGMNAME(LONGMIXED) - not for COBOL II
75	Y for DATEPROC - not for COBOL II

PDS261I `Program terminated by CONDEND for message PDS`*`xxxx`*

Explanation: Indicates that CONDEND was satisfied by the displayed message number and StarTool FDM terminates without executing any additional subcommands. StarTool FDM reads and ignores all following subcommands until the next END or QUIT subcommand.

PDS262I

```
LOC NAME         VALUE    DESCRIPTION
--- ----          -----    -----------
off dname        dvalue   dnotes
```

Explanation: Documents an individual directory entry:

off	Offset in hexadecimal.
dname	Name of this field from the *MVS Debugging Handbook*.
dvalue	Directory data in character, decimal, or hexadecimal form.
	NOTE: Character data is provided for PDS2NAME and PDS2MNM. Names beginning MAN are for PDSMAN/MVS statistics. Decimal data is followed by a period or K. All other values are displayed in hexadecimal.
dnotes	interpretation of displayed data.

The following example shows the PDS262I message with actual values.

```
PDS262I LOC NAME     VALUE     DESCRIPTION
PDS262I --- ----     -----     -----------
PDS262I 00  PDS2NAME PDS99     MEMBER NAME
PDS262I 08  PDS2TTRP 010907    TTR OF FIRST BLOCK OF DATA
PDS262I 0B  PDS2INDC B1        ALIAS; 1 TTRS FOLLOW; 17 HALFWORDS
PDS262I 1F  PDS2FTB2 11        RMODE ANY; ALIAS AMODE24; MAIN AMODE 64
```

PDS263I Linklist data sets cannot use new secondary extents until after IPL

Explanation: This message from the DSNAME subcommand indicates that this LINKLIST data set was allocated in extents, but LINKLIST data sets can not load members added in a new secondary extent until after a system IPL. An LLA stop and start does not correct this situation.

Even though the FIXPDS subcommand can add an extent to a LINKLIST data set, it is not recommended (see message PDS542W) due to the IPL requirement. Be careful that a LINKLIST data set is not extended into a new secondary extent for the same reason.

Solution: Remove any secondary allocation quantity on LINKLIST data sets with FIXPDS SPACE(0) so that a secondary extent is not taken without being detected. You might also make these data sets larger to reduce the need for an extent.

If you need to extend a data set, add a one-time extent with the following steps:

- Type a command like FIXPDS ADDCYL(30) or FIXPDS ADDTRK(450) (expect to see a PDS452W warning message).
- Copy or link in the new or replacement modules. (Any references to these modules through LLA will be to the previous levels).
- Quiesce the system and prepare to IPL.
- Compress the dataset if necessary as a standalone batch job.
- IPL so that the linklist library is reopened and members in the new data set extent can be loaded.

PDS264I This is a null VSAM data set

Explanation: Indicates that the current data set is a new VSAM data set that has never been initialized. StarTool FDM attempts to open this data set. Enter a dummy record and delete it so that the data set can be used by subsequent StarTool FDM processes.

This will fail on the delete (or ERASE) step for VSAM ESDS datasets; however, StarTool FDM is still able to use the dataset.

PDS265I STARTOOL *n.n.n* used on *cccc/mm/dd* at *hh:mm* AM/PM by *userid*

Explanation: Indicates that StarTool FDM was invoked by the named user.

Solution: Request that this monitoring message be generated and sent to any TSO user with the SEND command by changing SAMPOPT4 to add #NUSERID=*userid* (where *userid* is the TSO user to notify).

PDS266I Duplicate DDN for WRITE= requested for ',*ddn*,' using default output DDN.

Explanation: The MULTIWRITE WRITE= parameter used the same, default DD name (usually DD*xx*0) as a prior command that left the file open for output. This could occur, for example, if a SKIP command precedes the MULTIWRITE command. Left uncorrected, this would create multiple, conflicting data control blocks for the same file, resulting in an ABEND.

Solution: Use a nondefault DDN with the MULTIWRITE WRITE= parameter.

PDS270I Pseudo registers: NAME ORIGIN LENGTH

regname *starto* *length*

regname *starto* *length ...*

Explanation: This MAP message displays pseudo registers similar to the output generated by the linkage editor. The first field is the pseudo register name, followed by the offset and length.

PDS271I Total length of pseudo registers *totlen*

Explanation: This MAP message displays the total length of all pseudo register definitions.

PDS272I location *nn* requests cumulative pseudo register length

Explanation: This MAP message displays the offset in the module that requests a cumulative pseudo register length. This is the location of a CXD assembler statement.

The following example shows the PDS270I, PDS271I and PDS272I messages with actual values.

```
PDS270I Pseudo registers: NAME      ORIGIN  LENGTH
                          CURRENT   000000  000004
                          IKSUT0    000004  000004
                          *SCR0213  000008  000004
    PDS271I Total length of pseudo registers    000008
    PDS272I Location 20 requests cumulative pseudo register length
```

PDS273I Output data set is *dsname*

Explanation: The default output or compare data set name is displayed by this message. This data set name was substituted for the * in the data set name position of the **COPY** or **COMPDIR** subcommand.

PDS274I Member order is ascending

Explanation: This FIXPDS message specifies that the data set has a normal directory and that ORDER could not find any (or any more) entries to fix.

PDS275I The LLA status for *member* can not be determined due to {*TASKLIB=dsname*/*LINKLIB=dsname*}

Explanation: Generated by the LLA subcommand for the SYNC operator if a system BLDL returns a status indicating that a member was found in a TASKLIB data set or in a linklist data set which is higher in the linklist concatenation order.

Since it cannot be determined if the module's directory entry is synchronized with its LLA entry, the **LLA** subcommand refreshes the module to assure that it is current.

PDS276I A ZAP IDR record was added

Explanation: Generated by the DUP and REPRO subcommands if they add a ZAP IDR record to a load member due to an ADDZAP keyword.

PDS277I No subcommands are restricted

Explanation: Generated by the CONTROL subcommand with RESTRICTED if no subcommands are restricted.

PDS278I No object code was found

Explanation: Generated by the READOBJ subcommand if no TXT records are present in a member; no output is generated by READOBJ.

PDS279E *memname* is an orphan member

Explanation: This SMPGEN subcommand encountered an element that had no matching main member (an orphan). Investigate this problem before proceeding.

Solution: If this member is a main member, alter its status with an **ATTRIB** subcommand and an UNALIAS operand.

PDS280I System serial: *serial*; CPU TYPE: *cputype*

Explanation: This CONTROL message lists the system CPU serial and type.

PDS281I Active CPUs: *cpulist*

Explanation: This CONTROL message lists the active CPU numbers.

PDS282I SMF ID: *smfid*; System Mode: *sysmode*

Explanation: This CONTROL message lists the SMF identifier and the system mode (z/OS, MVS/XA or MVS/ESA).

PDS283I Maintenance data:*maintdata*

Explanation: This CONTROL message lists 32 bytes of system maintenance data.

PDS284I IPL Date: *yyyy/mm/dd yyyy.jjj*; Time: *hh:mm*

Explanation: This CONTROL message lists the date and time of the last IPL.

PDS285I IPL Type: *ipltype*; Volume: *volser*; UCB:*ucb*

Explanation: This CONTROL message lists the type of IPL (WARM, CVIO or CLPA), volume serial and UCB address of the IPL volume.

PDS286I Master Catalog dsname: *dsname*; Volume: *volser*; UCB:*ucb*

Explanation: This CONTROL message lists the data set name of the master catalog and the volume serial and UCB address of the catalog volume.

PDS287I OS/390 *x.x.x*; DFSMS *x.x.x;* DFSMS*typ*; ISPF *x.x*;
VTAM *x.x*; TSO/E *x.xx.x*; RACF *x.xx.x*;

MVS SP *x.x.x*; DFSMS *x.x.x;* DFSMS*typ*; ISPF *x.x*;
VTAM *x.x*; TSO/E *x.xx.x*; RACF *x.xx.x*;

PDS287I MVS SP *x.x.x*; DFP *x.x.x*; ISPF *x.x*;
VTAM *x.x*; TSO/E *x.xx.x*; RACF *x.xx.x*; DF/HSM *x.x.x*;

Explanation: This CONTROL message lists the level of various software products.

OS/390	taken from flags at CVTOSLV1.
MVS SP	taken from flags at CVTOSLV0 and CVTOSLV1.
DFSMS	taken from data pointed to by CVTDFA.
DFSMStyp	indicates DFSMShsm, DFSMSdss and DFSMSrmm if licensed from bits in the CVTDFA for DFSMS systems.
DFP	taken from data pointed to by CVTDFA.
ISPF	taken from the ISPF variable called ZENVIR. This message is only available in dialog mode.
VTAM	taken from data pointed to by PSAATCVT.
TSO/E	taken from data pointed to by CVTTVT.
ACF	taken from data pointed to by CVTRAC.
DF/HSM	taken from data pointed to by CVTHSM if DFP level.

PDS288I Current NUCLEUS ID:x; I/O CONFIG ID:xx

Explanation: This CONTROL LISTENV message shows the identifier used for the NUCLEUS for the last IPL and the suffix used for the current I/O configuration. Note: if HCD is in use, the I/O configuration field may not be maintained.

PDS290I *COMBINE/SEPARATE* is in progress

Explanation: This **COMBINE** or **SEPARATE** subcommand has given control to the record copy portion of the subcommand code.

PDS291I '*dsname*' is not allocated

Explanation: This WHOHAS or USAGE ALL message indicates that there are no allocations of the data set reported by the MVS GQSCAN facility.

PDS292I '*dsname*' is allocated as follows:
JOBNAME SCOPE TYPE STATUS SYSTEM RESERVE

Explanation: This WHOHAS or USAGE ALL message displays data set allocations reported by the MVS GQSCAN facility as follows:

JOBNAME	Jobname allocated
SCOPE	STEP, SYSTEM or SYSTEMS
TYPE	SHR or OLD
STATUS	USING or WAITING
SYSTEM	System name
RESERVE	NO, YES or CONVERTED (if changed from RESERVE to ENQUEUE)

PDS293I Member found in *libtype* DSNAME=*dsname*

Explanation: This FINDMOD message is a feedback message for found modules. libtype is TASKLIB, LINKLIST or LPALIB.

PDS294I Member found in *loctype*

Explanation: This FINDMOD message is a feedback message for found modules. *loctype* is LPA, MLPA or NUCLEUS.

PDS295I Address:*hexaddr* Length:*hexlen*

Explanation: This FINDMOD message is a feedback message for found modules.

PDS296I Found at entry:*entrypt*

Explanation: This FINDMOD message is a feedback message for found modules.

PDS297I *modname* found in *loctype*

Explanation: This FINDMOD message is a feedback message for found modules. *loctype* is LPA, MLPA or NUCLEUS.

PDS298I There are *nn* users allocated to this data set

Explanation: Produced when you enter a data set or request a WHOHAS or USAGE subcommand and at least one other user is allocated to the data set.

Solution: To see the other users, type USAGE ALL.

PDS299I All members are synchronized

Explanation: Produced when you use a SYNC operand on a LLA subcommand and the directory entries for the member group checked have synchronized disk and LLA directory entries. The LLA subcommand need not continue.

Chapter 3

Action Messages (PDS300A - PDS399A)

PDS300A `ENTER OPTION -- DSN=`*`dsname`*`,VOL=SER=`*`volume`*` MEM=`*`groupname`*

Explanation: The current data set name, the associated disk volume name and the current member group name display in this subcommand prompt.

The MEM= keyword has a different format depending on the current member group:

MEM=	No member group is current. You may not refer to the current member group with * notation.
MEM=IEANUC01	Current member group contains a single member named IEANUC01.
MEM=IEASYS*	Current member group contains members named IEASYS.
MEM=TRT/	Current member group contains members with TRT anywhere in the member name.
MEM=TR??B*	Current member group contains members with TR in the first two bytes and B in the fifth byte of the member names.
MEM=BB:FAN	Current member group contains members with names in the range BB through FAN.
MEM=(DISASM3	Current member group contains a list of members of which the first is a member called DISASM3.
MEM=(TRT/	Current member group contains a list of member groups, of which the first is a member group containing members with TRT anywhere in the member name.

Solution: This a the standard StarTool FDM input prompting message. No specific response is required. You can enter any appropriate StarTool FDM subcommand.

PDS380A `Reenter the search string with delimiters:`

Explanation: Because of a previously noted error condition, the search string is not valid.

Solution: Reenter the string and its delimiters. For example, to search for the characters ABC, type /abc/.

PDS381A `Reenter the data set name, volume and disposition:`

Explanation: The data set name entered could not be used because of a previously noted error condition.

Solution: Enter another data set name and any volume or disposition data. The previously entered data set name and any other operands are discarded. Reenter the data set name (qualified or not), any volume serial (if required) and a disposition (if desired).

For example, to use an uncataloged data set called 'SYS1.ANYWHERE' on volume SYSALT, type `'sys1.anywhere' vol(sysalt)`.

As another example, to use one of your data sets called 'USERID.SPF.LIB', type `spf.lib`.

PDS382A `Reenter the first TTR:`

Explanation: The first TTR address entered could not be used because of a previously noted error condition.

Solution: Reenter the TTR address as a string of one to six hexadecimal digits. For example, to enter 002A03 as a TTR address, type `2a03`.

PDS383A `Reenter the second TTR:`

Explanation: The second TTR address entered could not be used because of a previously noted error condition.

Solution: Reenter the second TTR address as a string of one to six hexadecimal digits. For example, to enter 0034B15 as a TTR address, type 34b15.

PDS384A `Reenter the HEX offset:`

Explanation: The hexadecimal offset entered could not be used because of a previously noted error condition.

Solution: Reenter the offset value as a string of one to six hexadecimal digits. For example, to enter 000AF0 as a offset, type af0.

PDS385A `Reenter the SSI data:`

Explanation: The hexadecimal SSI information entered could not be used because of a previously noted error condition.

Solution: Reenter the SSI data as a string of one to eight hexadecimal digits. For example, to enter CB304296 as SSI information, type cb304296.

PDS386A `Reenter the replacement string with delimiters:`

Explanation: The replacement string is not valid because of a previously noted error condition.

Solution: Reenter the string and its delimiters. For example, to replace the string with AB", type /abc/.

PDS387A `Reenter the hex offset:`

Explanation: The hexadecimal offset entered for the DSCB OFFSET could not be used because of a previously noted error condition.

Solution: Reenter the offset value as a string of two hexadecimal digits. For example, to enter 002C as a offset, type 2c.

PDS388A `Reenter the hex verify string:`

Explanation: The hexadecimal value entered for the VERIFY string could not be used because of a previously noted error condition.

Solution: Reenter the VERIFY value as a string of two to 20 hexadecimal characters. For example, to enter the characters IBM as a VERIFY string, type c9c2d4.

PDS389A `Reenter the hex replace string:`

Explanation: The hexadecimal value entered for the REPLACE string could not be used because of a previously noted error condition.

Solution: Reenter the REPLACE value as a string of two to 20 hexadecimal characters. For example, to enter the characters IBN as a REPLACE string, type c9c2d5.

PDS390A `Should this member be restored (Yes/No/Can) ?`

Explanation: The RESTORE subcommand reached a decision point and requires a response before continuing. You can cancel the RESTORE subcommand or you can restore or ignore this deleted member. If you ignore this deleted member, RESTORE scans the data set for the next deleted member and repeats this prompting sequence.

Solution: To restore the identified member, type Yes. To not restore the identified member, type No. To terminate the prompting sequence, type Can (cancel).

PDS391A `Should these members be renamed (Y/N) ?`

Explanation: The RENAME subcommand identified the members to be renamed. A response is required before any changes are made to your data set.

Solution: To rename the identified members, type Y. To not rename the identified members, type N.

PDS392A `Should this data set be modified (Y/N) ?`

Explanation: The FIXPDS subcommand identified potential problems with your requested action. A response is required before continuing with actual changes to the current data set.

Solution: To modify this data set by FIXPDS, type Y. To not modify this data set by FIXPDS, type N.

PDS393A `Should this member be deleted (Y/N) ?`

Explanation: A DELETE subcommand was entered without a member name. In this case, StarTool FDM requires a response to confirm that you want to delete the current member.

Solution: To delete the identified member, type Y. To not delete the identified member, type N.

NOTE If you want to avoid this prompt in the future, type DELETE * when a single member is the current member. If more than one member is to be deleted, you will still prompted (by the PDS394 message).

PDS394A `Should all of these members be deleted (Y/N) ?`

Explanation: A DELETE subcommand was entered that deletes multiple members. A response is required before changing the data set.

Solution: To delete identified members, type Y. To not delete identified members, type N.

PDS395A `Should these members be submitted (Y/N) ?`

Explanation: A SUBMIT subcommand was entered that submits multiple members. StarTool FDM wants to confirm that these members should be submitted.

Solution: To submit identified members, type Y. To not submit identified members, type N.

PDS396A `Should ATTRIB continue (Y/N) ?`

Explanation: An ATTRIB subcommand was entered that modifies the attributes of the displayed members. A response is required before changing the members.

Solution: To change identified members, type Y. To not change identified members, type N.

PDS397A Should this member be modified (Y/N) ?

Explanation: A duplicate or out-of-order member was identified by FIXPDS ORDER. A response is required before changing the data set.

Solution: If the FIXPDS subcommand should continue, type Y. If the FIXPDS subcommand should not continue, type N.

PDS398A Should this alternate data set be modified (Y/N) ?

Explanation: The FIXPDS subcommand with MODDSNAME is about to modify a data set with PDSEAUTH. A response is required before continuing with changes to this data set. This is not the current or active data set.

Solution: To modify this data set by FIXPDS, type Y. To not modify this data set by FIXPDS, type N.

PDS399A Should this data set be renamed (Y/N) ?

Explanation: The FIXPDS subcommand with NEWDSNAME is about to rename a data set with PDSEAUTH. A response is required before continuing with changes to this data set. This is done by rewriting the DSCB for the data set. There are two restrictions for safety: the data set cannot be cataloged and the VTOC for that volume cannot be indexed.

Solution: To rename this data set by FIXPDS, type Y. To not rename this data set by FIXPDS, type N.

Chapter 4

Warning Messages (PDS400W - PDS599W)

PDS410W VOLSET(*volname*) is still in effect

Explanation: The displayed default volume name will be used unless a VOLUME parameter is entered.

PDS412W Reallocation without VOLSET will be attempted

Explanation: The allocation attempt failed. StarTool FDM attempts reallocation without the VOLSET parameter assuming that you really wanted a cataloged data set.

Solution: Enter another **CHANGE** subcommand to get the correct data set.

PDS420W StarTool FDM will not initialize after *n* days

Explanation: Issued when you enter StarTool FDM if you have seven or less days remaining in your evaluation period for StarTool FDM.

Solution: Contact your systems programmer or your marketing representative for help before this period expires.

PDS441W *name* (Weak)

Explanation: This external name is a weak unresolved external reference. This name was not present when the module was linked. If this module is relinked, the linkage-editor can resolve references to this name but its presence is not required.

PDS442W *name* (Missing)

Explanation: This external name is an unresolved external reference. This name was not present when the module was linked. If this module is relinked, the linkage-editor can resolve references to this name; however, error messages are generated if this name is missing during the module linkage-edit.

PDS443W MAXBLK has been raised to the data set LRECL value

Explanation: REPRO and DUP do not allow an output blocksize lower than the data set logical record length. For RECFM=V data sets, MAXBLK is set to the LRECL+4; for RECFM=F data sets, MAXBLK is set to the LRECL.

PDS444W MAXBLK exceeds the data set blocksize

Explanation: REPRO and DUP can create data blocks larger than the data set blocksize; however, unless the BLKSIZE is changed to the maximum data blocksize later, most programs referencing the large blocks fail with I/O errors.

PDS450W Search library '*dsname*' was bypassed

Explanation: You do not have READ access to the displayed data set. FINDMOD searches the linklist/lpalib library concatenations for redundant modules by allocating and opening each one. To avoid S913 ABENDs, it first issues a RACROUTE to check that you have READ authority for the data set and bypasses data sets that you are not allowed to read.

Solution: Bypass the linklist/LPALIB search entirely by specifying the NOSEARCH keyword on the FINDMOD subcommand.

PDS451W All members in this data set will be lost

Explanation: FIXPDS RESET deletes all members from the data set.

PDS452W {$$$SPACE/*manmember*} member is present

Explanation: PDSMAN/MVS is monitoring the data set for space usage. EXPANDDIR and FREEDIR must not be performed without first deleting the PDSMAN/MVS control member.

Solution: The PDSMAN/MVS control member is named $$$SPACE, but its name can be changed in your PDSMAN/MVS installation. If the PDSMAN/MVS control member is not $$$SPACE, parameter PDSMANM in macro PDS#SIZE of the StarTool FDM installation should be changed to the control member name.

If this message displays, FIXPDS terminates without any further action.

To expand the directory for this data set correctly, perform the following StarTool FDM subcommands:

DELETE $$$SPACE	remove the PDSMAN/MVS control member)
FIXPDS EXPANDDIR...	expand the directory as desired
COMPRESS	compress to resume PDSMAN/MVS monitoring

PDS460W No history data is available

Explanation: This module has no associated history (translator, zap or user-supplied) IDR data. This module was linked by an obsolete linkage editor.

Solution: To reconstruct this member and any aliases with StarTool FDM and the linkage editor, type MAP member RELINK (and run the generated JCL in the background for the linkage editor).

PDS461W Records may be truncated

Explanation: DUP is copying to a data set with a smaller LRECL. Records may be truncated during the copy.

PDS462W Records are being padded with blanks/the PAD character

Explanation: DUP is copying to a data set with a larger LRECL. Records are being padded with blanks (default is X'00').

PDS463W THIS LINKLIST DATA SET WAS EXTENDED; YOU MUST IPL TO USE NEW EXTENTS

Explanation: This message from the DSNAME subcommand indicates that this linklist data set was extended since the last IPL. Members in these new extents cannot be loaded until after a system IPL. An LLA stop and start does not correct this situation.

Any reference to the modules located in the new extents through LINK, LOAD, ATTACH or XCTL get S106, S706 or S806 ABENDs. The VERIFY subcommand ABENDs on these modules as it loads each member unless NOLOAD is specified.

Solution: Use StarTool FDM to determine which members reside in the new extent from the USAGE ALL output as shown below.

```
PDS184I EXTENT  UCB  LO TT-HI TT  TRACKS     LOW CCHH-HIGH CCHH
     PDS184I ------  ---  ----- -----  ------  ----------- -----------
     PDS184I      0  418  00.00 04.73    1140  04.B1.00.00 04.FC.00.0E
     PDS184I      1  418  04.74 06.08     405  02.D7.00.00 02.F1.00.0E
```

To find all members that reside in the second extent, type a subcommand like:

```
IF : TTR(47401:60801) THEN(SUBLIST)
```

To copy these members to another library and delete them from the current data set, type the following subcommands:

```
COPY * new.library
DELETE  *
```

Remove any secondary allocation quantity on LINKLIST data sets with FIXPDS SPACE(0) so that a secondary extent is not taken without being detected. You might also make these data sets larger to reduce the need for an extent.

To use the members in this data set, perform the following:

- Quiesce the system and prepare to IPL.
- Compress the data set if necessary as a standalone batch job.
- IPL so that the LINKLIST library is reopened. Members in the new extent can be loaded.

PDS465W THIS DATA SET IS BEING UPDATED BY *userid*

Explanation: The user currently has this data set open for update and is using DISP=SHR allocation indicated a SYSZDSCB enqueue. StarTool FDM cannot open the data set for update because an ABEND S213-30 will result. In an interactive environment, StarTool FDM waits and retries once; in a batch environment, StarTool FDM retries four times.

PDS470W The program is probably in a loop

Explanation: A previous interruption was noted, but an interruption point was not encountered in the program before the current interruption. Interruptions are checked for at a terminal input or output and when the input data set is read.

This message means that StarTool FDM or a supporting TSO command was in a CPU loop or an attention key (PA1) was pressed before a subcommand process could complete. For more details, see *"Appendix D. Attention Processing" in the* StarTool FDM *Reference Guide*.

Solution: Terminate the looping subcommand or process immediately. Give control to the previously entered subcommand (the delayed subcommand).

PDS480W Compress may not be interrupted

Explanation: An interruption was received during a COMPRESS operation but is ignored since the data set can be destroyed if IEBCOPY or PDSFAST does not complete.

PDS482W `Blocksize should be evenly divisible by the DCB LRECL`

Explanation: The requested BLKSIZE is not a multiple of the logical record length for a RECFM=FB data set.

PDS484W `Copy should not be interrupted`

Explanation: An interrupt or cancellation request was received during a COPY operation but was ignored to protect the integrity of the target data set.

PDS490W `Storage could not be obtained for` *`module`*

Explanation: The available region is not sufficient for the size of the module being searched.

Solution: Resubmit the request using the BLOCK or DUMP option instead of LBLOCK or LDUMP.

PDS500W `No COBOL Task Global Table was found`

Explanation: This member contains COBOL CSECTS; however, the TGT could not be located after the member was loaded. No COBOL compile options can be reported.

PDS502W `This module was compiled with ENDJOB and mixed RES and NORES options`

Explanation: Some of the COBOL routines in this module were compiled with the RES compiler option; others had the NORES option. ENDJOB was in effect for at least one routine. According to the COBOL programmer's guide, this combination is not recommended.

PDS503W `This module was compiled with mixed RES and NORES options`

Explanation: Some of the COBOL routines in this module were compiled with the RES compiler option; others had the NORES option. This leads to errors since some routines requested resident compiler routines and others requested no resident compiler routines.

PDS510W `This is a null member`

Explanation: This member contains no data.

PDS520W `No information is available`

Explanation: No .? (extended help) information is available – There are currently no warning or error messages.

Solution: To use the extended help facility, type .? immediately after any subcommand that receives warning PDSnnnW or error PDSnnnE messages. Up to five of the most recent warning or error message explanations are requested automatically from the HELP data set by StarTool FDM.

To test the extended help facility when no messages are current, type .? twice. The first entry results in a PDS520W message; the second entry results in an explanation of the PDS520W message.

PDS530W `This data set is not partitioned`

Explanation: Issued after a CHANGE subcommand if the data set is not partitioned. Several subcommands are defined only for partitioned data sets and they are not available for this data set.

PDS531W `You should use message prefixes; enter: TSO PROFILE MSGID`

Explanation: StarTool FDM honors PROFILE NOMSGID by writing messages without the PDSnnn identifiers. Use message prefixes so that if messages are issued, you can refer to this reference material.

Solution: To get reference material on a StarTool FDM message returned in line mode, type HE MS MS(PDS*xxx*, PDS*yyy*) (where PDS*xxx* and PDS*yyy* are messages you want explained).

Messages above PDS399 (warning and error messages) are explained with the extended help facility. To use the extended help facility after warning and/or error messages are received, type a .? command. Up to five warning or error message explanations from the last subcommand display from the HELP data set.

In the ISPMODE log, place the cursor over a message identifier (the PDS*nnn* part) and press RCHANGE. Information for that message is placed into the log.

PDS532W `Multiple input members will be unloaded to this sequential data set`

Explanation: The output data set is sequential; IEBCOPY or PDSFAST creates an unload format output data set.

PDS533W `This is a {`*`DATA/INDEX`*`}component`

Explanation: This DATA or INDEX component of a VSAM data set is being accessed instead of the cluster. For the name of the associated cluster, see the associated data set messages (PDS121I) following this message.

Access VSAM data sets through the cluster name. Statistics for this component in the USAGE command are taken from the associated cluster.

When a VSAM component is accessed directly, data cannot be accessed in key order. For a variable RRDS, only control interval access can process the DATA component.

For DATA or INDEX components, the LIST, FIND and REPLACE subcommands support control interval access using the DUMP or BLOCK display formats. Instead of accessing individual VSAM records, each GET or PUT refers to a VSAM control interval record.

Control interval access is useful if a VSAM data set has logical errors. REPLACE can repair the error. Since only the component is opened for update, the next access of the data set through the related cluster gets warning errors because of the differing time stamps.

PDS540W *`csectname/e`*`ntryname is not referenced`

Explanation: The XREF subcommand is documenting a CSECT or ENTRY symbol that is not referenced by any other CSECT in the module, which can be reached from the entry point. If this module has aliases with differing entry points it is likely that this symbol is referenced through one of the aliases.

Solution: To check if this is the case, type an XREF subcommand for each of the module's aliases.

PDS541W `SYS1.NUCLEUS should not be allocated in extents -- IPL will fail!!!`

Explanation: The FIXPDS subcommand can add an extent to a data set even if it was originally allocated without extents. MVS does not support extents in the SYS1.NUCLEUS data set according to the IBM SYSGEN manual.

Do not add an extent to the SYS1.NUCLEUS data set. Reallocate SYS1.NUCLEUS instead of trying to extend it.

This message is issued for any data set with DSNAME '*xxx*.NUCLEUS' (where *xxx* is a valid DSNAME prefix); The extent restriction only applies to 'SYS1.NUCLEUS' during the IPL process. The warning is issued on other data sets with the NUCLEUS suffix in case the data set is renamed and used as a MVS NUCLEUS at a later time.

PDS542W `This data set is in the linklist; an IPL is required to use any extents`

Explanation: The FIXPDS subcommand can add an extent to a data set even if it was originally allocated without extents. Extents added to data sets in the linklist (LNKLSTxx in SYS1.PARMLIST) are not useable until an IPL occurs. An LLA stop and start does not correct this situation.

Solution: See message PDS263I for more information on extending a linklist data set safely.

PDS551W `No matching data was found`

Explanation: This **FIND** or **REPLACE** subcommand did not locate a matching character string in any of the members searched.

If FIND with THEN(SUBLIST/ MEMLIST) or ELSE(SUBLIST/ MEMLIST) or REPLACE with ML, MEMLIST, NEWML or SUBLIST was entered, the default member group is nullified.

Solution: You must explicitly respecify the member group to establish a new default member group. You cannot use the * form of reference for the default member group.

PDS552W `No matching external symbols were found`

Explanation: This MAP or XREF subcommand did not locate any matching module names in any of the members searched. The search was for the CSECT named in the MODULE keyword.

PDS553W `No matching history data was found`

Explanation: This HISTORY subcommand did not locate any matching HISTORY information in the members searched. The search was for the CSECT named in the MODULE keyword.

PDS554W `No matching members were found; the default member group is now null`

Explanation: This COMPDIR subcommand did not locate any members matching an EXIST, NOEXIST, DIRCHANGE, NODIRCHANGE, CHANGED or NOCHANGED keyword in the other data set.

When this message is issued, the default member group is also nullified.

Solution: To get a new member group you must explicitly respecify it. You cannot use the * form of reference for the default member group.

PDS555W `No matching members were found`

Explanation: This **COPY** subcommand did not locate any members matching your EXIST or NOEXIST keyword in the output data set. Or, this **COMPDIR** subcommand with a MEMBER keyword found no matching members.

PDS556W `Null member group created`

Explanation: The new member group contains no members. When this message is issued, the default member group is also nullified.

Solution: To get a new member group you must explicitly respecify it. You cannot use the * form of reference for the default member group.

Generated by a SUBLIST with REVERSE or EXCLUDE operands if the resulting member group has no members. It can also be generated by an IF or FIND subcommand with THEN(SUBLIST/MEMLIST) or ELSE(SUBLIST/MEMLIST) if no members match the criteria; or by a REPLACE, HISTORY or MAP subcommand if the ML, MEMLIST, NEWML or SUBLIST operands result in no selected members.

PDS557W `No error members were found`

Explanation: VERIFY with MEMLIST or SUBLIST did not find any members with warning or error messages (PDS400W through PDS999E messages or non-standard member name messages).

PDS560W `Member` *`original`* `was renamed to` *`newname`*

Explanation: This duplicate member was renamed to the name shown. Now you can access both member names.

Solution: You may want to rename or delete one or both members after you have a chance to review them.

PDS581W `Large Files Option Status: IS ON`

Explanation: FDM issues this message to indicate that the current file is considered a large file and special large-file I/O processing has been invoked. Under most circumstances, this message goes to the LOG. However, if the current file meets the "large file" criteria when you first start FDM, the LOG is not yet initialized and this message goes to the screen.

Solution: No action required.

PDS570W `PDS#SECI and PDS#OPT4 are not co-ordinated; PDS#OPT4 data: Security tables` *`tblname1 tblname2 tblname3 ...`*

Explanation: Issued in response to a CONTROL SECURITY command when the names given PDS#ACFT macros in PDS#OPT4 do not match the operands of the PDS#ACFN macros of PDS#SECI.

Solution: The **Security tables** the message for PDS#OPT4 and compares it to the similar message for PDS#SECI just below the PDS194I message that follows. You can ignore this message if only a single security table is used in PDS#OPT4 since the PDS#SECI routine is not called in this situation.

PDS575W `LLA status can not be determined due to {`*`TASKLIB=dsname/ LINKLIB=dsname`*`}`

Explanation: Generated by the VERIFY subcommand for LLA managed linklist data sets if a system BLDL returns a status indicating that a member was found in a TASKLIB data set or in a linklist data set that is higher in the linklist concatenation order.

This can be an error situation for LINKLIB=dsname because this module is in at least two different linklist data sets. Use the FINDMOD subcommand to search the entire linklist.

For TASKLIB=*dsname*, this indicates that a module with the same name as the linklist module is in a JOBLIB, STEPLIB or other TASKLIB. This can be an error for some applications.

PDS576W The disk directory entry and LLA entry are not synchronized

Explanation: Generated by the **VERIFY** subcommand for LLA managed linklist data sets if a system BLDL returns a status indicating that a member in this library is out of synchronization. This means that the module's attributes have been updated or the module has been relinked (or moved) but the LLA entry has not been refreshed.

Solution: Use the **LLA** subcommand or some other method of refreshing LLA for this member.

PDS577W Not known to LLA

Explanation: Generated by the VERIFY subcommand for LLA managed linklist data sets if a system BLDL indicates that the member is not in this library. The member is physically in the library.

Solution: Use the LLA subcommand or some other method to inform LLA that this member is present.

PDS580W DCB changes only affect the data set attributes

Explanation: Generated by the FIXPDS subcommand if the RECFM, LRECL or BLKSIZE of a data set is to be modified. This is a reminder that only the data set label (the FMT1 DSCB) is modified when these DCB parameters are updated.

This can be a problem if you reduce the BLKSIZE of a data set since any existing members of the data set retain their previous blocksize and you are not able to access members that have a physical blocksize larger than the BLKSIZE in the FMT1 DSCB.

Solution: To test if any members exceed a given BLKSIZE before such a change, type a subcommand such as VERIFY : MAXBLK(9040) to identify members with blocksizes above 9040 characters. A source member can be reblocked before a BLKSIZE change with a subcommand such as REPRO member MAXBLK(9040).

After reducing the blocksize, find members with blocksize problems with VERIFY as above. You do not need the MAXBLK keyword. Similarily, the REPRO subcommand can reblock these source members. It also does not need a MAXBLK keyword.

PDS590W StarTool FDM SuperEdit option expires in *n* days

Explanation: Issued when you enter StarTool FDM if you have seven or less days remaining in your evaluation period for the StarTool FDM SUPEREDIT option.

Solution: Contact your systems programmer or your marketing representative for help before this period expires.

PDS592W Invalid PARM=RC=0; this value is ignored

Explanation: The execution-time StarBat parameter 'RC=0' is no longer accepted. It was made obsolete by enhanced return code processing and the addition of automatic empty input data set checking in StarTool FDM 7.7.0.

Chapter 5

Error Messages (PDS600E - PDS999E)

PDS620E `MAC, MACUPD, MOD, SRC or SRCUPD must be specified`

Explanation: The element type operand was not entered. SMPGEN requires that you specify the type of SMP/E element being generated. MAC produces ++MAC elements. MACUPD produces ++MACUPD elements. MOD produces ++MOD elements. SRC produces ++SRC elements, and SRCUPD produces ++SRCUPD elements.

PDS620E `DISTLIB is required`

Explanation: This **SMPGEN** subcommand requires a DISTLIB(ddname) operand so that the generated SMP/E elements can also include this information. SMP/E requires DISTLIB so it can determine the distribution library.

PDS612E `TXLIB, LKLIB, RELFILE and INLINE are mutually exclusive`

Explanation: This **SMPGEN** subcommand was entered with two or more operands from TXLIB(ddname), LKLIB(ddname), RELFILE(number) and INLINE. Only one of these operands is allowed.

PDS620E *`memname`* `is an alias member`

Explanation: This **SMPGEN** subcommand encountered a SRC element that had an alias. SMP/E does not allow alias ++SRC elements.

Solution: Use MAC since aliases are supported. SMPGEN automatically generates the appropriate MALIAS operands.

PDS622E `TXLIB, LKLIB, RELFILE or INLINE must be specified`

Explanation: A **SMPGEN** subcommand must contain a TXLIB(*ddname*), LKLIB(*ddname*), RELFILE(*number*) or INLINE operand.

Solution: To generate data inline, specify the INLINE keyword; otherwise, specify the source of the data with one of the other keywords.

PDS623E `LKLIB is not allowed with` *`typeop`*

Explanation: This **SMPGEN** subcommand contains a MAC, SRC, MACUPD or SRCUPD operand and an LKLIB(ddname) operand. LKLIB is only supported by a MOD operation.

PDS624E *`typeop`* `does not support TXLIB or RELFILE`

Explanation: This **SMPGEN** subcommand contains a SRCUPD or MACUPD operand with a TXLIB(ddname) or RELFILE(number) operand. These operands are not supported since these elements are required to be generated inline.

PDS630E `SSI is not allowed with` *`typeop`*

Explanation: This **SMPGEN** subcommand contains a MACUPD, MOD or SRCUPD operand with a SSI(hexdata) operand. SMP/E does not support the SSI operand for these element types.

PDS631E JCLIN member *memname* is not in this library

Explanation: This **SMPGEN** subcommand had a MOD element with a JCLIN(memname) operand; the JCLIN member could not be found. SMPGEN requires the JCLIN member to reside in the same data set as the SMP/E object elements.

PDS632E SYSLMOD is required to build ++JCLIN

Explanation: This **SMPGEN** subcommand contains a MOD operand and you are processing a load library. SMPGEN automatically constructs JCLIN statements for SMP/E; however, you must enter a SYSLMOD(name) operand to define the low level DSNAME qualifier of the SYSLMOD DD statement. As an example, if SYSLMOD(PDSLOAD) were specified, SYSLMOD statements similar to the following would be generated:

```
//SYSLMOD  DD  DISP=SHR,DSN=SYS1.PDSLOAD
```

PDS633E SYSLMOD is only permitted with MOD and RECFM=U

Explanation: This **SMPGEN** subcommand contains a SYSLMOD(name) operand; however, you are not processing a load library or you did not specify the MOD operand. Other element types do not support the SYSLMOD operand.

PDS640E SYSLIB is not allowed for MOD

Explanation: This **SMPGEN** subcommand contains a MOD operand with a SYSLIB(ddname) operand. SMPGEN with MOD supports the SYSLMOD operand but not the SYSLIB operand.

PDS641E JCLIN is only allowed with MOD and RECFM=F

Explanation: This **SMPGEN** subcommand contains a JCLIN(memname) operand; however, you are processing a load library or you did not specify the MOD operand. Other element types do not support the JCLIN operand.

PDS642E DISTMOD is not permitted with *typeop*

Explanation: This **SMPGEN** subcommand contains a MAC, MACUPD or MOD operand with a DISTMOD(ddname) operand. DISTMOD is only supported for SRC or SRCUPD operands.

PDS673E *member* was not updated; LLACOPY failed

Explanation: The **LLA** subcommand completed with an error; the LLA directory entry for this member is not affected.

Solution: Either insufficient storage was available or an I/O error was encountered in the data set. Try a VERIFY subcommand to get more information.

PDS680E This volume may be contaminated by DOS; DS4DOCVT is set

Explanation: Issued by the **VUSE** subcommand to indicate that DOS may have contaminated the VTOC (DS4DOCVT in DS4VTOCI is set).

Solution: Contact your systems programmer.

PDS681E The VTOC on this volume has been damaged; DS4DIRF is set

Explanation: Issued by the **VUSE** subcommand to indicate that the VTOC damage bit has been set (DS4DIRF in DS4VTOCI).

Solution: Contact your systems programmer.

PDS683E This volume has no free space

Explanation: Issued by the **VUSE** subcommand to indicate that no free space is available on this volume.

Solution: Delete or move any possible data sets and contact your systems programmer.

PDS684E The FORMAT 4 DSCB could not be read

Explanation: Issued by the **VUSE** subcommand to indicate that the Format 4 DSCB was required to analyze the volume usage but it could not be found.

Solution: Contact your systems programmer.

PDS685E The FORMAT 5 DSCB could not be read

Explanation: Issued by the **VUSE** subcommand to indicate that the Format 5 DSCB was required since the volume is not indexed, but it could not be found.

Solution: Contact your systems programmer.

PDS686E Volume volser was not found

Explanation: Issued by the **VUSE** subcommand to indicate that the volume is not currently available.

Solution: Check to insure that the volume name is correct before contacting your systems programmer.

PDS690E OFFSET and VERIFY are required

Explanation: Issued by FIXPDS DSCB if an OFFSET value is entered without a corresponding VERIFY value. Multiple groups of OFFSET, VERIFY and REPLACE can be entered in a list; the last group can have the REPLACE values omitted. For example,

DSCB(11 2222 3333 4444 555555 6is valid and
DSCB(11 2222 3333 4444 555555) is valid, but
DSCB(11 2222 3333 4444)is *not* valid.

PDS691E OFFSET must be between 2C and 8C

Explanation: Issued by FIXPDS DSCB if an OFFSET value is below 2C (in hexadecimal) or above 8C (in hexadecimal). Values below 2C modify the data set name (this is not supported) while values above 8C (or decimal 140) access past the end of a DSCB.

PDS692E VERIFY contains an odd number of digits

Explanation: Issued by FIXPDS DSCB if there is an even number of hexadecimal characters in the VERIFY string. For example:

DSCB(11 2222 3333) is valid and
DSCB(11 222 3333)is *not* valid.

PDS693E VERIFY data does not match DSCB data

Explanation: Issued by FIXPDS DSCB if any of the VERIFY strings do not match the corresponding data in the Format 1 DSCB. For example:

DSCB(2C F1 F2 3D 00 02) would verify correctly but
DSCB(2C F3 F2 3D 00 02) would not verify correctly.

PDS694E REPLACE contains an odd number of digits

Explanation: Issued by FIXPDS DSCB if there is an even number of hexadecimal characters in the REPLACE string. For example:

DSCB(11 2222 3333)is valid and
DSCB(11 2222 33333)is not valid.

PDS695E `Hex data extends past the end of the DSCB`

Explanation: Issued by FIXPDS DSCB if an OFFSET value plus the length of a VERIFY or REPLACE string exceeds 8D (or decimal 141). For example:

DSCB(8C 00 01)is valid and
DSCB(8C 0000 0123)is not valid.

PDS696E `FIXPDS DSCB can only be used to verify data`

Explanation: The FIXPDS DSCB direct update facility is disabled at your site.

Solution: Contact your StarTool FDM administrator for access to this facility.

The verify-only form of this subcommand can still be used. For example:

DSCB(2C F1)is valid and
DSCB(2C F1 F1)is not valid.

PDS697E `FIXPDS NEWDSNAME has not been enabled`

Explanation: The **FIXPDS DSCB** direct rename facility for any data set was disabled at your site by rewriting the DSCB for the data set. There are two restrictions for safety: the data set cannot be cataloged and the VTOC for that volume cannot be indexed.

Solution: Contact your StarTool FDM administrator for access to this facility.

PDS698E `FIXPDS MODDSNAME has not been enabled`

Explanation: The FIXPDS DSCB direct update facility for any data set is disabled at your site. This is not the current or active data set

Solution: Contact your StarTool FDM administrator for access to this facility.

PDS700E `This range of names is invalid`

Explanation: The range of names is invalid (the range of names cannot progress from one name to a name lower in collating sequence). For example:

valid name ranges: bb:bb bb:c bb:bc bb:b bb: :bb
invalid name ranges: bb:ba bb:a

PDS701E `This data set is not a load library`

Explanation: This subcommand (or an operand) is defined only for load libraries.

PDS702E `This data set is a load library`

Explanation: This subcommand (or an operand) is not defined for load libraries.

PDS703E `This module has no external symbols`

Explanation: Indicates that the module was not created by a linkage editor or that it was constructed from incomplete data. This message also displays when a load module was created with the Not Editable (NE) attribute of the linkage editor.

PDS704E `Module` *`memname`* `has no external symbols`

Explanation: Indicates that the module was not created by a linkage editor or that it was constructed from incomplete data. This message also displays when a load module was created with the Not Editable (NE) attribute of the linkage editor.

PDS705E External symbol *name* was not found

Explanation: The name is not an external symbol in this member. The entry point address cannot be changed.

PDS706E This data set is a PDSE

Explanation: The **RESTORE** subcommand is not supported for PDSE data sets.

PDS710E Invalid APF information format; member is assumed not authorized

Explanation: The APF information for this module is invalid; it is assumed not authorized.

PDS711E No member names are in this range

Explanation: This data set has no members whose names are in this range of names. The following examples illustrate matching members for the **MEMBERS** subcommand:

MEMBERS :	all members – X'00' through X'FF'
MEMBERS dd:	members from DD through X'FF'
MEMBERS :bb	members from X'00' through BB
MEMBERS aa:bb	members between AA and BB
MEMBERS (abc,d:)	member ABC and those from D through X'FF'

PDS712E No member names match this pattern

Explanation: This data set has no members whose names match these pattern characters. The following examples illustrate matching members for the **MEMBERS** subcommand:

MEMBERS aa/	member names containing AA anywhere
MEMBERS /bb	member names containing BB anywhere
MEMBERS aa/bb	member names containing AA and BB
MEMBERS aa/?bb	member names containing AA and .BB
MEMBERS (aa/,bb/)	member names containing AA or BB
MEMBERS (a?a/,bb/)	member names containing A.A or BB

PDS713E No member names match this combination name

Explanation: Either no member names match the beginning range characters or the second pattern portion of the name entered. The following examples illustrate matching members for the **MEMBERS** subcommand:

MEMBERS aa*	members with names AA
MEMBERS *bb	members with names containing BB anywhere
MEMBERS ?bb	three character member names with BB in position 2
MEMBERS bb?	three character member names with BB in position 1
MEMBERS aa*bb	members with names AA and BB elsewhere
MEMBERS b?d*	members with B in the first position and D in position 3
MEMBERS (aa*,bb/)	members with names AA or with BB anywhere

PDS714E No members are in the data set

Explanation: This data set has no member names in its directory; this is an empty PDS.

PDS715E No matching attributes were found

Explanation: This IF or MEMLIST subcommand did not locate any members with the attributes specified in the members searched.

Solution: If this message is accompanied with PDS556W for a null group, the default member group is nullified. In this case, you must explicitly respecify the member group to establish a new default member group. You cannot use the * form of reference for the default member group.

PDS720E Not APF authorized; the APF data is missing

Explanation: The APF data for this module is not present so it is assumed not authorized.

PDS721E Not APF authorized, the APF data is the wrong length

Explanation: The APF data for this module is invalid (not one byte long) so the module is assumed not authorized.

PDS722E The APF data can not be changed

Explanation: the APF value was not modified Because of missing or invalid APF data. A module linked with an old linkage editor might not have APF data.

Solution: To reconstruct this member and any aliases with StarTool FDM and the linkage editor, type MAP member RELINK (and run the generated JCL in the background for the linkage editor).

PDS723E The RLD/CONTROL count can not be changed

Explanation: The RLD/CONTROL count does not exist for this module since it was linked with an obsolete linkage editor. Since the directory does not contain a RLD/CONTROL count field, it cannot be modified.

Solution: To reconstruct this member and any aliases with StarTool FDM and the linkage editor, type MAP member RELINK (and run the generated JCL in the background for the linkage editor).

PDS724E RMODE and AMODE can not be changed -- obsolete linkage-editor

Explanation: Residence and addressing mode values do not exist for this module because it was linked with an obsolete linkage editor. Therefore, they cannot be changed either.

Solution: To reconstruct this member and any aliases with StarTool FDM and the linkage editor, type MAP member RELINK (and run the generated JCL in the background for the linkage editor).

PDS726E Page alignment can not be changed -- obsolete linkage-editor

Explanation: The page alignment flag does not exist for this module because it was linked with an obsolete linkage editor.

Solution: To reconstruct this member and any aliases with StarTool FDM and the linkage editor, type MAP member RELINK (and run the generated JCL in the background for the linkage editor).

PDS727E StarTool FDM can not determine if this data set is managed by LLA

Explanation: The LLA subcommand refreshes the LLA directory by issuing a LLACOPY macro for selected members. Either LLA is not active and there is no LLA directory to update, or the current data set is not managed by LLA. In either case, issuing a LLACOPY macro has no effect.

This message can also be issued if the current data set is not cataloged or the CXVLLAxx member of SYS1.LPALIB specifies GET_LIB_ENQ(NO) because StarTool FDM uses the LLA enqueue to determine if a library is LLA managed. In either of these cases, you can use the FORCE parameter of the LLA subcommand to continue and update the LLA status of LLA managed members.

Solution: Investigate if the current data set should be managed by LLA or determine if LLA is down and take corrective action.

PDS728E *Memname* not found but is in the LLA directory

Explanation: This member was not found in the directory but it is known to LLA. Type an ATTRIB subcommand to display member attributes, but ATTRIB cannot be used to update any member attributes.

Solution: Recreate this member or use the LLA subcommand to inform LLA that this member was deleted.

PDS729E SYNC ignored; this is not a linklist library

Explanation: Issued by the LLA subcommand with SYNC if this data set is not in the linklist. The SYNC operand cannot be used because a system BLDL only applies to TASKLIB and linklist data sets.

PDS730E Dynamic PLIB/MLIB definition failed

Explanation: This message occurs only for customers using dynamic library allocation in the PDS#OPT4 option configuration module to allocate their StarTool FDM libraries. The #DYNLIBS parameter in PDS#OPT4 specified a PLIB or MLIB dynamic library allocation definition at StarTool FDM installation. These libraries were activated at runtime with ISPF LIBDEF services, but verification of the members within them failed. A S0C1 ABEND is forced after this message displays to assist in diagnosing the library allocation problem.

Solution: Dynamic allocation of the FDM libraries may fail the validation step for several reasons. These typically involve an interaction between a customized PDS#OPT4 configuration module and the requirements for FDM message libraries or panel libraries.

First, ensure that any data set names referenced by the #DYNLIB macro in PDS#OPT4 match the actual data sets created during product installation.

Second, if dynamic allocation is used with a panel library (PLIB), panel member PDS@PRIM must be copied to a generally accessible ISPF panel library. In addition, the installed FDM load library must be at the same version, release, and modification level as the panel library being used.

Third, if dynamic allocation is used with a message library (MLIB), no line numbers should appear in the message members. To remove line numbers, edit the member in ISPF, issue the UNNUM command, and SAVE the member.

In addition, during dynamic allocation of a message library (MLIB), FDM looks for a message library member whose name takes the form PDS#*nn*, where *nn* is the FDM version and release number. For example, *nn* would be set to *76* for member FDM760.MSGS(PDS#76), the message library member pertaining to all FDM releases in the 7.6.*mm* series. Within this message library member, individual messages numbered in the format PDS#*nnnA* are expected, where *nnn* is the full version, release, and modification level for the installed instance of StarTool FDM. For example, message number PDS#761Y would be correctly formatted for StarTool FDM 7.6.1. Ensure that any changes or additions you make to the MLIB data set list in PDS#OPT4 are consistent with these message member naming conventions.

PDS731E ISPF is not operational now

Explanation: Because of a previously noted error condition, the **BROWSE, EDIT, ISPF, ISPMODE, ISPXEQ** and **MEMLIST** subcommands are disabled.

PDS733E BROWSE failed -- null member or I/O error

Explanation: The ISPF BROWSE service fails on null members or members containing I/O errors (physical errors or logical record blocking errors).

Solution: To investigate the cause of this failure, type VERIFY member.

PDS734E Record length exceeds 255 characters

Explanation: **EDIT** is supported only for files with record length 255 and shorter.

PDS740E This module has no matching external symbols

Explanation: The MODULE(*name*) requested is not in this member.

PDS750E A required notelist pointer was not found in this member

Explanation: One or more load module records referred to in an overlay notelist record could not be located by **DUP, FIXPDS** or **REPRO** because of an error condition. This message may be due to data set or equipment errors.

Solution: A **VERIFY** subcommand can provide more information. Any directory change operation is terminated with the member in error unchanged. Any previously moved or copied members and their associated aliases are fully updated. If this problem is due to data set errors, the data set may be damaged and it should be recovered.

PDS751E A notelist record could not be found for this member

Explanation: An overlay notelist record could not be input by **DUP, FIXPDS** or **REPRO** because of an error condition. This message may be due to data set or equipment errors.

Solution: A **VERIFY** subcommand can provide more information. Any directory change operation is terminated with the member in error unchanged. Any previously moved or copied members and their associated aliases are fully updated. If this problem is due to data set errors, the data set may be damaged and it should be recovered.

PDS752E The number of desired directory blocks must be specified

Explanation: The number of directory blocks could not be determined because of a previously noted error condition.

Solution: The number of directory blocks must be specified to expand or reset the data set directory.

PDS761E Member *memname* is out of order

Explanation: The directory is being checked by **FIXPDS ORDER** and the member named was found to be out of order.

Solution: If you choose to correct this error, this member will be renamed to its present name.

PDS762E Member *memname* is a duplicate

Explanation: The directory is being checked by **FIXPDS ORDER** and the member named was found to be a duplicate.

Solution: If you choose to correct this error, this member will be renamed to another name that can be accessed later.

PDS763E Rename failed; this member is still called *memname*

Explanation: This member could not be renamed. This is probably due to member names being too close together (like AAAA0001, AAAA0002, and so on).

Solution: If you can generate some room between member names you may want to retry this command later.

PDS770E A search string is required

Explanation: A default search string cannot be used since a default string has not yet been established.

PDS771E *name* is not a valid subcommand; the following are valid:

Explanation: The displayed subcommand is an undefined subcommand. A table of valid subcommand names for this data set type follows this header. For example, ATTRIBXX MEMBER can cause this message.

PDS771E *name* has been disabled for StarTool FDM StarWarp Option; the following are valid:

Explanation: The displayed subcommand has been disabled for StarWarp Option customers.

Solution: StarWarp Option does not include several StarTool FDM data management subcommands such as COPY and FIXPDS. A table of valid subcommand names for StarWarp Option displays after this header. For example, FIXPDS RELEASE could cause this error message for a StarWarp Option user.

PDS771E *name* is only valid for partitioned data sets; the following are valid subcommands:

Explanation: The displayed subcommand is defined only for partitioned data sets. A table of valid subcommand names for this data set type follows this header. For example, ATTRIB MMBER could cause this error message if the current data set is sequential or VSAM.

PDS771E *name* has been disabled at your site; the following are valid:

Explanation: The displayed subcommand was disabled at your site during the installation process. A table of valid subcommand names displays after this header. Several StarTool FDMA subcommands are optional and this subcommand was disabled during StarTool FDM installation.

For example, DSAT LIB.CNTL could cause this error message if the DSAT command was disabled for use by StarTool FDM.

Solution: Type CONTROL DEFAULTS to identify which subcommands are supported at your installation. To use any of the disabled subcommands, contact technical support at your installation.

PDS772E A replacement string is required

Explanation: A default replacement string cannot be used since a default string has not yet been established.

PDS773E Equal length strings are required for BLOCK and DUMP updates

Explanation: The search and replacement strings are different lengths. This is allowed only for REPLACE with NUM, SNUM or NONUM formats.

PDS774E `Replace terminated; character expansion failed`

Explanation: The replacement string could not fit on the current logical line and no additional updates will be made to this member.

NOTE This member may have been partially updated since each physical block is updated in-place to record changes before the next block is read.

PDS775E `Equal length strings are required for REPLACE picture strings`

Explanation: If a picture string is used for a replacement string in the **REPLACE** subcommand, it must be the same length as the search string.

PDS780E *`subname`* `DCB open error -- reallocate and try again`

Explanation: The output file could not be opened.

Solution: Correct any problems with the allocation and try again.

Issued by the COMBINE, COMPDIR, CONTROL with DSN, COPY, CREATE, DUP, FINDMOD, OUTCOPY or SEPARATE subcommands.

PDS781E {*`OUTCOPY/LOGCOPY`*} `DCB attributes conflict -- use sequential with RECFM=FB and LRECL=80`

Explanation: The attributes of the FILE(PDSOUT) and the session copy data set must be RECFM(F B) LRECL(80) with a blocksize that is a multiple of 80. It must be allocated to a sequential output data set or a member of a partitioned data set.

PDS782E `COMBINE DCB attributes conflict -- use sequential with RECFM=FB`

Explanation: The attributes of the COMBINE file must be RECFM=FB and it must be allocated to a sequential data set of a member of a partitioned data set.

PDS783E `SEPARATE DCB attributes conflict -- use partitioned with RECFM=FB`

Explanation: The attributes of the **SEPARATE** file must be RECFM=FB and it must be allocated to a partitioned data set.

PDS784E *`COMBINE/LOGCOPY`* `member name is required for a PDS`

Explanation: The output file for the session copy data set and **COMBINE** must be written sequentially. Your output data set is a PDS or a PDSE but you did not indicate a member name. Reenter the command but add (*membername*) after the data set name.

PDS790E `This data set is cataloged`

Explanation: The FIXPDS DSCB direct rename facility cannot continue with this operation because the target data set is cataloged. StarTool FDM will not rename an ENQUEUED, cataloged data set because of the danger of renaming an active system data set.

PDS800E `No load module text was found for member`

Explanation: This member contains invalid load module data and it cannot be restored.

`PDS801E End of member simulated -- remainder of track skipped`

Explanation: Because of a previously noted input error, the remainder of the track cannot be read. RESTORE begins processing with the following track as if it were the beginning of a new member.

PDS802E A main member named *memname* is already at this TTR

Explanation: The identified main member resides at this location. **RESTORE** terminates after checking for other associated members.]

PDS804E Restore abandoned

Explanation: **RESTORE** cannot continue because of a previously noted error condition.

Solution: Retry RESTORE with different operands.

PDS805E Invalid load module data

Explanation: This member contains invalid load module data and it cannot be restored.

PDS806E Block length of *nn,nnn* exceeds the MAXBLK value

Explanation: This member contains blocks larger than the **MAXBLK** value entered.

PDS807E Statement sequence error

Explanation: **SEPARATE** requires a "./ ADD NAME=member" statement as its first control statement. Data until the next ./ ADD statement is skipped.

PDS808E SVC numbers stop at 255

Explanation: SVC numbers range from zero through 255; there are no higher entries.

PDS809E ESR number is too high

Explanation: An ESR entry above the maximum in this SVC was requested. An ESR SVC contains a binary number at offset four to indicate the highest valid entry.

PDS810E PEDIT only supports VSAM KSDS data sets

Explanation: The **PEDIT** command only supports VSAM KSDS data sets at this time. In addition, if PEDIT is used in the PDS#CALL macro for the **EDIT** subcommand, **PEDIT** is automatically invoked for VSAM data sets; however, only VSAM KSDS data sets are allowed.

PDS811E Record length *n* is invalid

Explanation: The indicated logical record length (0, 1, 2 or 3) is invalid for RECFM(V) data sets. This type of error indicates that your data set DCB has been altered.

Solution: If this is the case, reset the data set DCB with the following subcommand:

```
FIXPDS RECFM(mm) LRECL(nn) BLKSIZE(pp)
```

where *mm, nn* and *pp* are replaced by the proper DCB attributes.

PDS812E Block length of *nn,nnn* exceeds the data set DCB BLKSIZE

Explanation: The physical blocksize exceeds the BLKSIZE of the data set. This type of error indicates that your data set DCB has been altered.

Solution: If this is the case, reset the data set DCB with the following subcommand:

```
FIXPDS RECFM(mm) LRECL(nn) BLKSIZE(pp)
```

where *mm, nn* and *pp* are replaced by the proper DCB attributes.

PDS813E **Record length of *nn,nnn* exceeds the maximum DCB LRECL**

Explanation: The logical record length exceeds the LRECL of the data set. This type of error indicates that your data set DCB has been altered.

Solution: If this is the case, reset the data set DCB with the following subcommand:

```
FIXPDS RECFM(mm) LRECL(nn) BLKSIZE(pp)
```

where *mm, nn* and *pp* are replaced by the proper DCB attributes.

PDS814E **Block length of *nn,nnn* is not divisible by the DCB LRECL**

Explanation: The physical blocksize is not a multiple of the data set's LRECL. This type of error indicates that your data set DCB has been altered.

Solution: If this is the case, reset the data set DCB with the following subcommand:

```
FIXPDS RECFM(mm) LRECL(nn) BLKSIZE(pp
```

where mm, nn and pp are replaced by the proper DCB attributes.

PDS820E **This member is an alias for *member1* but it points to *member2***

Explanation: This member is an alias for main member *MEMBER1* (according to its TTR), but its directory entry indicates that it should be an alias of *MEMBER2*. This is caused by renaming a main module with a utility that does not update the associated alias modules' directory entries correctly. This type of error causes serious problems if the members are in your LPALIB (you may not be able to IPL).

Solution: To correct this problem with StarTool FDM, issue the following subcommand:

```
RENAME member1 member1
```

where *member1* is the name of the main module identified above.

PDS821E **RMODE entry does not correspond with member *memname***

Explanation: The residence mode entry for this alias member does not match the residence mode entry of the identified main module.

Solution: Reinstall the main module and its aliases. The aliases for this member are probably unusable until this error is corrected. To correct this problem with StarTool FDM, issue the following subcommands:

```
ATTRIB memname
```

where *memname* is the main member identified above.

ATTRIB *member* RMODE *xx*

where RMODE*xx* is the RMODE value displayed by the first ATTRIB.

PDS822E **Main amode entry does not correspond with member *memname***

Explanation: The addressing mode entry for this alias member does not match the addressing mode entry of the identified main module.

Solution: Reinstall the main module and its aliases. The aliases for this member are probably unusable until this error is corrected. To correct this problem with StarTool FDM, issue the following subcommands:

```
ATTRIB memname
```

where *memname* is the main member identified above.

```
ATTRIB memname AMODExx
```

where AMODE*xx* is the AMODE value displayed by the first ATTRIB.

PDS823E **RLD/CONTROL count does not correspond with member *member***

Explanation: The RLD/CONTROL count for this alias member does not match the RLD/CONTROL count of the identified main module.

Solution: Reinstall the main module and its aliases. FETCH uses this count field to construct a channel program that will load the member. If this error is not resolved before program FETCH uses this member, FETCH can operate in a degraded mode (see IBM message CSV300I). To correct this problem with StarTool FDM, issue the following subcommand for the main module and each of its aliases:

```
ATTRIB memberx RLDFIX
```

PDS824E **Duplicate member name -- ignored**

Explanation: This member name was encountered previously in the data set directory. Your data set has been damaged. It should be recovered in some fashion or it may suffice to delete one of the duplicate member names.

Solution: FIXPDS with ORDER or an interactive ZAP command may be useful in changing the actual member names to ascending order.

PDS825E **Member name is out of sequence -- ignored**

Explanation: Member names higher in the collating sequence than this member name were encountered previously in the data set directory. Your data set has been damaged. It should be recovered in some fashion, or it may suffice to delete the out-of-sequence member name or the member name just before this one in the directory.

Solution: FIXPDS with ORDER or an interactive ZAP command may be useful in changing the actual member names to ascending order.

PDS826E **The directory RLD/CONTROL count does not match the first RLD entry**

Explanation: The RLD/CONTROL count for this member does not match the number of RLD or control records following the first TEXT record. FETCH uses this count field to construct a channel program that will load the member. If this error is not resolved before FETCH uses this member, FETCH can operate in a degraded mode (see IBM message CSV300I).

Solution: To correct this problem with StarTool FDM, issue the following subcommand for the main module and each of its aliases:

```
ATTRIB memberx RLDFIX
```

PDS827E *member1* is an alias for this member but it points to *member2*

Explanation: MEMBER1 is actually an alias for this main member (according to its TTR), but its directory entry indicates that it should be an alias of MEMBER2. This is caused by renaming a main module with some utility that does not update the associated alias modules' directory entries correctly. This type of error causes serious problems if the members are in your LPALIB (you may not be able to IPL).

Solution: To correct this problem with StarTool FDM, issue the following subcommand:

```
RENAME mmember mmember
```

where *mmember* is the name of the main member.

PDS828E GETMAIN for *nnnn* megabytes above the line failed

Explanation: The OPEN of a linear data set or browse for a data set failed because an area to hold the pointers to the data records or the data records was not available. If a VSAM data set occupies less than two megabytes or it is a Path (since Paths cannot have unique keys), StarTool FDM obtains storage for the data set itself. In other cases, StarTool FDM obtains storage for a pointer (RBA, RRN or key) to each record to support ISPF BRIF. Your system did not let StarTool FDM obtain the required storage.

NOTE To increase the amount of storage allowed above the 16 megabyte line, investigate IEFUSI.

PDS829E DASDVOL prevents PDSEAUTH updates to the VTOC

Explanation: If a DASD VTOC is protected from updates using the DASDVOL generic resource, you cannot update that volume with FIXPDS keywords that update the FORMAT 1 DSCB directly such as SPACE(20), TRK/CYL/BLK or DSCB.

In a RACF environment, if a volume is protected with the DASDVOL resource, messages similar to the following display before the PDS829E message is issued

```
ICH408I STR894 CL(DASDVOL)
     ICH408I INSUFFICIENT ACCESS AUTHORITY
     ICH408I FROM STR* (G)
     ICH408I ACCESS INTENT(UPDATE) ACCESS ALLOWED(READ)
     IEC150I 913-38, ...
```

Solution: If you need DASDVOL access so that you can update the DSCB records in this manner, forward the information in this explanation to your security administrators with supporting documentation including the actual messages received so that your access rules can be modified.

PDS830E Obtain error; DSCB not on volume

Explanation: The data set name could not be found in the VTOC (Volume Table of Contents). This is either a StarTool FDM program error or the base name of a generation data group (GDG) was entered.

Solution: To use a GDG, enter the fully qualified name with a trailing GnnnnVmm. . You can also enter a DSNAME like GDG.NAME(0) or GDG.NAME(-1).

PDS831E Unable to open data set

Explanation: The open for the data set failed.

PDS832E `Dummy member add failed, RC=8`

Explanation: A dummy member, with name 9FIXPDS, was not added as expected to the data set directory.

PDS833E `Dummy member delete failed, RC=8`

Explanation: A dummy member, with name 9FIXPDS, was not deleted as expected from the data set directory.

PDS834E `Error in general fail service routine; R15=`*`nn`*

Explanation: The general FAIL system message routine (IKJEFF19) failed with the indicated return code. This routine is used to diagnose IKJPARS errors.

PDS835E `Error in DAIRFAIL service routine; R15=`*`nn`*

Explanation: The DAIRFAIL system message routine (IKJEFF18) failed with the indicated return code.

PDS836E `I/O error in directory, EXCP RC=12`
`I/O error in directory, BLDL RC=8`
`I/O error in directory, STOW RC=16, R0=`*`hexvalue`*

Explanation: The system directory management routines indicate that the directory for this data set contains one or more I/O errors. This I/O error may be due to data set or equipment errors.

Solution: Type a **VERIFY** subcommand for more information. Data set recovery will be required if this is a data set error.

If the message indicates **EXCP**, StarTool FDM noted the I/O error during a directory read. If the message indicates BLDL, the BLDL macro noted the error during a member search.

If the message indicates **STOW**, a member update operation was not successful. It received a return code 16 with the displayed reason code. STOW reason codes are as follows:

R0=00000001	A permanent I/O error was detected.
R0=00000002	A permanent I/O error occurred while writing the member EOF mark.
R0=00000004	An error occurred while writing data buffered in system buffers.
R0=00000737	The system found an I/O error while trying to read or write the VTOC.
R0=00000B37	The system was unable to update the VTOC.
R0=00000D37	Either no secondary space is available or a DADSM user exit error occurred. The error occurred when trying to write an EOF; all primary space was used.
R0=00000E37	Either no secondary space is available or a DADSM user exit error occurred.

PDS837E *program* environment is not APF authorized

Explanation: A program invoked with the IKJEFTSR interface must be authorized. It must be marked AC(1) and it must reside in an authorized library (which cannot be concatenated to other non-authorized libraries). Also, the program name must be present in the IKJTSO00 member of SYS1.PARMLIB and this member must have been activated with an IPL or the TSO PARMLIB command.

Solution: Notify your systems programmer. Normally, this message displays after IKJEFTSR issues the following message indicating that the SYS1.PARMLIB change is in effect for the program:

```
CSV019I REQUESTED MODULE program NOT ACCESSED, IS IN NON-APF LIBRARY.
```

PDS838E PDSEAUTH function code is not supported

Explanation: A function was requested from PDSEAUTH that is not supported.

Solution: Notify your systems programmer that PDSEAUTH may be back-level.

PDS839E PARTREL macro failed, RC=*nn*

Explanation: PDSEAUTH issues a PARTREL macro to release space in PDSE data sets for a FIXPDS RELEASE function. The return code from PARTREL was non-zero indicating that the partial release failed. Return codes are:

Return Code	Explanation
RC=02	Unable to find an extent in the VTOC.
RC=04	Unable to find an extent in the VTOC.
RC=08	Either the SYSZTIOT or SYSDSN ENQ failed, or an unrelated DEB indicates that another DCB is open to the data set.
RC=12	Invalid parameter list.
RC=16	Either a permanent I/O error occurred, CVAF provided an unexpected return code, an installation exit rejected the request or an I/O error occurred while the tracks were being erased.
RC=20	DSN or DSN pointer is invalid.
RC=24	Invalid UCB pointer.
RC=28	Specified DSORG is not supported.
RC=32	No room in the VTOC.
RC=36	Invalid TIOT=NOENQ request; exclusive use of SYSDSN is needed.
RC=40	An error occurred while SMS was processing the request.
RC=44	CLOSE was the caller of partial release. IGGPRE00 (the preprocessing exit rejected the partial release request.

Solution: Contact your systems programmer or Micro Focus Customer Support for help.

PDS840E Invalid hexadecimal string length

Explanation: **FIND** and **REPLACE** allow for a maximum of 64 hexadecimal digits for a search or replacement string.

PDS841E Invalid hexadecimal characters

Explanation: Only numeric characters and the characters from A through F (in upper or lower case) can be used in hexadecimal strings.

PDS842E This string is too long

Explanation: **FIND** and **REPLACE** allow for a maximum of 32 characters for a search or replacement string.

PDS843E Only disk data sets are supported

Explanation: The data set to be allocated must exist on a physical or virtual disk.

PDS844E Syntax error: *errormessage*

{AMBIGUOUS KEYWORD}
{INVALID DELIMITER}
{INVALID PARAMETER DATA}
{PARAMETER IS TOO LONG}
{VALIDATION FAILED}
{POSITIONAL PARM MISSING}
{INVALID DSNAME LENGTH}
{INVALID DATA SET NAME}
{INVALID MEMBER NAME}
{INVALID MEMBER LENGTH}
{INVALID PASSWORD LENGTH}
{INVALID RANGE VALUE}

Explanation: The subcommand entered is incorrect. It must be corrected before StarTool FDM can proceed with the subcommand.

Solution: To correct the error, StarTool FDM suspends subcommand processing and prompts you with an appropriate syntax assistance panel. Put the cursor at the beginning of the data in error. After determining the cause of the problem, fix the problem by overtyping the error on this panel. When you press the Enter key, StarTool FDM tries to interpret the subcommand again. If you press END, StarTool FDM discards the subcommand.

The following table shows actions you can take for each message.

Error text	Probable cause	Suggested action
INVALID KEYWORD	the indicated keyword is not defined	correct any misspelling
AMBIGUOUS KEYWORD	the abbreviation used is too short	add additional characters
INVALID DELIMITER	an invalid character was entered between parameters	correct any miskeyed data
INVALID PARAMETER DATA	this parameter cannot be interpreted	check the parameter for obvious problems
PARAMETER IS TOO LONG	too many characters were entered for this parameter	reduce the parameter's length
VALIDATION FAILED	a parse support routine rejected this parameter	check the parameter for obvious problems
POSITIONAL PARM MISSING	a required positional parameter was omitted	add the required parameter
INVALID DSNAME LENGTH	the data set name has more than 44 characters	correct the data set name
INVALID DATA SET NAME	the data set is incorrectly constructed	check the data set name for obvious problems

Error text	Probable cause	Suggested action
INVALID MEMBER NAME	the member name is incorrectly constructed	correct obvious errors
INVALID MEMBER LENGTH	member name has more than 8 characters	correct obvious errors
INVALID RANGE VALUE	first value exceeds the second one	change either value

PDS845E `Syntax error; ignored due to END`

Explanation: The subcommand entered was discarded because of an **END** command. To correct a syntax error, overtype corrections followed by pressing the Enter key.

PDS848E `RENAME failed; this name is already present on this volume`

Explanation: This data set can not be renamed because another data set on this volume with this name is already present on this volume.

PDS849E `Volume volser has an indexed VTOC`

Explanation: This data set cannot be renamed because this volume has an indexed VTOC.

Solution: To rename this data set, unindex this volume, rename the data set and reindex the volume again.

PDS850E *memname* `is being updated by` *username*

Explanation: This member is being modified by the named user or JOB. This member is currently owned by the indicated user or JOB and its status cannot be changed.

PDS851E `This data set is being updated by` *username*

Explanation: This data set is being modified by the named user or JOB with an edit program. This data set is currently owned by the indicated user or JOB and its status cannot be changed.

PDS852E *memname* `already exists`

Explanation: This member cannot be added to the data set since it is already in the data set.

PDS853E *memname* `not found`

Explanation: This member is not in the data set; the requested function requires an existing member and it cannot be performed.

PDS854E *memname* `is an invalid member name`

Explanation: This member name is invalid.

Solution: Type member names in character or hexadecimal mode.

- Character member names can be from one to eight bytes long with no imbedded blanks, commas, parentheses, asterisks, colons, slashes, question marks or percent symbols.
- Hexadecimal member names can contain from one to sixteen hexadecimal digits delimited by ' and '. Note: x'd7c4e2c5' and PDSE are equivalent; x'333' and x'0333' are equivalent.
- Member names for services external to StarTool FDM such as EDIT, BROWSE, PRINT or COMPARE have more stringent requirements:
- The member name is from one to eight characters long.

- The first character of the name must be a alphabetic or national character.
- Any additional characters should be alphabetics, numerics or nationals.

PDS855E `The data set directory is full and members cannot be added`

Explanation: The directory is full. If you are trying to save a member using an editor, save it in another data set before continuing.

Solution: This type of problem can be resolved in several ways:

- Clean up the data set directory by deleting obsolete members and make room for new member names.
- Split the data set into two (or more) data sets.
- Reallocate the data set (with a larger directory) and copy all old members to the replacement.
- Expand the directory with FIXPDS. For example, type FIXPDS EXPAND(30) to add 30 directory blocks.

PDS856E `STOW error, R15=`*`nn`*`, R0=`*`hexvalue`*

Explanation: An update to a member failed with the indicated return code and reason code. STOW return codes and reason codes are:

Return Code	Reason Code	Explanation
R15=20	R0=00000000	The data control block is not open, is open for input, or a DEB error occurred.
R15=20	R0=00000004	The initialize function was specified for a PDSE with DISP=SHR.
R15=24	R0=00000000	Insufficient virtual storage was available to perform the STOW function.
R15=28	R0=00000000	The DCB defined a PDS; initialize only supports PDSE data sets.
R15=28	R0=00000004	STOW add or replace was attempted for a member of a PDSE with load modules (Program Objects).
R15=36	R0=00000000	For a PDSE, the alias has an invalid TTR.
R15=40	R0=00000000	For a PDSE, user-supplied TTRs are in the user field of the directory entry.
R15=48	R0=00000004	For a PDSE, the add failed because you cannot add a primary member name while the data set is open for update.
R15=48	R0=00000008	For a PDSE, the replace failed because you cannot replace a primary member name while the data set is open for update and the specified member name does not exist.
R15=48	R0=0000000C	For a PDSE, the replace failed because you cannot replace an alias name if it is the same name as the primary member.
R15=48	R0=00000010	For a PDSE, the add or replace failed when attempting to add or replace an alias, but the member identified by the TTR did not exist.
R15=48	R0=00000014	For a PDSE, the replace failed when attempting to replace a primary member name while the data set is open for update and the member name identified an existing alias.

Return Code	Reason Code	Explanation
R15=48	R0=00000018	For a PDSE, the replace failed when attempting to replace a primary member name while the data set is open for update, but the input TTR has not been defined for that member.
R15=52	R0=00000000	For a PDSE, one or more members were placed in a pending delete state. The space taken by those modules is not immediately available for reuse.

PDS857E `Binder error in service: r15=nn, rs=hexvalue`

Explanation: An unexpected return code and reason code were returned by a binder interface call. Programs request binder services through an interactive session called a dialog. An area of working storage used to create or operate on a program module is called a workmod.

The binder interface service name in this message is:

ADDA	Add an alias
ALIGNT	Align text in a workmod
ALTERW	Alter a workmod
BINDW	Bind a workmod
CREATEW	Create a workmod
DELETEW	Delete a workmod
ENDD	End dialog
GETD	Get data
GETE	Get ESD data
GETN	Get CSECT names
INCLUDE	Include a module
INSERTS	Insert a section
LOADW	Load a workmod
ORDERS	Order section
RESETW	Reset a workmod
SAVEW	Save a workmod
SETL	Set library
SETO	Set options
STARTD	Start a dialog
STARTS	Start a segment

The return codes set by the binder are interpreted as follows:

Return Code	Explanation
RC=00	Successful completion of the operation
RC=04	Successful completion, but an unusual condition existed. See the reason code explanation.
RC=08	Error condition detected but corrective action was taken by the binder.
RC=12	Severe error encountered. The requested operation could not be completed but the dialog continues.
RC=16	Terminating error. The binder dialog could not be continued because the integrity of binder data could not be assured.

Several return code and reason codes are common to multiple services:

Return Code	Reason Code	Explanation
R15=12	R0=83000001	Invalid workmod token. Request rejected.
R15=12	R0=83000002	Invalid dialog token. Request rejected.
R15=12	R0=83000003	Binder invoked from within user exit. Request rejected.
R15=12	R0=83000004	Invalid function code specified. Request rejected.
R15=12	R0=83000005	Invalid parameter. Request rejected.
R15=12	R0=83000008	Wrong number of arguments specified. Request rejected.
R15=12	R0=83000009	Parameter list contains invalid addresses or refers to storage that is not accessible by the binder. Request rejected.
R15=12	R0=83000010	Parameter list is not accessible by the binder. Request rejected.
R15=16	R0=83000050	Storage limit established by workspace option exceeded. Dialog terminated.
R15=16	R0=83000051	Insufficient storage available. Dialog terminated.
R15=16	R0=83000060	Operating system not at correct DFSMS/MVS level. No dialog established.
R15=16	R0=83000FFF	IEWBIND module could not be loaded. No dialog established.
R15=16	R0=83EE2900	Binder logic error. Dialog terminated.
R15=16	R0=83FFaaa0	Binder ABEND occurred. Dialog terminated. 'aaa' is the system ABEND code.

Return codes and service codes that are unique to a particular dialog service are:

ADDA – Add an alias

Return Code	Reason Code	Explanation
R15=04	R0=83000711	Alias name has already been assigned. This request replaces the previous request for this alias name.
R15=12	RS=83000001	Invalid workmod token. Request rejected.
R15=12	RS=83000006	Section is being built and only STARTD, ENDD, DELETEW, CREATEW and RESETW are allowed until the section is complete.

ALIGNT – Align text in a workmod

Return Code	Reason Code	Explanation
R15=04	R0=83000710	Duplicate alignment request. A request to page align this section has already been processed. The request is ignored.
R15=12	RS=83000001	Invalid workmod token. Request rejected.
R15=12	RS=83000006	Section is being built and only STARTD, ENDD, DELETEW, CREATEW and RESETW are allowed until the section is complete.
R15=12	RS=83000104	Function not allowed for INTENT=ACCESS. Request rejected.

ALTERW – Alter a workmod

Return Code	Reason Code	Explanation
R15=04	R0=83000702	LDNAME was not found. For an immediate-mode change or replace request, no ESD in the module contained the specified name.
R15=04	RS=83000706	Duplicate name. For an immediate-mode request, the replacement name already exists as an external symbol in the target workmod. The old name or section is deleted if necessary, and the requested change is made.
R15=08	RS=83000550	A section for which an expand request was made is not in the target workmod. The workmod is unchanged.
R15=08	RS=83000551	The name on an expand request matched a symbol in the workmod that was not a section name. The workmod is unchanged.
R15=08	RS=83000552	The name on an expand request is blank. The workmod is unchanged.
R15=08	RS=83000553	Expand request for more than 1 gigabyte. The workmod is unchanged.
R15=12	RS=83000001	Invalid workmod token. Request rejected.
R15=12	RS=83000006	Section is being built and only STARTD, ENDD, DELETEW, CREATEW and RESETW are allowed until the section is complete.
R15=12	RS=83000104	Function not allowed for INTENT=ACCESS. Rejected.

BINDW – Bind a workmod

Return Code	Reason Code	Explanation
R15=04	R0=83000300	Unresolved external references exist. NCAL, NOCALL, or NEVERCALL specified. Workmod has been bound.
R15=04	RS=83000308	Unresolved external references exist. A member matching the unresolved reference was included during autocall, but did not contain an entry label of the same name. Workmod has been bound.
R15=04	RS=83000314	At least one valid exclusive call was found in module bound in overlay format. The XCAL option was specified. Workmod has been bound.
R15=04	RS=83000316	The overlay option was specified, but there is only one segment. Workmod has been bound, but not in overlay format.
R15=08	RS=83000301	Unresolved external references exist. The referenced symbols could not be resolved from the autocall library. Workmod has been bound.
R15=08	RS=83000302	Unresolved external references exist. No autocall library specified. Workmod has been bound.

Return Code	Reason Code	Explanation
R15=08	RS=83000303	Unresolved external references exist. The members were located in the autocall library, but an error occurred while attempting to include one or more of the members. References to the members that could not be included remain unresolved. Workmod has been bound.
R15=08	RS=83000304	The name in an insert request was not resolved, or was not resolved to a section name. Workmod has been bound.
R15=08	RS=83000305	An ORDER request was processed for a symbol that is not a label in the ESD. Ordering of that symbol has been ignored. Workmod has been bound.
R15=08	RS=83000307	The module was bound successfully, but the module map or cross reference table could not be produced.
R15=08	RS=83000309	An ALIGN request was processed for a symbol that is not a label in the ESD. Alignment of that symbol is ignored. Workmod has been bound.
R15=08	RS=83000310	One or more alteration requests were pending upon entry to autocall. The alterations were ignored. Workmod has been bound.
R15=08	RS=83000311	Workmod has more than one segment, but OVLY was not specified. The overlay structure was ignored. Workmod has been bound.
R15=08	RS=83000313	A V-type address constant of less than four bytes that references a segment other than the resident segment has been found in an overlay segment. Workmod has been bound.
R15=08	RS=83000315	At least one invalid exclusive call was found in a module bound in overlay format. Workmod has been bound but the adcon for invalid call will not be properly relocated.
R15=08	RS=83000317	At least one valid exclusive call was found in a module bound in overlay format. Workmod has been bound.
R15=08	RS=83000318	There are no calls or branches from the root segment of an overlay module to a segment lower in the tree structure. Other segments can not be loaded. Workmod has been bound.
R15=08	RS=83000501	One or more control statements were included during autocall processing. The statements were ignored.
R15=12	RS=83000001	Invalid workmod token. Request rejected.
R15=12	RS=83000006	Section is being built. Only STARTD, ENDD, DELETEW, CREATEW and RESETW are allowed until the section is complete. Request rejected.
R15=12	RS=83000104	INTENT=ACCESS specified for workmod. Module could not be rebound. Request rejected.
R15=12	RS=83000312	There are no sections or only zero-length sections in the root segment of an overlay module and the module probably can not be executed. Workmod has been bound.
R15=12	RS=83000320	An autocall library is unusable. Either it could not be opened or the directory could not be processed. Autocall processing continues without using this library.

Return Code	Reason Code	Explanation
R15=12	RS=83000415	Module contains no ESD data and could not be bound.
R15=12	RS=83000719	Module contained no text after being bound and is probably not executable. Processing continues.

CREATEW – Create a workmod

Return Code	Reason Code	Explanation
R15=12	R0=83000002	Invalid dialog token. Request rejected.

DELETEW – Delete a workmod

Return Code	Reason Code	Explanation
R15=04	R0=83000701	The workmod was in an altered state but PROTECT=NO was specified. The workmod is deleted.
R15=12	RS=83000001	Invalid workmod token. Request rejected.
R15=12	RS=83000707	The workmod was in an altered state and PROTECT=YES was specified or defaulted. The delete request is rejected.

ENDD – End dialog

Return Code	Reason Code	Explanation
R15=04	R0=83000700	One or more workmods were in an active state but PROTECT=NO was specified. The dialog is terminated.
R15=08	RS=83000704	An unexpected condition occurred while ending the dialog. The dialog was terminated but some resources may not have been released.
R15=12	RS=83000708	One or more workmods were in an active state and PROTECT=YES was specified or defaulted. The dialog is not terminated.
R15=12	RS=83000002	Invalid dialog token. Request rejected.

GETD – Get data

Return Code	Reason Code	Explanation
R15=04	R0=83000800	Normal completion. Some data may have been returned in the buffer and an end of data condition was encountered.
R15=08	RS=83000801	The requested item did not exist or was empty. No data has been returned.
R15=12	RS=83000001	Invalid workmod token. Request rejected.
R15=12	RS=83000006	Section is being built. Only STARTD, ENDD, DELETEW, CREATEW and RESETW are allowed until the section is complete. Request rejected.
R15=12	RS=83000102	Workmod was in an unbound state. GETD request could not be processed.

GETE – Get ESD data

Return Code	Reason Code	Explanation
R15=04	R0=83000800	Normal completion. Some data may have been returned in the buffer and an end of data condition was encountered.
R15=08	RS=83000705	The requested symbol could not be located in the workmod. No data has been returned.
R15=08	RS=83000801	The requested item did not exist or was empty or no record met the specified criteria. No data has been returned.
R15=08	RS=83000812	The specified offset was negative or beyond the end of the designated item or module. No data has been returned.
R15=12	RS=83000001	Invalid workmod token. Request rejected.
R15=12	RS=83000006	Section is being built. Only STARTD, ENDD, DELETEW, CREATEW and RESETW are allowed until the section is complete. Request rejected.
R15=12	RS=83000101	OFFSET and SYMBOL have both been specified. Request rejected.
R15=12	RS=83000102	Workmod was in an unbound state. GETE request could not be processed.

GETN – Get CSECT names

Return Code	Reason Code	Explanation
R15=04	R0=83000800	Normal completion. Some data may have been returned in the buffer and an end of data condition was encountered.
R15=08	RS=83000801	No section names exist. No data was returned.
R15=08	RS=83000810	Cursor is negative or beyond the end of the end of the specified item. No data has been returned.
R15=12	RS=83000001	Invalid workmod token. Request rejected.
R15=12	RS=83000006	Section is being built. Only STARTD, ENDD, DELETEW, CREATEW and RESETW are allowed until the section is complete. Request rejected.
R15=12	RS=83000102	Workmod was in an unbound state. GETN request could not be processed.

INCLUDE – Include a module

Return Code	Reason Code	Explanation
R15=04	R0=83000515	Unsupported control statement encountered in included file. File was included successfully.
R15=04	RS=83000525	An unusual condition was encountered while processing a REPLACE or CHANGE statement.
R15=04	RS=83000526	An unusual condition was encountered in an input module while converting it into workmod format. For example, this error may be caused by a two-byte relocatable adcon.

Return Code	Reason Code	Explanation
R15=08	RS=83000502	One or more editing requests (delete, change or replace) failed during inclusion of the module. The module was included successfully but some of the requested changes were not made.
R15=08	RS=83000504	The module was successfully included but the ALIASES or ATTRIB option could not be honored because the directory was not accessible.
R15=08	RS=83000505	The module was marked "not editable" and has been deleted.
R15=08	RS=83000507	A format error has been encountered in a module being included. The module was not added to the target workmod.
R15=08	RS=83000511	A control statement in an included file attempted to include the file containing the statement or included another file that included the original file. The recursive include has been rejected.
R15=08	RS=83000516	A format error has been encountered in one or more control statements being included. The erroneous statements have been ignored.
R15=08	RS=83000517	A NAME control statement has been found but no target (MODLIB) has been specified. The statement was ignored.
R15=08	RS=83000518	A NAME control statement was encountered in a secondary input file. The statement was ignored.
R15=08	RS=83000519	Errors (invalid data) were found in a module being brought in by an INCLUDE control statement. The module was not included.
R15=08	RS=83000520	The data set or library member specified by an INCLUDE control statement could not be found and it was not included.
R15=08	RS=83000521	An I/O error occurred while trying to read an input data set (or directory) specified on an INCLUDE control statement and it was not included.
R15=08	RS=83000522	The input data set specified on an INCLUDE control statement could not be opened. The data set or member was not included.
R15=12	RS=83000001	Invalid workmod token. Request rejected.
R15=12	RS=83000006	Section is being built. Only STARTD, ENDD, DELETEW, CREATEW and RESETW are allowed until the section is complete. Request rejected.
R15=12	RS=83000101	Not all parameters required for the specified INTYPE were provided. Request rejected.
R15=12	RS=83000103	INTENT=BIND was specified but the INTYPE was not DDNAME. Request rejected.
R15=12	RS=83000500	The INCLUDE call has attempted to include a second module with a processing intent of ACCESS. The request has been rejected.
R15=12	RS=83000503	An I/O error while trying to read the input data set or directory. The input is not usable.
R15=12	RS=83000506	An attempt has been made to include an object module specified with ACCESS intent. Request rejected.

Return Code	Reason Code	Explanation
R15=12	RS=83000509	An attempt has been made to include a file containing control statements but the workmod specified INTENT=ACCESS. Request rejected.
R15=12	RS=83000510	Error were encountered in the included module. The module is rejected.
R15=12	RS=83000512	The designated source for the current INCLUDE contained more than one module but the target workmod specified INTENT=ACCESS. Request rejected.
R15=12	RS=83000513	The file could not be opened. Request rejected.
R15=12	RS=83000514	The requested member could not be found in the library or the library could not be found. Request rejected.
R15=12	RS=83000523	For intent access, the requested module contained a format error and has not been placed in a workmod. Request rejected.

INSERTS – Insert a section

Return Code	Reason Code	Explanation
R15=04	R0=83000711	An insert was already processed for this section and has been replaced.
R15=12	RS=83000001	Invalid workmod token. Request rejected.
R15=12	RS=83000006	Section is being built and only STARTD, ENDD, DELETEW, CREATEW and RESETW are allowed until the section is complete. Request rejected.
R15=12	RS=83000104	INSERT is not valid against a workmod specified with INTENT=ACCESS. Request rejected.

LOADW – Load a workmod

Return Code	Reason Code	Explanation
R15=04	R0=83000603	The AMODE or RMODE of one or more input ESD records is incompatible with the AMODE or RMODE of the primary entry point.
R15=04	RS=83000605	No entry name has been provided either by the user or from any object module processed. The entry point will default to the first text byte.
R15=04	RS=83000655	The buffer provided room only for one extent but a second extent exists for the loaded module. The module was loaded successfully.
R15=04	RS=83000657	The module was loaded with AMODE(24) but one or more references in the module were resolved to modules in the Extended LPA. The load was successful.
R15=08	RS=83000306	The module was loaded but the binder could not produce the load summary report.
R15=08	RS=83000650	The entry name specified was not defined in the loaded module. The entry point will default to the first text byte.

Return Code	Reason Code	Explanation
R15=12	RS=83000001	Invalid workmod token. Request rejected.
R15=12	RS=83000006	Section is being built and only STARTD, ENDD, DELETEW, CREATEW and RESETW are allowed until the section is complete. Request rejected.
R15=12	RS=83000101	Identify was set to NO but no extent list buffer was provided. Request rejected.
R15=12	RS=83000415	The module to be loaded contains no text. Execution is impossible.
R15=12	RS=83000651	The IDENTIFY for the loaded module failed probably due to the existence of another module of the same name. The module was loaded successfully but can not be accessed by system-assisted linkage.
R15=12	RS=83000652	Sufficient storage was not available to load the module; it could not be loaded.
R15=12	RS=83000653	An error of severity greater than that allowed by the current LET value was encountered. The module could not be loaded.
R15=12	RS=83000656	The module was loaded in overlay format and can not be loaded. Request rejected.

ORDERS – Order section

Return Code	Reason Code	Explanation
R15=04	R0=83000711	A previous order request for this section was received and has been replaced.
R15=12	RS=83000001	Invalid workmod token. Request rejected.
R15=12	RS=83000006	Section is being built and only STARTD, ENDD, DELETEW, CREATEW and RESETW are allowed until the section is complete. Request rejected.
R15=12	RS=83000104	An ORDERS request is invalid against a workmod specified with INTENT=ACCESS. Request rejected.

RESETW – Reset a workmod

Return Code	Reason Code	Explanation
R15=04	R0=83000703	The workmod was in altered state but PROTECT=NO was specified. The workmod was reset as requested.
R15=12	RS=83000001	Invalid workmod token. Request rejected.
R15=12	RS=83000009	The workmod was in altered state but PROTECT=YES was specified or defaulted. RESETW request rejected.

SAVEW – Save a workmod

Return Code	Reason Code	Explanation
R15=04	R0=83000400	The module has been saved as requested but has been marked "not-editable".
R15=04	RS=83000411	A module saved as a program object had the SCTR attribute specified. The SCTR attribute was ignored.
R15=04	RS=83000420	A module saved as a load module contained incompatible data. Some auxiliary information may have been lost (for example, IDRU records may have been lost).
R15=04	RS=83000603	The AMODE or RMODE of one or more input ESD records is incompatible with the AMODE or RMODE of the primary entry point.
R15=04	RS=83000605	No entry name has been provide either by the user or from any object module processed. The entry point will default to the first text byte.
R15=08	RS=83000306	The module was saved successfully but the save operation summary could not be printed.
R15=08	RS=83000401	One or more aliases could not be added to the target directory. Module was saved as requested, however.
R15=08	RS=83000402	The entry name specified is not defined in the module being saved. The entry point will default to the first text byte.
R15=08	RS=83000410	An error was encountered while saving a workmod. The module was saved but may not be executable.
R15=12	RS=83000001	Invalid workmod token. Request rejected.
R15=12	RS=83000006	Section is being built and only STARTD, ENDD, DELETEW, CREATEW and RESETW are allowed until the section is complete. Request rejected.
R15=12	RS=83000404	The module exceeded the limitations for load modules and could not be saved in the specified PDS library.
R15=12	RS=83000405	A permanent write error was encountered while attempting to write the load module. The save operation terminated prematurely and the module is unusable.
R15=12	RS=83000406	A permanent read error was encountered while attempting to write the load module. The save operation terminated prematurely and the module is unusable.
R15=12	RS=83000407	No valid member name has been provided. Request rejected.
R15=12	RS=83000408	The workmod has been marked not executable and can not replace an executable version. Request rejected.
R15=12	RS=83000409	A member of the same name already exists in the target library but the REPLACE option was not specified. The module was not saved**.**
R15=12	RS=83000413	One or more external references in the workmod were bound to modules in the Link Pack Area. The module can not be saved.
R15=12	RS=83000415	The module is empty (contains no non-empty sections) and will not be saved unless LET=12.

Return Code	Reason Code	Explanation
R15=12	RS=83000416	No DDNAME has been specified for the target library. Request rejected.
R15=12	RS=83000417	The target data set is not a library. Request rejected.
R15=12	RS=83000418	The target data set is not a load library. Request rejected.
R15=12	RS=83000421	Text longer than 1 gigabyte in program object. Module not saved.
R15=12	RS=83000600	The target library could not be found.
R15=12	RS=83000601	The binder could not successfully close the output library.
R15=12	RS=83000602	The binder could not successfully open the output library.

SETL – Set library

Return Code	Reason Code	Explanation
R15=04	R0=83000711	This request replaced a previous SETLIB request for the same symbol.
R15=12	RS=83000001	Invalid workmod token. Request rejected.
R15=12	RS=83000006	Section is being built and only STARTD, ENDD, DELETEW, CREATEW and RESETW are allowed until the section is complete. Request rejected.
R15=12	RS=83000101	The LIBOPT and CALLIB parameters were inconsistent. Either LIBOPT=C and CALLIB was omitted or LIBOPT=N or E and CALLIB was present. Request rejected.
R15=12	RS=83000104	The SETL function is invalid against a workmod specified with INTENT=ACCESS. Request rejected.

SETO – Set options

Return Code	Reason Code	Explanation
R15=12	R0=83000001	Invalid workmod token. Request rejected.
R15=12	RS=83000002	Invalid dialog token. Request rejected.
R15=12	RS=83000006	Section is being built and only STARTD, ENDD, DELETEW, CREATEW and RESETW are allowed until the section is complete. Request rejected.
R15=12	RS=83000100	Neither dialog token nor workmod were specified. Request rejected.
R15=12	RS=83000106	The option specified is invalid for a workmod specified with INTENT=ACCESS. Request rejected.
R15=12	RS=83000107	Invalid option keyword specified. Request rejected.
R15=12	RS=83000108	The option value is invalid for the specified keyword. Request rejected.

STARTD – Start a dialog

Return Code	Reason Code	Explanation
R15=04	R0=83000204	The binder was unable to open the trace data set during initialization. Processing continues without trace.
R15=08	RS=83000200	The binder was unable to open the PRINT data set during initialization. Processing continues without PRINT.
R15=08	RS=83000201	One or more invalid options were passed on STARTD. These options were not set but processing continues.
R15=08	RS=83000203	The binder was unable to open the TERM data set during initialization. Processing continues without TERM.
R15=08	RS=83000205	The current time was not available from the operating system. Time and date information in printed listings and IDR records will be incorrect.

STARTS – Start a segment

Return Code	Reason Code	Explanation
R15=12	R0=83000001	Invalid workmod token. Request rejected.
R15=12	RS=83000006	Section is being built and only STARTD, ENDD, DELETEW, CREATEW and RESETW are allowed until the section is complete. Request rejected.
R15=12	RS=83000104	The STARTS function is not valid against a workmod specified for INTENT=ACCESS. Request rejected.
R15=12	RS=83000712	The maximum of 4 regions will be exceeded. Request rejected.
R15=12	RS=83000713	The maximum of 255 segments will be exceeded. Request rejected.

Solution: If you get any of the above return code and reason code combinations, it is probably because of a StarTool FDM or binder error. Call Micro Focus Customer Support for assistance.

PDS858E `No default member has been established`

Explanation: A command that refers to the current member group (such as MEMBERS *) can only be entered after a default member name or member group is established. To establish a default member name or member group, use any of the following commands:

```
MEMBERS abc          member ABC
EMBERS (abc,xyz)     members ABC and XYZ
MEMBERS :            all members -- X'00' through X'FF'
MEMBERS dd:          members from DD... through X'FF'
MEMBERS =            members from the MEMLIST table
MEMBERS :bb          members from X'00' through BB
MEMBERS aa:bb        members between AA... and BB
MEMBERS (abc,d:)     member ABC and those from D through X'FF'
MEMBERS aa/          member names containing AA anywhere
MEMBERS /bb          member names containing BB anywhere
MEMBERS aa/bb        member names containing AA and BB
MEMBERS a?a/bb       member names containing A.A and BB
```

MEMBERS (aa/,bb/)	member names containing AA or BB
MEMBERS aa*	members with names AA
MEMBERS *bb	members with names containing BB anywhere
MEMBERS aa?	members with names AA (three character member names)
MEMBERS ?bb	members with names .BB (three character member names)
MEMBERS aa*bb	members with names AA and BB elsewhere
MEMBERS a?a*bb	members with names A.A and BB elsewhere
MEMBERS (aa*,bb/)	members with names AA or with BB anywhere

After you enter a subcommand, use ***** to refer to the current member group. You can determine if a member group is current by examining the normal StarTool FDM prompt message (PDS300A). If the MEM= is followed by a blank, no default member group has been established.

PDS859E `External command name is not installed`

Explanation: The named TSO command is required to support a StarTool FDM subcommand but it could not be found in the LINKLIST, in your STEPLIB data sets or in the LPALIB. Ensure that the required TSO command is available from one of the above sources before trying this subcommand again.

Several StarTool FDM subcommands are optional. This subcommand was not disabled during installation and the supporting external TSO command is not available in your TSO session.

For installations that use CA-ACF2, this message can be issued if a program being executed by StarTool FDM with IKJEFTSR (such as PDSEAUTH or IDCAMS) are not in the CA-ACF2 command limiting list. Refer to *PDSEAUTH in the* StarTool FDM *Installation Guide* for more details.

PDS860E *memname* `is an alias but no main member exists`

Explanation: This alias member, known as an orphan, has no associated main member. This error is caused by not linking a main module and all of its aliases. Reinstall the main module and its aliases.

Solution: To correct this problem with StarTool FDM, issue the following subcommands for each identified orphan member:

DELETE *memberz*

where *memberz* is the orphan member.

ALIAS *memberx memberz*

where *memberx* is the correct main member.

PDS861E `The alias directory entry notes the main member name as` *memname*

Explanation: Displays the name of the main member for this alias member as noted by its directory entry.

PDS862E `Error in GQSCAN data`

Explanation: Indicates that **ENQUEUE** check parameters are incorrect.

PDS863E `This member is an alias for itself`

Explanation: The main name for this alias entry is the same as the main name; it points to itself. If this module is loaded, a CSV023I error message is issued to indicate the definition error; the load of the module will fail.

Solution: To correct this problem with StarTool FDM, issue a RENAME subcommand to change the member's name.

PDS864E *`memname`* `is an apparent alias for this member`

Explanation: This member and the identified member both have the same TTR address but neither has its alias bit set. These members are called apparent aliases and the actual owner of the member data cannot be determined by StarTool FDM.

A cause of this problem is an open/close/EOV situation (OZ44857 -- also documented in II00587) in which opening a partitioned data set causes the FORMAT1 DSCB to be rewritten. If this occurs while the data set is open for update or output, then the DS1LSTAR (last TTR pointer) can be invalidated.

This situation only occurs on the first access of each day. Some MVS system modifications cause the DSCB to be updated more often and increase the exposure for duplicate TTRs and overlaid members.

If the data set is copied or compressed, IEBCOPY hides this error by creating two identical members during the copy.

Solution: To correct this problem with StarTool FDM, determine which apparent alias member name should correspond to the member data and issue the following subcommand:

DELETE memberx

where *memberx* is the non-corresponding member name)

PDS865E `The IEBCOPY output can not be opened`

Explanation: A compress or copy was performed but a summary of IEBCOPY's messages cannot be provided since the message data set cannot be opened.

PDS866E `PDSCOMPD does not support the SuperEdit option`

Explanation: The AUTH subcommand can only enable the SUPEREDIT option with a current level of PDSCOMPD. This version of PDSCOMPD is from an earlier level of StarTool FDM.

Solution: Retry this subcommand with a current level of PDSCOMPD if you want to test the SUPEREDIT option.

PDS867E `ISPF current member size (nnn) is mismatched with actual size for` *`memname`*

Explanation: The ISPF statistics for SIZE of this member do not agree with the number or actual members in this member. This message is not issued for ISPF packed members.

Solution: To correct this, use the ATTRIB subcommand with the RESIZE keyword.

PDS868E `USERID can not be changed for JOBTRAC data sets`

Explanation: Any data set with a name like "*anything*.JOBTRAC.TRAC*anything*" is considered a CA-JOBTRAC data set and changes of ISPF USERID is not permitted because this does not permit JOBTRAC to control individual members of the data set.

PDS869E BLOCK or DUMP formats do not support AND, OR COLS or FORMAT

Explanation: The **LIST, FIND** and **REPLACE** subcommands only support AND, OR, COLS and FORMAT for members when formats NUM, NONUM or SNUM is in effect.

For VSAM data sets or load members, these keywords cannot be used since only formats DUMP, LDUMP, BLOCK or LBLOCK are supported.

PDS870E PDS directories must be contained in one extent

Explanation: The directory of a partitioned data set must be totally contained in the first extent of the data set.

Solution: From **VERIFY**, it indicates that your data set was allocated with a invalid directory. Do not use the data set since it can fail in program load or when used by IEBCOPY.

From **FIXPDS**, it indicates that your data set requires more than its first extent to contain the expanded (or reset) directory. This is not permitted since it creates an invalid data set directory.

PDS871E A TTR for this member was not found

Explanation: Because of an error condition, a record pointed by this member's directory entry could not be found in this load module.

This message may be due to data set or equipment errors. A **VERIFY** subcommand may provide more **information**.

If this error occurs in FIXPDS, the subcommand is terminated before changing the member in error. Any previously moved members and their associated aliases are fully updated, however.

If this problem is due to data set errors, the data set may be damaged and should be recovered.

PDS872E This member is after the data set end-of-file

Explanation: This member's data follows the end of data set marker (DS1LSTAR) for this data set. To ensure that this diagnostic message is valid, StarTool FDM reopens the data set from the input routine in case another user saved into the data set. If the DS1LSTAR pointer is still less than this member's start address, this message is issued.

Indicates that your data set contains one or more invalid TTR pointers and that the data set is damaged. The data set should be recovered.

PDS873E TTR is beyond the used portion of the data set

Explanation: A TTR pointer in this member's directory has a value that exceeds the end of data marker (DS1LSTAR) for the data set.

This error indicates that your data set contains one or more invalid TTR pointers and that the data set has been damaged. The data set should be recovered.

PDS874E TSO command name is invalid

Explanation: TSO SCAN service indicates that this TSO command name is invalid. Valid TSO command names follow these rules:

- The TSO command name should be from one to eight bytes long.

- The first character of the TSO command name must be an alphabetic or national character.
- Any additional characters should be alphabetics, numerics or nationals.

PDS875E This data set has no directory blocks

Explanation: This is a null data set. It contains no tracks and consequently, no directory blocks and no members.

When the data set takes an extent, it receives actual disk tracks and directory blocks.

PDS876E A directory record has an incorrect length (not 256 bytes)

Explanation: This data set has an invalid directory block. Directory blocks should be 256 characters long and each block should contain an eight-byte key.

This error indicates that your data set was written over. The data set should be recovered.

PDS877E Invalid subcommand name

Explanation: TSO SCAN service indicates that this subcommand name is invalid. Valid subcommand names follow these rules:

- The subcommand name should be from one to eight bytes long.
- The first character of the subcommand name must be an alphabetic or national character.
- Any additional characters should be alphabetic, numeric or national characters.

PDS880E Residence mode ANY and addressing mode *xxx* are incompatible

Explanation: Residence mode ANY and an addressing mode of 24 are incompatible. This is an invalid combination of linkage editor attributes.

PDS881E Reentrant attribute conflicts with not reusable

Explanation: A reentrant attribute is incompatible with a not reusable attribute. This is an invalid combination of linkage editor attributes.

PDS882E Test attribute conflicts with not edit

Explanation: A test attribute is incompatible with a **not edit** attribute. This is an invalid combination of linkage editor attributes.

PDS883E Reusable attribute conflicts with scatter

Explanation: A reusable attribute is incompatible with a scatter load attribute. This is an invalid combination of linkage editor attributes.

PDS884E Overlay attribute conflicts with *xxxx*

Explanation: The overlay attribute and any of the following attributes are incompatible:

A31	AMODE 31
AANY	AMODE ANY
RENT	reentrant
REUS	reusable
SCTR	scatter
RANY	RMODE ANY

PDS885E **More than one output member would be named *memname***

Explanation: For a COMPDIR, COPY, DUP or REPRO operation with the AS or TO keyword, multiple members can map to the same output member name. For example, if the member names A03BY, BONBY and CONCY are input and AS(ZZZ) is in effect, only the output member names ZZZBY and ZZZCY result.

PDS891E **VTOC read error, VOL=*volnam*, TRACKS=*nnnn*, ECB=*xx***

Explanation: StarTool FDM inputs VTOC information for the VMAP and LISTF functions by reading an entire cylinder at a time by chaining several read multiple operations together. Each read multiple operation reads an entire disk track.

StarTool FDM normally reads the entire VTOC regardless of the value in the DS4HPCHR field (DS4HPCHR indicates the address of the last Format 1 DSCB but it is not maintained in an Indexed VTOC environment).

Because StarTool FDM reads the entire VTOC, it is sensitive to data errors anywhere in the VTOC. The PDS991E message is issued after a read of a VTOC track fails. The number of tracks reported can be used to calculate the track with the problem data.

For example, if you get the following message:

PDS891E VTOC read error; VOL=FOX804; TRACKS= 21; ECB=41

the first 21 tracks of the VTOC were read successfully before a data error was encountered. Some types of read multiple errors are transient in nature. Retry the VMAP or LISTF operation to see if this error is repeatable.

Data errors in a VTOC can be cleaned up with a ICKDSF INSPECT function. To perform this operation, determine the CCHH address of the VTOC for the volume with the StarTool FDM LISTV function.

Assuming an error on volume FOX804, type **LISTV FOX804** from the LOG. After obtaining the display for the volume, press the **RIGHT** PF key to display an alternate format like the following:

```
VOLUME DATA/MSG DEV  DEV   - MOUNT - STORAGE  USE -----VTOC----...
      NAME  -------- ADDR TYPE  ATTR STAT -GROUP-  CNT --CCHH-- SIZE...
     FOX804           3AC 3390M3 PRI PRES           31 03720005   55...
```

Since a 3390M3 device contains 15 tracks in a cylinder, the CCHH address of the track containing the data error is 0373000B (or hexadecimal 0372+0001 and hexadecimal 0005+0006). You can execute ICKDSF to inspect and correct data on several tracks near this error by submitting a job similar to the following:

```
//FIXTRK  EXEC  PGM=ICKDSF
//SYSPRINT  DD  SYSOUT=*
//VOLUME    DD  DISP=SHR,VOL=SER=FOX804,UNIT=3380
//SYSIN     DD  *
 INSPECT DDNAME(VOLUME) NOSKIP CYLRANGE(X'0373',X'0373') -
    HEADRANGE=(10,12) CHECK(2) ASSIGN PRESERVE NOVERIFY
```

Notes on the above INSPECT statement for ICKDSF:

DDNAME points to the DDNAME allocated in the JCL (//VOLUME).
NOSKIP performs primary surface checking. SKIP also performs skip displacement checking (use SKIP if you want a more extensive test).

CYLRANGE cylinder range to check from your calculations.
HEADRANGE head range to check from your calculations.
CHECK number of repeated track checks desired.
ASSIGN flags specific tracks. ICKDSF can also assign new alternate tracks.
PRESERVE saves data from the inspected track and restores it.
NOVERIFY bypasses verification of the volume name.

PDS892E Read multiple failed at TTR=*ttraddr*; CCHHR=*cc.hh.rr*

Explanation: StarTool FDM has an input mode called "read multiple" that can read an entire track of disk data at a time. A read multiple can fail for any of several reasons:

I/O error	an I/O error is on the current track
Invalid address	the disk TTR address provided is invalid
Skip displacement	bad spots on the track are not bypassed
Track overrun	too much data is recorded on a physical track

After a read multiple input fails StarTool FDM uses its alternate double buffering input mode for the remainder of the subcommand. In many cases, double buffering also fails during the read of data on this track due to I/O or other errors. With the next subcommand, read multiple is attempted again. If many subcommands issue failure messages for read multiple, you may want to change the mode for input buffering to double with the CONTROL DOUBLE subcommand**.**

Solution: Consider the following information and procedures for correcting read multiple failures because read multiple is a far more effective input technique. Determine what members reside on a data set track with read multiple errors. For example, with the following message:

PDS892E Read multiple failed at TTR=044B01; CCHHR=04FB.0003.01

Type a StarTool FDM subcommand like the following to build a list of members that start on the track containing the error:

IF : TTR(44B01:44BFF) THEN(MEMLIST)

Back up the first TTR address (for example to 44A01) to begin searching on the previous track for any members that start on an earlier track and continue over a track boundary.

A read multiple error is retried one time before a PDS892E error message is issued because a control unit can become stressed with too much activity. It reads the data correctly if the input operation is redriven. To increase this threshold to permit more redrive attempts, reassemble and relink the PDS#OPT4 module with a larger RMRETRY parameter on the PDS#INIT macro as in the following example:

PDS#INIT RMRETRY=7

After changing RMRETRY, exit StarTool FDM and restart it and issue a CONTROL DEFAULTS subcommand to confirm that the threshold was changed as shown in the following example:

```
PDS037I Installation defaults from PDS#OPT4  1997/04/01 14.12:
      Access control method             NONE
      Security tables                   SYSTEMSE SYSTEMSN APPLEXP
      READ MULTIPLE retries             7
       . . .
```

You can determine how effective this change is by issuing a CONTROL IOSTATS subcommand after an input operation. IOSTATS reports on input and output statistics. It zeroes all counters after each report; zero quantities are not reported. An output like the following documents redriven read multiple operations:

```
 6 REDRIVEN READ ERRORS
      15 INPUT ROUTINE ENTRIES
       8 TTR CHANGES
         . . .
```

If redriving the input operation additional times does not suppress read multiple error messages and double buffering is able to read the data without I/O errors, the track has a SKIP DISPLACEMENT problem.

After a message like the following:

PDS892E Read multiple failed at TTR=044B01; CCHHR=04FB.0003.01

execute ICKDSF to inspect and correct data on this track by submitting a job similar to the following:

```
//FIXTRK  EXEC  PGM=ICKDSF
     //SYSPRINT  DD  SYSOUT=*
     //VOLUME    DD  DISP=SHR,VOL=SER=SYSAK3,UNIT=3380
     //SYSIN     DD  *
       INSPECT DDNAME(VOLUME) NOSKIP CYLRANGE(X'04FB',X'04FB') -
               HEADRANGE=(3,3) CHECK(2) ASSIGN PRESERVE NOVERIFY
     //
```

Notes on the above INSPECT statement for ICKDSF:

DDNAME	points to the DDNAME allocated in the JCL (//VOLUME).
NOSKIP	performs primary surface checking; SKIP would also perform skip displacement checking (use SKIP if you want a more extensive test).
CYLRANGE	cylinder range to check from the PDS892E message.
HEADRANGE	head range to check from the PDS892E message.
CHECK	number of repeated track checks desired.
ASSIGN	flags specific tracks; if defective, ICKDSF can also assign new alternate tracks.
PRESERVE	saves data on the inspected track and restores it.
NOVERIFY	bypasses verification of the volume name.

PDS893E Read multiple error -- next TTR (*ttraddr*) is incorrect

Explanation: StarTool FDM has an input mode called "read multiple" that can read an entire track of disk data at a time. The last read command failed to obtain a new TTR address for the next track even though no error condition was presented to StarTool FDM.

After a read multiple input fails, StarTool FDM uses its alternate double buffering input mode for the remainder of the subcommand. With the next subcommand, read multiple is attempted again.

Solution: If many subcommands issue failure messages for read multiple, consider changing the mode for input buffering to double with the following subcommand:

CONTROL DOUBLE

This error is due to equipment errors. Notify your hardware vendor of a problem with DASD **read multiple** on the device currently allocated.

PDS894E Use COPY to get COPYMOD reblocking

Explanation: The **DUP** subcommand cannot reblock load modules. Use the **COPY** subcommand. A COPYMOD operation is requested automatically.

PDS895E Load module conversion is not allowed

Explanation: The **DUP** subcommand does not support copying load members to source libraries or copying source members to load libraries.

PDS896E RETAIN record search failed; buffering will be downgraded to multiple

Explanation: The search of the in-storage track buffers for a record failed. This operation continues using **MULTIPLE** buffering.

Solution: Contact your systems programmer or contact Micro Focus Customer Support for help.

PDS897E RETAIN buffer GETMAIN failed

Explanation: An attempt was made to obtain the number of track buffers that you specified in the **CONTROL RETAIN(***n***)** subcommand; however, your region does not contain enough available storage for all of these buffers. Processing continues using the number of buffers that were successfully obtained.

PDS898E The ALIAS command does not support PDSE program objects.

Explanation: One or more assembler statements prior to the first named control section (CSECT) caused a private section to initiate before the named CSECT. The Linkage Editor and the Program Binder differ in their handling of private CSECTs. This appears to be a permanent restriction of the z/OS Binder. StarTool FDM cannot process the program object due to this Binder restriction.

Solution: Reference IBMLink APAR II07696, titled "CONTINUATION OF II07297 - DIFFERENCES BETWEEN THE BINDER AND THE LINKAGE EDITOR - WHAT YOU NEED TO KNOW AND DO."

PDS900E The source and target data sets must differ

Explanation: The copy programs supported by the COPY subcommand do not allow you to copy members into the input data set. When the input and output data sets are identical, a data set compress is attempted.

Solution: Perform this function with the DUP subcommand or with the **REPRO** subcommand using the AS or TO keyword.

PDS901E *keyword* parameter error; *message*

Explanation: The VSAM positioning keyword displayed is in error for the reason shown. The subcommand does not execute because of the error message. The fields in the PDS901E message are as follows:

keywordFROMKEY, FROMADDRESS, FROMNUMBER, TOKEY, TOADDRESS, or TONUMBER
messageerror message text (see table)

Keyword	Message	Explanation
FROMKEY, TOKEY	Not a KSDS data set	FROMKEY and TOKEY can be used only for a KSDS
FROMKEY, TOKEY	This is a component	The data set allocated is a KSDS DATA or INDEX component and not the CLUSTER, so FROMKEY and TOKEY cannot be supported
FROMKEY, TOKEY	Key is too long	Generic keys are supported for FROMKEY and TOKEY but they cannot exceed the defined key length
FROMADDRESS	Not a multiple of 4096	FROMADDRESS for a linear data set must be on a control interval boundary such as 0, 4096 or 8192
FROMADDRESS, TOADDRESS	Use numbers for a RRDS	Use FROMNUMBER and TONUMBER to access a fixed or variable RRDS. FROMADDRESS and TOADDRESS can be used for control interval access, however.
FROMNUMBER, TONUMBER	This is not a RRDS	FROMNUMBER and TONUMBER can be used only with a fixed or variable RRDS
FROMNUMBER, TONUMBER	This uses CI-access	FROMNUMBER and TONUMBER are not allowed for control interval access to a DATA or INDEX component
FROMADDRESS, FROMKEY, TOADDRESS, TOKEY	Incompatible with keys	TOADDRESS is not compatible with FROMKEY and TOKEY is not compatible with FROMADDRESS
FROMKEY, TOKEY	Odd number of hex digits	Hexadecimal generic keys require an even number of characters. X'12' is valid, X'123' is not valid
FROMKEY, TOKEY	Invalid hexadecimal digits	Hexadecimal generic keys must contain only valid hexadecimal characters X'0123456789ABCDEF'
FROMKEY, FROMADDRESS, FROMNUMBER, TOKEY, TOADDRESS, TONUMBER	Not a VSAM data set	These positioning parameters are supported only for VSAM data sets

PDS910E TSO command *name* is not allowed

Explanation: You are not authorized to use this TSO command.

Solution: Contact your systems support staff if this restriction causes a problem.

PDS911E This data set already has 16 extents

Explanation: The **FIXPDS** subcommand cannot add another data set extent since this data set already has the maximum number of extents allowed.

Solution: Compress your data set (with the **COMPRESS** subcommand). Free any unused extents (with the **FIXPDS** subcommand using **RELEXT, RELSAVE** or **RELEASE** operands). Try **FIXPDS ADDTRK** or **ADDCYL** again.

PDS920E Use of *subname* is restricted

Explanation: You are not authorized to use this subcommand or subcommand/operand combination.

Solution: Contact your systems support staff if this restriction causes a problem.

PDS930E *name* is an invalid subcommand abbreviation

Explanation: This subcommand name abbreviation is not allowed.

Solution: Enter additional characters to create a valid subcommand name.

PDS940E Invalid password; contract your marketing representative

Explanation: The AUTH subcommand requires a password to extend your StarTool FDM evaluation period. AUTH can be used only by the systems programmer responsible for StarTool FDM.

Solution: Contact your marketing representative for the AUTH password.

PDS941E RELEASE is unable to open this data set

Explanation: The **FIXPDS** subcommand could not open the data set to release unused disk space.

PDS942E RELEASE failed; this data set is already open

Explanation: The **FIXPDS** subcommand cannot release disk space on a data set that is already open in your session. This includes uses of the data set such as for ISPPLIB, ISPMLIB, ISPLLIB or STEPLIB.

Solution: After getting all instances of the data set closed, attempt the FIXPDS subcommand again.

PDS943E This data set has never been opened; you need at least a RECFM field

Explanation: The **FIXPDS** subcommand could not open the data set to release unused disk space because the DCB contains insufficient information.

Solution: Enter a FIXPDS subcommand with a RECFM parameter to initialize (and OPEN) the data set; then, try the FIXPDS with release again.

PDS944E RELEASE failed; this data set is allocated by *userid*

Explanation: The FIXPDS subcommand could not release space from this data set because the indicated user or JOB had the data set allocated. The userid displayed is only the last user to allocate the data set; others could be allocated to it as well.

PDS945E This data set is in use by *userid*

Explanation: You cannot edit or update this non-partitioned data set because the indicated user or JOB is allocated to it. The userid displayed only identifies the last user to allocate it; others may be allocated to the data set as well.

PDS961E VSAM *type* error at *loc*=*locnum*; *message*; FEEDBACK=*pdrccprs*

Explanation: A VSAM I/O operation failed with a logical error (return code 08).

In the PDS961E message, data is filled in as follows:

type	ERASE, OPEN, POINT, GET or PUT depending on the operation.
loc	RRN for a RRDS; RBA otherwise.
locnum	RRN (relative record number) of the error for a RRDS; otherwise, RBA (relative byte address) of the error.
message	A reason code identified by "rs=" plus a short message. (See table below.)

FEEDBACKHex contents of the RPLFDBK feedback word. Two-digit pairs can be interpreted as follows:

pdProblem Determination Function (PDF) hex code used to locate the point in VSAM record management where a logical error is recognized.

rcReturn code; 08 means there was a logical error.

cpComponent code. It is 01 or 02 for the base cluster; 02 or 03 for an alternate index, and 04 or 05 for the upgrade set.

rsReason code returned with a logical error.

The message field of the PDS961E output text may return any of the following reason codes and explanatory messages. For more information, look up the hex reason code indicated as "rs=" below, as documented in *SC26 - 4747 DFP MACRO Instructions for Data Sets* under the topic *Reason Code (Logical Errors)*.

Reason Code	Message and Explanation
rs=0C	"Record keys are out of order" Key sequence error; output records are not in ascending key sequence.
rs=10	"This record is not present" For an RRDS, the FROMNUMBER specified is not in the data set; the record may have been deleted.
rs=20	"RBA does not match any record" For a DATA or INDEX component using CI (control interval) processing, a KSDS or an ESDS, the FROMADDRESS specified does not match the starting RBA of any record.
rs=48	"Keyed request for a component" For a variable RRDS DATA component, StarTool FDM attempts to read the component with a key for the relative number. This fails because it is not being accessed through the CLUSTER name.
rs=4C	"Addressed PUT to a KSDS" For REPLACE with a KSDS using FROMADDRESS or TOADDRESS, updates cannot be performed if addressed access is being used.

Reason Code	Message and Explanation
rs=60	"You can not update the key" For REPLACE with a KSDS, an alternate index, or a PATH, the key (KSDS key or AIX key) cannot be updated.
rs=6C	"Output record length is too long" Record length exceeds the maximum specified record length.
rs=88	"Addressed access for spanned data" For FROMADDRESS or TOADDRESS for a KSDS, you cannot retrieve spanned records. For access to a KSDS DATA component, spanned records cannot be retrieved without using CI (control interval) access.
rs=90	"Invalid pointer--no such record" For GET access through a PATH, the pointer in the alternate index is invalid. There is no associated base record.
rs=C8	"Addressed access through a path" For FROMADDRESS or TOADDRESS through a PATH, addressed access is not allowed.
rs=F0	"Open for update failed" The data set is open elsewhere or is not reusable and an OPEN for UPDATE failed. The data set was reopened for INPUT only a second time.
other	"Call Micro Focus Customer Support" This code has no short explanation. See the table below for a possible resolution. Otherwise, contact Micro Focus Customer Support indicating the type of VSAM data set, the command entered, and the FEEDBACK= code.

The `feedback` field of the PDS961E output text may return any of the following reason codes with return code of 08. No short explanation accompanies these errors. The following information may be helpful in resolving such error conditions. If the following information is not sufficient to resolve the problem, contact Micro Focus Customer Support indicating the type of VSAM data set, the command entered, and the FEEDBACK= code.

Reason Code	Explanation When No Message Is Supplied
rs=04	The end of the data set was encountered or the search argument is greater than the data set high key.
rs=08	You attempted to store a record with a duplicate key or there is a duplicate record for an alternate index with the unique key option.
rs=0C	One of the following occurred: – an attempt to store a duplicate key – storing a record out of key sequence in skip-sequential mode – skip-sequential reads were not done in ascending key sequence – shared resources buffer pool is full
rs=10	The record was not found or the RBA was not found in the buffer pool.
rs=14	The record was found but the buffer is under the exclusive control of another request.
rs=18	The record is on a volume that cannot be mounted.
rs=1C	The data set cannot be extended because VSAM cannot allocate additional direct access space.
rs=20	The RBA specified is not the address of any data record in the data set.

Reason Code	Explanation When No Message Is Supplied
rs=24	The record being inserted does not fit in any key range specified when the data set was created.
rs=28	There was insufficient virtual storage in your address space to complete the request.
rs=2C	The work area was not large enough for the data record or for the buffer.
rs=30	Invalid options, data set attributes or processing conditions were specified by MVS/DFP.
rs=34	Invalid options, data set attributes or processing conditions were specified by MVS/DFP.
rs=40	There is insufficient storage to add another string or the maximum number of placeholders that may be allocated to the request have already been allocated.
rs=44	An attempt was made to use a processing type that was not specified when the data set was opened.
rs=48	A keyed request was made for an entry-sequenced data set (ESDS) or a PUTIX or GETIX against a RRDS or ESDS.
rs=4C	An addressed or control interval PUT to add to a key-sequenced data set or variable-length RRDS or a control interval PUT to a fixed-length RRDS was attempted.
rs=50	An ERASE was issued for one of the following: – For access to an entry-sequenced data set. – For access to an entry-sequenced data set through a path. – With CI (control interval) access.
rs=54	OPTCD=(LOC) was used for a PUT request or in a RPL in a chain or RPLs.
rs=58	GET sequential was issued without positioning or you changed from addressed access to keyed access without being positioned for keyed-sequential retrieval. There was no positioning established for sequential PUT insert for a RRDS, or you attempted an illegal switch between forward and backward processing.
rs=5C	PUT for update or an ERASE without a previous GET for update or a PUTIX without a previous PUTIX was attempted.
rs=60	An attempt was made to update the prime key or the key of reference while making an update.
rs=64	An attempt was made to change the length of a record while making an addressed update.
rs=68	The Request Parameter List (RPL) options are invalid or conflicting: – SKP was specified with BWD or without KEY – BWD was specified with CNV – LRD and FWD were both specified – Neither KEY, ADR, nor CNV was specified – BFRNO is invalid (less than one or greater than the number of buffers in the pool) – WRTBFR, MRKBFR or SCHBFR was used without the shared resource option or TRANSID was greater than 31. – ICI processing was used with something besides PUT or GET – MRKBFR MARK=OUT or MRKBFR MARK=RLS was issued but the RPL did not have a data buffer. – RPL specified WAITX but ACB is not LSR or GSR
rs=6C	The RECLEN was larger than the maximum allowed, equal to zero, or smaller than the sum of the length and displacement of the key field. This error can also mean that RECLEN is not equal to slot size if an RRDS is being accessed.

Reason Code	Explanation When No Message Is Supplied
rs=70	The KEYLEN was too large or equal to zero.
rs=74	An invalid request was issued during initial load of a new cluster: – OPTCD=UPD on GET, ERASE, PUT, or POINT – RRDS request other than PUT insert
rs=78	A request was made under an incorrect TCB. Some functions, like GETMAIN/ FREEMAIN, must be issued from same TCB.
rs=7C	A request was cancelled for a JRNAD exit.
rs=80	A loop was found in the index horizontal pointer chain during index search processing.
rs=84	An attempt was made to retrieve a spanned record in locate mode.
rs=88	An attempt was made to retrieve a spanned record with an addressed GET.
rs=8C	An inconsistent spanned record was encountered.
rs=90	A pointer in an alternate index is invalid; there is no associated base record.
rs=94	The maximum number of pointers for an alternate index has been exceeded.
rs=98	There are not enough buffers available to handle this request (shared resources only).
rs=9C	An invalid control interval was detected during keyed processing, an addressed GET UPD request failed because the control interval flag was on, or an invalid control interval or index record was detected.
rs=A0	One or more candidates were found that had a modified buffer to be written. The buffer was left in write status with valid contents.
rs=C0	An invalid relative record number was used.
rs=C4	An addressed request was made to a fixed or variable RRDS.
rs=C8	An addressed or control interval request was made through a path.
rs=CC	A PUT insert was attempted in backward mode.
rs=D0	An ENDREQ was issued against an RPL that has an outstanding WAIT against its associated ECB. An ENDREQ was issued from a STAE or ESTAE routine against a RPL that was started before the ABEND. No ENDREQ processing was done.
rs=D4	During a control area split, an existing condition prevented the split of the index record. The index and/or data control interval size may need to be increased.
rs=DA	SVC 109 passed back an unknown return code.
rs=E0	MRKBFR OUT was issued for a buffer with invalid contents.
rs=E4	A caller in cross-memory mode was not in supervisor state or the RPL of the caller in SRB or cross-memory mode did not specify SYN processing.
rs=E8	The ECB used on an UPAD request was not posted by a caller in cross- memory mode.
rs=EC	A validity check error occurred for SHAREOPTIONS 3 or 4.
rs=F0	While shared resources are in us, an attempt was made to obtain a buffer in exclusive control, a buffer was being invalidated, or the buffer use chain was changing.
rs=F4	The register 14 stack size is not large enough.
rs=F8	The register 14 return offset is negative.

Reason Code	Explanation When No Message Is Supplied
rs=FC	Record mode processing is not allowed for a linear data set.
rs=FD	VERIFY is not a valid function for a linear data set.

PDS962E Keyed and sequential access counts differ

Explanation: The VERIFY subcommand reads a KSDS or AIX data set in key-sequence and reports on the record counts (unless NOREAD is specified). Then, the data set is read sequentially to determine if the index is synchronized with the data. This message is issued when the record counts do not agree.

Solution: To get the sequential record count, reenter the VERIFY subcommand but add a **FROMADDRESS(0)** operand.

Recover the data set by copying the data (using the IDCAMS REPRO command or the StarTool FDM DUP subcommand) and using a FROMADDRESS(0) operand to access the data sequentially. After the data set unload, the data set can be deleted and redefined and the IDCAMS REPRO command can be used to reload the data set.

PDS963E VSAM DIV *type* error at RBA=*locnum*; *message*; FEEDBACK=*oprcreas*

Explanation: A VSAM DIV (Data-in-Virtual) operation failed on a linear data set.

In the PDS963E message, data is filled in as follows:

type	**IDENTIFY, ACCESS, MAP, UNACCESS** or **SAVE** depending on the DIV operation that failed
locnum	RBA (relative byte address) of the error
message	"**Call Micro Focus Customer Support." This** indicates that no better short explanation is available. For more information, reference the DIV macro in the *Assembler Programming Reference* under the topic "Return and Reason Codes", using rc and reas from the FEEDBACK= field.
FEEDBACK	Hex contents of OPRCREAS feedback word. These digits can be interpreted as follows:

op hexadecimal number from one to eight. Used to locate the point in VSAM record management where the logical error occurred.

rc hexadecimal return code. This is 04, 08 or 0C indicating the severity level.

reashexadecimal reason code. This is used to look up a description of the problem encountered.

Solution: If you get this error message, contact Micro Focus Customer Support indicating a VSAM linear data set, the command entered, the message received, and the FEEDBACK= code.

PDS971E COPY/COMPRESS/IDCAMS has completed; RC=*nn optional-message*

Explanation: A **COPY, COMPRESS** or **IDCAMS** subcommand finished with a non-zero return code. For an IDCAMS failure, an **IDCAMS** error message is provided in the optional-message field.

PDS973E No default output data set name has been established

Explanation: The default output data set name for the **COPY** or **COMPDIR** subcommand has not yet been established. Until a **COPY** or **COMPDIR** subcommand is entered with an actual data set name as output, ***** notation for the default output data set name cannot be used.

PDS975E Update failed; you have insufficient access authority for this data set

Explanation: A StarTool FDM subcommand attempted to open the data set for update, but your security system indicated that you are not authorized to update this data set.

This subcommand is terminated without opening the data set and without causing a security ABEND (such as S913).

PDS977E HFS DATA SETS ARE NOT SUPPORTED

Explanation: This data set is an HFS data set and is not supported by StarTool FDM.

Solution: To continue, choose another data set that is supported.

PDS976E OPEN failed; you have insufficient access authority for this data set

Explanation: A StarTool FDM subcommand attempted to open this data set but your security system indicated that you are not authorized to access this data set in this manner.

This subcommand will be terminated without opening the data set and without causing a security ABEND (such as S913).

PDS978E LARGE-FILE data sets are not supported in this release

Explanation: The LARGE data set file type, which was introduced in z/OS 1.7, allows file sizes larger than 64K tracks. StarTool FDM does not support files of any type that are larger than 64K tracks.

PDS980E IEBCOPY was interrupted

Explanation: A compress or copy operation was interrupted by an attention request (PA1). For a copy operation, this means that the output was only partially completed; for a compress operation, compress is performed in-place on your data set. Since **IEBCOPY** did not complete its operation, the data set may be destroyed.

Solution: If you get the message contact Micro Focus Customer Support for investigation of the problem.

PDS981E This option is not available; StarTool FDM/SuperEdit is not licensed

Explanation: Issued when you type a **PBROWSE** or **PEDIT** subcommand (or a browse or edit of a VSAM data set and they call **PBROWSE** or **PEDIT**) and the StarTool FDM SUPEREDIT option is not licensed.

PDS981E StarTool FDM/StarWarp Option are not licensed on this processor

Explanation: StarTool FDM and the StarWarp Option are not permitted on this processor because of Registry service options in member IFAPRDXX in SYS1.PARMLIB.

Solution: Contact your systems programmer or your marketing representative for assistance.

PDS982E Sequential input must be copied to a specific output member

Explanation: Sequential input must be copied to a single output member.

Solution: Use syntax such as PDS.DATA(*membername*).

PDS983E COMPDIR requires a partitioned data set for member compares

Explanation: COMPDIR cannot compare members of a PDS or a PDSE with a non-partitioned data set.

Solution: Correct the data set name and enter the subcommand again.

PDS984E {*COMPDIR/COPY/CREATE*} terminated due to error

Explanation: Because of a previously noted error condition, the **COMPDIR, COPY** or **CREATE** subcommand could not continue.

Solution: Correct the situation and reenter the subcommand.

PDS985E invalid hexadecimal digits

Explanation: A non-hexadecimal character was used as a hexadecimal digit.

PDS986E Severe error in edit processing; RC=*nn*

Explanation: Indicates that EDIT encountered a fatal error. Usually indicates a physical block size problem.

For more information, type a **VERIFY** subcommand on the member or data set.

Return codes from EDIT have the following meanings:

Return Code	Explanation
RC=00	Normal execution, data was saved.
RC=04	Normal execution, no data was saved.
RC=14	EDIT failed, the member or data set was in use.
RC=16	EDIT failed, the member or data set was empty.
RC=20	EDIT failed, critical error prevented continued processing.

PDS987E PUTGET Service failed; RC=*nn*

Explanation: Indicates that the PUTGET message service failed.

Solution: RC=16 may be returned if StarTool FDM is invoked in a batch ISPF environment without NEWAPPL(ISR), because the input cannot be read. Add NEWAPPL(ISR) to the ISPF invocation and retry the job.

This message generally indicates that the StarTool FDM environment was not set up correctly. Call Micro Focus Customer Support for assistance.

Return codes from PUTGET have the following meanings:

Return Code	Explanation
RC=00	Normal input line was obtained from REXX data stack, a command procedure, DATA-ENDDATA group, or the terminal.
RC=04	Normal input line was obtained from an in-storage list or command procedure.
RC=08	PUTGET failed because of an attention interrupt and the attention handler turned on the completion bit in the ECB.
RC=12	No prompting was allowed on a PROMPT request due to PROFILE NOPROMPT or the input source is an in-storage list (but not an EXEC). Alternately, a line could not be obtained for a MODE request. Second level messages exist (the current stack is not the terminal) but PROFILE PAUSE is not in effect.
RC=16	NOWAIT was specified and no line was put out. Alternately, a barrier element is on top of the stack and the current source of input is a data set and SUBSTACK=NO was specified of defaulted. No command buffer is returned.
RC=20	NOWAIT was specified for GET processing but no line was available for input.
RC=24	Invalid parameters were passed to the PUTGET service.
RC=28	PUTGET was unable to obtain sufficient storage for output buffers.
RC=32	The terminal has been disconnected.
RC=36	A barrier element is on the top of the stack and SUBSTACK=YES was specified. No command buffer is returned

PDS988E `Member is not available; RC=nn, RS=mm`

Explanation: Indicates that the subcommand cannot read a member due to an error identified by the RC and RS keywords.

Return code 4 with reason code 8 is issued by StarTool FDM if you attempt to use the REPLACE subcommand to update PDSE members in a data set that is allocated on another system. You can update this data set if you allocate the data set as OLD before executing the REPLACE subcommand. This is a known restriction for PDSE data sets. Call Micro Focus Customer Support for assistance.

Return codes from PUTGET have the following meanings:

Return Code	Explanation
RC=00	Successful execution.
RC=04	The member is not available for some reason.
RS=00	Member is no longer present in the data set.
RS=04	You only have RACF execute authority to this PDSE so it cannot be input with this subcommand.
RS=08	Share options for the data set do not permit shared access to the member. This means that the data set cannot be updated because it is allocated on a different system in the SYSPLEX.
RS=12	PDSE is open for output and the FIND macro was issued to point to some other member.
RC=08	A problem was encountered in the FIND macro.
RS=00	Permanent I/O error during the directory search.

Return Code	Explanation
RS=04	Insufficient virtual storage is available.
RS=08	Invalid DEB due to a programming error.
RC=12	An I/O error occured while flushing system buffers containing member data for a PDSE member.
RC=16	No DCB address was input due to a programming error.

PDS990E `Extent initialization read failed`

Explanation: The first read for an extent of this data set failed. This problem is unusual unless your directory contains invalid TTR pointers.

PDS991E `Permanent I/O error at TTR=`*`ttraddr`*

Explanation: An uncorrectable I/O error was encountered at the displayed TTR address.

This error may be due to data set or equipment errors.

Solution: A **VERIFY** subcommand can provide more information. Data set recovery is required if this is a data set error.

PDS992E `This subcommand does not support VSAM data sets`

Explanation: The FIXPDS subcommand only supports partitioned, partitioned extended, sequential and direct data sets.

PDS993E `Permanent I/O error; `*`ucb`*`,DA,`*`ddname`*`,READ/WRITE,`*`error message`*`, `*`hexbbcchhr`*`, {QSAM/BSAM/BPAM/BPAM S} [,`*`hexttr`*`, `*`relrec#num`*`, `*`smsretur`*`, `*`smsreasn`*`]`

Explanation: An uncorrectable I/O error was encountered at the displayed disk address. The error message is generated by a SYNAD recovery routine.

In this message, data is filled in as follows:

`ucb`	UCB address of the active device
`DA`	DA for direct access
`ddname`	DDNAME of the data set
`READ/WRITE`	Function being performed
`error message`	Short description of the problem encountered
`hexbbcchhr`	Actual address of the error in hexadecimal
`BSAM/QSAM/BPAM`	Access method used (the data set is sequential or a PDS)
`BPAM S`	Dta set was a PDSE. The following fields are also provided:
	`hexttr` TTR (token address) of the PDSE member in error `relrec#num` relative record number of the PDSE error. Add 1,048,576 to get the actual TTR of the record. `smsretur` SMS return code. If you suspect a system software error, report the SMS return code and reason code to your IBM service representative. `smsreasn` SMS reason code. If you suspect a system software error, report the SMS return code and reason code to your IBM service representative.

Solution: If you get this message, supply a copy of it to Micro Focus Customer Support so that the message format can be verified.

This error may be due to data set or equipment errors. The VERIFY subcommand can provide more information. Data set recovery is required if this is a data set error.

PDS994E Permanent I/O error; *rbanumber*,*type*,*volser*,*ucb*,DA,*ddname*, *zz-OP*,*error message*,*hexbbcchhr*,VSAM

Explanation: An uncorrectable VSAM I/O error was encountered at the displayed disk address. The error message is generated by the VSAM POINT, GET, ERASE or PUT read/write routines.

In this message, data is filled in as follows:

rbanumbr	RBA (relative byte address) of the error
type	DATA or INDEX, depending on the active component
volser	Volume serial name
ucb	iUCB address of the active device
DA	DA for direct access
ddname	DDNAME of the data set
zz-OP	Channel command in the first two bytes
error message	Short description of the problem encountered
hexbbcchhr	Actual address of the error in hexadecimal
type	VSAM is the access method in use

Solution: If you get this message, send a copy of it by mail or FAX to Micro Focus Customer Support so that the message format can be verified.

This error may be due to data set or equipment errors. The VERIFY subcommand can provide more information. Data set recovery is required if this is a data set error.

PDS995E LLA failed; update access authority is required

Explanation: Indicates that you did not have update access to the data set being processed by the LLA subcommand.

PDS996E This subcommand is not supported for program objects

Explanation: The following subcommands and functions are not yet supported for program objects (load members in PDSE data sets):

CSECTS	map the external symbols in an ISPF table.
MAP	modify the AMODE or RMODE of CSECT external symbols.
REPLACE	update a program object.
ZAP	update a program object.

PDS997E Different version of StarTool FDM reinvoked

Explanation: When ISPF services are requested within StarTool FDM and it has been invoked outside of ISPF (READY mode), StarTool FDM reinvokes itself recursively as an ISPF dialog to use ISPF services.

Indicates that a different version of StarTool FDM was entered on the recursive entry. This can happen if you invoke StarTool FDM from LINKLIST, LPALIB or STEPLIB and you have a different copy of StarTool FDM in your ISPLLIB data set.

This error is detected by comparing the assembly date and time of the calling version of StarTool FDM with the corresponding values from the invoked version of StarTool FDM.

PDS998E ABEND *Sxxx* loading this module

Explanation: The displayed ABEND code was received while loading this module. If you have your user profile set to WTPMSG as in the TSO command, PROFILE WTPMSG, you should also receive a CSV011I message with a return code or a CSV016I message as shown below:

ABEND	Associated Message	Description
S106	CSV011I Return Code=0B	FETCH routine error
S106	CSV011I Return Code=0C	Insufficient storage to load the module
S106	CSV011I Return Code=0D	Invalid record type in load module
S106	CSV011I Return Code=0E	Invalid TTR address in load module
S106	CSV011I Return Code=0F	Uncorrectable I/O error in load module
S706	CSV016I	"Not Executable" module

PDS999E ABEND *Sxxx Unnnn* AT *hexvalue* IN PROGRAM *progname*

Explanation: StarTool FDM terminated abnormally. The message fields are as follows:

Sxxx	system ABEND code
Unnnn	user ABEND code
hexvalue	if signed, an offset from the routine entry point; otherwise, the address of the abending instruction
progname	name of the abending program (if available):
– PDSMAIN	ABEND in the StarTool FDM mainline
– PDS#SECI	ABEND in the security interface
– PDSALIAS	ABEND in the subroutine assembly
– PDSCBSX	ABEND in the COPYBOOK setup routine
– PDSCPARS	ABEND in the COPYBOOK parse routine
– PDSDECOD	ABEND in the DISASM routine
– PDSDELNK	ABEND in the DELINK routine
– PDSFCALC	ABEND in the CALC routine
– PDSFILE	ABEND in the StarTool FDM batch execution routine
– PDSFPARS	ABEND in the StarTool FDM batch emulation parser
– PDSIDCAM	ABEND in the IDCAMS interface
– PDSIDSPY	ABEND in the ISPMODE dialog
– PDSIPARS	ABEND in the StarTool FDM parser
– PDSPARSE	ABEND in the PARSE interface
– PDSSPACE	ABEND in the service routines
– PDSVTOCR	ABEND in the VTOC read routine
– VTSOCMD	ABEND in the TSO command check

For more details, see *"Appendix B. ABEND Processing" in the* StarTool FDM *Reference Guide.*

Chapter 6

StarBat Messages (STRB00I - STRB99E)

STRB01I `BSAM/QSAM input is in use`

Explanation: For RECFM=VBS (or spanned) records, QSAM is for input. Otherwise, input data is read using EXCP, except for the following cases that use BSAM instead:

- Input is not DASD (tape or DD *)
- uncataloged data set
- striped data set
- multivolume data set
- concatenated data set
- PDS(member) referenced in the JCL

STRB02I `BPAM input is in use`

Explanation: Input data is read using EXCP; however, for PDSE data sets, BPAM is used instead.

STRB03I *`ddname`* `Volume: ` *`volser`*`, Recs=`*`nnnnnnnnn`*`, Nbr=`*`nnn`*`'`

Explanation: Provides record count subtotals by volume when processing multivolume tape files. "Recs" is the number of records written to the volume (for an output file) or read from the volume (for an input file). "Nbr" is the sequence number of the VOLSER in the data set.

For example:

```
'STRB03I DD01O Volume: MP0092, Recs=00099999, Nbr=001'
'STRB03I DD01O Volume: MP0093, Recs=00000009, Nbr=002'
```

when two tape volumes are written.

STRB05I `DDNAME=`*`ddname`* `DSN=`*`input.data.set`* `OPENED FOR BSAM/QSAM OUTPUT DCB=(RECFM=`*`rfm`*`,LRECL=`*`nn`*`,BLKSIZE=`*`mm`*`),VOLSER=`*`volser`*

Explanation: COPYREC and EXCLUDEREC use BSAM except for sequential output data set, which use QSAM. The MULTICOPY function uses BSAM except for output to a sequential data set or output to a specific member of a PDS in JCL that uses QSAM.

The UPDATE functions change this message to OPENED FOR UPDATE.

STRB10E xx yy= has no ending quote

Explanation: Command *xx* was given a value for named parameter *yy* that has no ending quote mark. For example:

```
DD01 COPYREC IF=(12,EQ,C'ABC)
```

can cause this message.

STRB11E A parenthesized list is required for parameter *yy*

Explanation: The named parameter requires a parenthesized argument list. For example:

```
DD01 COPYREC IF=12
```

can cause this message.

STRB12E *xx yy*= parameter contains too many digits

Explanation: Command *xx* requires a value for named parameter *yy* that contains less than 10 digits. For example:

```
DD01 COPYREC PRINTHEX=1234567890
```

can cause this message.

STRB13E *xx yy*= parameter is incorrectly coded

Explanation: The named parameter is coded with undefined values. For example:

```
DD01 COPYREC IF=(0,EQ,C'AB')
```

can cause this message.

STRB14E *xx* function identifier is not supported

Explanation: The function *xx* is not supported by StarBat.

For example:

```
DD01 FPRINT IF=(12,EQ,C'AB')
```

can cause this message.

The following functions are not supported by StarBat at this time:

- The formatted copybook print functions (FPRINT, FPRINTALL, FPRINTMEM, FPRINTBACK).
- The REFORMAT function that selects and copies records with a copybook.
- DSORG function identifiers (COPYPS, COPYDA, COPYVS, COPYIS and COPYPO).

STRB15E *yy* parameter is invalid

Explanation: The named parameter is undefined. For example:

```
DD01 COPYREC IXX=12
```

can cause this message.

STRB16E *yy* parameter/subparameter value is incorrect

Explanation: The value for named parameter *yy* is incorrect or not defined.

For example:

```
DD01 COPYREC ABEND=8
```

causes the PARAMETER VALUE IS INCORRECT message.

```
DD01 COPYREC WARPDEF=FISCAL=14
```

causes the SUBPARAMETER IS INCORRECT message.

STRB17E XX YY= hexadecimal parameter has an odd number of digits

Explanation: The named parameter specifies a hexadecimal parameter incorrectly.

For example:

```
DD12 COPYREC IF=(12,EQ,X'123')
```

causes this message.

STRB18E XX YY= parameter has invalid hex digits or comma data

Explanation: The named parameter specifies a hexadecimal parameter incorrectly. For example:

```
DD01 COPYREC IF=(6,EQ,X'1G')
```

causes this message.

It is issued if a hexadecimal parameter contains the value X'6B' (or comma) because character translation is required.

```
DD01 COPYREC IF=(6,EQ,X'C16BC1,C1C2C3')
```

causes this message.

STRB19E Data set identifier is incorrectly coded

Explanation: A data set identifier must have the format DD*nn* where *nn* is from 00 through 99. For example:

```
DD123 COPYREC IF=(12,EQ,X'23')
```

causes this message.

STRB20E XX is an invalid function identifier

Explanation: The named function identifier is undefined. DSORG function identifiers like COPYPS, COPYDA, COPYVS, COPYIS and COPYPO are not supported by STARBAT. For example:

```
DD01 COPYXX IF=(12,EQ,X'23')
```

causes this message.

STRB21E **A function identifier like COPYREC is required**

Explanation: A data set identifier must be followed by a function identifier like COPYREC. For example:

```
DD01
```

with no following verb causes this message.

STRB22E **YY parameter is not supported**

Explanation: The named parameter is not currently supported by STARBAT. For example:

```
DD01 COPYREC FPRINT=12
```

causes this message.

The following parameters are not supported:

```
ABEND=3/4
FEOV=YES
FPRINT=n
MAP=name
SHOW=FORMAT/NUMBER/OFFSET/PICTURE
```

STRB23E **A continuation record must start with a blank**

Explanation: The last statement echoed should be a continuation record; however, it does not begin with a blank. For example, the following two statement images cause this message:

```
DD01 COPYREC IF=(12,EQ,
C'1234')
```

STRB24E **YY null string is not permitted**

Explanation: The named parameter does not support a null string.

For example:

```
DD01 COPYREC IF=(12,EQ,C''
```

causes this message.

STRB25E **XX YY= string is too long**

Explanation: The named parameter string is too long for this function. For example:

```
DD01 COPYREC IF=(12,EQ,26C'1234567890')
```

causes this message because the resulting string is longer than 255 bytes.

STRB26E **YY= compare length is too short**

Explanation: The length specified for a compare scan must be at least one longer than the compare string length. For example, `IF=(10,4,C'1234')` is invalid because the literal is four characters long and that matches the number of columns that are to be scanned.

STRB27E `Expected continuation was not found`

Explanation: A continued statement was expected but it was not found before the end of the control statements.

STRB28E `XX YY= are not permitted together`

Explanation: The named parameter cannot be used with the named function because it is incompatible. For example, any of the following causes this message:

```
DD01 UPDATEREC NEWMBR=ANY
DD01 UPDATEREC NEWMBRS=ANY--C
DD01 UPDATEREC MOVE=(1,20,1)
DD01 UPDATEREC EXPAND=(1,C,12,15)
```

STRB29E `XX YY= parameter is not numeric`

Explanation: The named parameter must be numeric. For example:

```
DD01 COPYREC PRINTHEX=X2
```

causes this message.

STRB31E `XX is sequential; do not use a member name with this data set`

Explanation: This data set is not a PDS; you cannot use a DATASET(MEMBER) notation.

STRB32E `xx does not support a length element with packed data element`

Explanation: A parameter such as `IF=(10,10,P'1234')` is invalid because scanning for a packed data element is not supported. If, however, you change it to `IF=(10,EQ,P'1234')`, it is valid since scanning for the data value in multiple columns of each record is not required. `STRB33E xx yy=` parameter has invalid packed digits.

A parameter such as `IF=(10,10,P'123G')` is invalid. Packed data elements can contain an optional plus or minus and numeric digits. G is not a numeric digit in this case.

STRB34E `n conversion is not supported for WARP=`

Explanation: The `WARP=(22,Z,YY/MM/DD)` parameter is invalid because only B (binary), C (character) and P (packed) data types are supported; Z is an unsupported storage type in this example.

STRB35E `xx picture and type y are not supported for WARP=`

Explanation: The `WARP=(22,B,YY/MM/DD)` parameter is invalid because this picture is not supported for binary or packed storage; however, `WARP=(22,C,YY/MM/DD)` is permitted.

STRB36E `xx= keyword is not supported for WARP=`

Explanation: The `WARP=(22,B,YY/MM/DD,NODEFINE=Z)` parameter is invalid because `NODEFINE` is an undefined subparameter for WARP.

STRB37E `Only one of DATE=, ADD=, SUB=, MULT=, OR CONV= may be specified for WARP=`

Explanation: The `WARP=(22,C,YY/MM/DD,ADD=12M,DATE=97/11/15)` parameter is invalid because `DATE=, ADD=, SUB=, MULT=` and `CONV=` are mutually exclusive sub-parameters for WARP.

STRB38E **ADD=n/SUB=n is not a supported type like B,D,W,M,Y or blank**

Explanation: The `WARP=(22,C,YY/MM/DD,ADD=12Z)` parameter is not valid because only codes B (Business days), D (Days), W (Weeks), M (Months), Y (Years) and blank (numeric elements) are defined. In this case, Z is an undefined code type.

STRB39E **ADD=nn/SUB=nn specifies an unsupported number of units**

Explanation: The `WARP=(22,C,YY/MM/DD,ADD=1234Y)` parameter is not valid because it exceeds the permitted maximum for the code type:

B	Business Days allows 0B through 9999B
D	Days allows 0D through 9999D
W	Weeks allows 0W through 999W
M	Months allows 0M through 999M
Y	Years allows 0Y through 999Y
blank	numeric elements allow any value and decimals

STRB40E **ACTION=xx/VALID=xx is not a defined value**

Explanation: The `WARP=(22,C,YY/MM/DD,ACTION=ANYONE)` parameter is not valid because `ANYONE` is undefined for the `ACTION` subparameter.

STRB41E **DATE=xx does not match the date picture**

Explanation: The `WARP=(22,C,YY/MM/DD,DATE=971115)` parameter is not valid because the `DATE` value does not match the picture specified. In this case, `DATE=97/11/15` is valid.

STRB42E **ADD=/SUB=/VALID=/ACTION= is not compatible with the data picture**

ADD=/SUB=/ACTION=/MULT=/DIV=/CONV= is not compatible with the date picture

Explanation: The named parameter is not compatible with a numeric item. The message takes two forms, depending on the type of numeric incompatibility.

Format 1: Data incompatibility:

WARP=(10,B,S999,ADD=1Y)ADD= must be strictly numeric
WARP=(10,C,999,ADD=1234)ADD= does not match picture
WARP=(10,B,9,VALID=MEND)VALID= is not supported with numeric
WARP=(6,B,9,ACTION=MEND)ACTION type is only for date pictures

Format 2: Date incompatibility:

WARP=(10,B,YYDDD,ADD=10)requires a code like D/W/M/Y
WARP=(10,B,YYDDD,ACTION=ODROP)is supported only with numeric
WARP=(10,B,YYDDD,MULT=1.10)is supported only with numeric
WARP=(10,B,YYDDD,DIV=1.10)is supported only with numeric
WARP=(10,B,YYDDD,CONV=DEMEUR)is supported only with numeric

STRB43E **xx is an invalid holiday exit name**

Explanation: A holiday exit name must be a standard MVS member name. The following examples are all invalid:

WARP=(4,B,YYDDD,HOLIDAY=A23456789)more than eight characters
WARP=(4,B,YYDDD,HOLIDAY=A234*678)invalid character
WARP=(4,B,YYDDD,HOLIDAY=12345678)invalid first character

STRB44E xx picture is not supported for WARP=

Explanation: The date picture requested is not supported by STARWARP and this date picture is undefined. For example, `DD01 COPYREC WARP=(2,C,CCYYY)` causes this message.

STRB45E MULT=xx/DIV=xx specifies an invalid number of items

Explanation: The number for multiply or divide is invalid. A `MULT=1.22.3` parameter causes this message.

STRB46E CONV=name conversion name missing

Explanation: STARWARP could not locate the requested token in the conversion exit. The conversion names contain two 3-character tokens: the starting currency name and the target currency name. The following 3-character names are currently defined:

EUR European monetary units
BEF Belgian Franc (smallest currency unit is 1.00)
LUF Luxembourg Franc (smallest currency unit is 1.00)
DEM Deutsche Mark
ESP Spanish Peseta (smallest currency unit is 1.00)
FRF French Franc
IEP Irish Punt
ITL Italian Lira (smallest currency unit is 1.00)
NLG Netherlands Guilder
ATS Austrian Schilling
PTE Portuguese Escudo (smallest currency unit is 0.10)
FIM Finish Markka
GRD Greek Drachma (was not eligible to join initially)
DKK Danish Krone (did not join initially)
SEK Swedish Krona (did not join initially)
GBP United Kingdom Pound (did not to join initially)
USD United States Dollar (not a member)
CAD Canadian Dollar (not a member)
ASD Australian Dollar (not a member)
JAY Japanese Yen (not a member)

STRB47E Member was not found; Return code=8 will be set later

Explanation: Concatenated partitioned data sets were searched for a member named in a MEMBER= parameter but the member was not present. StarBat continues with the next control statement and sets the return code to eight at termination.

STRB50E Compare outside of record

Explanation: This `OR, IF, CHANGE, CHANGEALL, OVERLAY, OVERALL` or `STOPIF` parameter is referencing data outside of the record boundaries.

STRB51E MULTIWRITE DDN same as default OUTPUT DATA SET name:*ddddd*. Make DDN unique.

Explanation: A prior command opened an output file with the default DD name listed in the message, then left it open for input to MULTIWRITE. (The default output DDN is the input DDN suffixed with alphabetic "0", usually in the form DD*xx*0.) The `MULTIWRITE WRITE=ddn` subcommand then attempted to open the same DDN. Left uncorrected, this situation would create multiple, conflicting data control blocks for the same file, resulting in an ABEND.

For example, the following StarBat instructions might be issued with the expectation that StarBat would skip the first record in DD01 and the remaining records would be processed

by the MULTIWRITE command.

```
//DD01 DD        some dataset
//DD01O DD       an output dataset
//SYSIN DD *
DD01 SKIP MAXRECIN=1
DD01 MULTIWRITE ... WRITE=DD01O
```

However, the SKIP command leaves the default dataset, DD01O, open since the MULTIWRITE command also uses the same input DDN. This would cause the duplicate DDN condition and trigger this error message.

Solution: Change the WRITE=*ddn* subcommand parameter value for the MULTIWRITE command, plus its corresponding JCL, to a different, non-default DD name.

For the example above, the correction would look like:

```
//DD01 DD        some dataset
//DDMM DD        an output dataset
//SYSIN DD *
DD01 SKIP MAXRECIN=1
DD01 MULTIWRITE ... WRITE=DDMM
```

STRB53E **CHANGE= move outside of record**

Explanation: The CHANGE parameter is attempting to move data outside of the record boundaries.

STRB54E **String expansion error**

Explanation: A CHANGE or CHANGEALL parameter cannot expand a string because the record is being updated in place for OPTIONS=JCL or there are insufficient blank characters to replace for the new string.

Solution: StarBat dumps the current record, sets the return code to eight and terminates for this type of error.

STRB55E **CHANGEALL= move outside of record**

Explanation: The CHANGEALL parameter is attempting to move data outside of record boundaries.

STRB56E **MOVE=/EXPAND=/SUM= beyond input record end**

Explanation: The MOVE, EXPAND or SUM parameter is referencing data outside of the input record boundaries.

STRB57E **MOVE= move outside of record**

Explanation: The MOVE parameter is attempting to move data outside of the record boundaries.

STRB59E **WARP= outside of record at column nnnn**

Explanation: The WARP parameter is referencing data outside of the record boundaries. The record is dumped and processing continues with the next parameter.

STRB60E **OVERLAY= move outside of record**

Explanation: The OVERLAY parameter is attempting to move data outside of the record boundaries.

STRB63E OVERALL= move outside of record

Explanation: The OVERALL parameter is referencing data outside of the record boundaries on a repeat record scan.

STRB66E FPRINT= is not supported

Explanation: The FPRINT parameter is not currently supported by StarBat, nor are the following parameters supported:

```
ABEND=3/4,
FEOV=YES
FPRINT=n
MAP=name
SHOW=FORMAT/NUMBER/OFFSET/PICTURE.
```

STRB67E FPRINT/FPRINTALL/FPRINTMEM/REFORMAT function is not supported

Explanation: This function is not supported by StarBat, nor are the following functions supported:

- The formatted copybook print functions: FPRINT, FPRINTALL, FPRINTMEM, FPRINTBACK.
- The REFORMAT function that selects and copies records with a copybook.
- DSORG function identifiers like COPYPS, COPYDA, COPYVS, COPYIS and COPYPO.

STRB69E SUM= invalid numeric character; CHAR=C'abcd'; at record n

Explanation: The data field for SUM does not contain valid numeric information. Valid numeric characters are zoned numbers from X'F0' through X'F9'. The last digit for a numeric character can be signed with a X'C0' or X'D0' zone digit.

STRB70E MEMBERS= and NEWMBR= are incompatible

Explanation: MEMBERS= is a generic request while NEWMBR= renames a single member. They are incompatible. Use NEWMBRS with MEMBERS or NEWMBR with MEMBER.

STRB71E Sequential input must be copied to a specific output member

Explanation: The input data set is sequential and the output data set is partitioned. A NEWMEM parameter is required.

STRB72E Invalid packed data in parameter; HEX=X'abcdef'; at record nn

Explanation: Undefined packed decimal data was encountered for the SUM, IF, OR, CHANGE, CHANGEALL, OVERLAY, REPLALL or STOPIF parameter. This record is dumped so it can be examined.

STRB73E ADD= or SUB= overflowed

Explanation: The data value in the record added or subtracted from the ADD or SUB parameter cannot be represented in the data picture specified. This is known as an overflow condition.

STRB74E ADD= or SUB= result minus

Explanation: The data value in the record added or subtracted from the ADD or SUB parameter is negative but the picture specified does not specify an S to represent a sign field.

STRB75E `Invalid xx at column nnnn; HEX=X'hhhhhh'; CHAR=C'ccc'`

Explanation: An invalid data or date condition was detected. The invalid data value is shown in the message in hexadecimal and character formats if appropriate. Following are possible *xx* message values and short explanations:

DATE SIGN FIELD	Negative date negative sign like P'-1997'
PACKED NUMERIC	Invalid packed numeric digit like P'-19G7'
CHARACTER NUMBER	Invalid character digit like C'19G7'
JULIAN DAY VALUE	Julian value like 97000, 97366 or 97399
MM VALUE IN DATE	Gregorian month greater than 12 or equal to 0
DD VALUE IN DATE	Gregorian day too high for month or equal to 0
-- NOT LEAP YEAR	February 29 is only valid in leap years
FORMATTED DATE	Date picture and date value do not match
INPUT EXIT DATE	Input date exit returned an error code
OUTPUT EXIT DATE	Output date exit returned an error code
HOLIDAY DATE	Holiday exit for ACTION signaled an error
HOLIDAY VALIDATE	Holiday exit for VALID signaled an error
YEAR BEFORE 1582	Dates must be between 1582 and 9999

STRB76E `WARP= derived date is invalid at column nnnn; DATE=ccyy/mm/dd`

Explanation: The date from the `ADD` or `SUB` subparameter was an invalid date. The derived date displays in CCYY/MM/DD format. Type an `ACTION` parameter to correct this error. The following derived dates could cause this type of error message:

OUTPIC=CCYY/MM/DD	1997/00/10
OUTPIC=CCYY/MM/DD	1997/13/10
OUTPIC=CCYY/MM/DD	1997/02/29
OUTPIC=CCYY/MM/DD	1997/02/30
OUTPIC=CCYY/MM/DD	1997/02/00
OUTPIC=CCYYDDD	1997000
OUTPIC=CCYYDDD	1997366
OUTPIC=CCYYDDD	1997399

STRB77E `WARP= VALID=`*`nn`*` test failed at column `*`nnnn`*`; DATE=`*`ccyy/mm/dd`*

Explanation: The displayed date failed this validity test. The date tested displays in CCYY/MM/DD format. The following tests could cause this type of error message:

OUTPIC=CCYY/MM/DD	for 1997/01/10 and VALID=MEND
OUTPIC=CCYY/MM/DD	for 1997/04/10 and VALID=QFBD
OUTPIC=CCYY/MM/DD	for 1997/12/10 and VALID=YEND
OUTPIC=CCYYDDD	for 1997364 and VALID=YEND

STRB78E `name exit/Holiday ACTION/Holiday VALID routine not found`

Explanation: The displayed exit routine was not available for StarBat use. Ensure that the exit routine is available with a JOBLIB, STEPLIB or LINKLIST data set before retrying the job.

STRB79E `Return Code GT/EQ RC=xxxx (Force-EOJ). JobStep terminated.`

Explanation: The return code issued by a StarBat function equals or exceeds the configured value for forcing end-of-job. The default end-of-job value is RC=12.

Solution: You can customize the forced end-of-job return code setting in StarBat. This will alter return code processing globally for all StarBat functions. Alternatively, you can change the return codes issued by each StarBat function individually. This is done by customizing the StarBat return code table. See the *StarTool FDM StarBat Option* manual for information about customizing StarBat return code processing.

STRB79I `Function completed normally. Non-zero RC=xxxx requested (RC_A).`

Explanation: A StarBat function has completed normally. However, the StarBat Return Code Table has been customized to return a non-zero value for normal completion of this function. The custom return code value is shown as RC=*xxxx*. The default value for normal completion is RC=00.

Solution: You can change the return codes issued by each StarBat function individually. This is done by customizing the StarBat return code table. See the *StarTool FDM StarBat Option* manual for information about customizing StarBat return code processing.

STRB79W `Input file(s) empty, RC=xxxx (No-Input).`

`No records output, RC=xxxx (RC_B).`

`Read backwards on empty disk file, RC=xxxx (RC_B).`

`One or more input data sets had no data selected for output, RC=xxxx (RC_C).`

Explanation: No records were output by a StarBat function that is normally expected to produce output. This can occur if:

- No input data exists in any input file or data set.
- One or more input data sets containing data were read, but no output was produced (for example, because selection criteria were not satisfied).
- One or more input data sets containing data were read, but a read-backwards operation occurred at a point where no data could be found (for example, at the beginning of a file or data set member).
- At least one of the data sets in the input concatenation was empty.

If no input data exists, the no-output condition probably is not serious. The default return code value for this condition is RC=04.

If input data exists, the no-output condition may or may not be serious, depending on the function being performed and whether or not all data sets in the concatenation were read.

Default return codes for certain no-input and no-output conditions are shown for each StarBat function in the following table. Similar functions with identical default settings are grouped for brevity.

StarBat Function	Input Data Set(s) Read, No Output	Concatenated Input Data Set(s) Empty
COPYALL, COPYMBR, COPYREC, COPYREV, COPYSOME	08	04
EXCLUDEREC	00	00
FPRINT, FPRINTALL, FPRINTMEM	00	00
MULTICOPY	08	04
PRINT, PRINTALL, PRINTCHR, PRINTCHRALL, PRINTCHRMBR, PRINTCHRREV, PRINTHEX, PRINTHEXALL, PRINTHEXMBR, PRINTHEXREV, PRINTMBR, PRINTREV	00	04
REFORMAT	00	00
SKIP	00	00
SKIPREV	08	04
TOTAL	00	00
UPDATEALL, UPDATEMBR, UPDATEREC	00	04

Solution: You can change the return codes issued for no-output and empty concatenated data set conditions individually for each StarBat function. You can also change the return code issued for no-input conditions globally across StarBat. This is done by customizing the StarBat return code table.

You can also disable empty input data set checking. This is done by setting the value of the EMPTYRC parameter to -1 in the StarBat return code table.

See the *StarTool FDM StarBat Option* manual for information about customizing StarBat return code processing.

STRB80E **The input and output data set is the same**

Explanation: For a COPY or EXCLUDE function, the output data set must be different from the input data set unless the data set is partitioned. Use one of the UPDATE functions instead.

STRB81E **The WARP parameter is not available; StarWarp is not licensed**

Explanation: Customers with a StarTool FDM license cannot use the StarWarp Option WARP parameter. Contact Customer Support if you need this functionality.

STRB82E **Data input is forward, can not reverse**

Explanation: A forward reading function like COPYREC cannot be followed by a reverse function like COPYREV unless it uses a different DDNAME reference because the data set direction cannot be changed.

STRB83E **This data set is not compatible with JCL**

Explanation: To be eligible for OPTIONS=JCL processing, a data set must be partitioned with RECFM=FB and LRECL=80. This data set does not meet these requirements.

STRB84E `Too many OPTIONS=JCL continuations`

Explanation: A JCL statement (DD, EXEC, JOB, PROC or SET) is limited to a total of 50 statement images including any comment (//*) statements before the last image. The current statement contains more than 50 statement images.

STRB85E `Missing OPTIONS=JCL continuation`

Explanation: `OPTIONS=JCL` processing noted a member with a missing JCL continuation. StarBat continues with the member but the return code is set to four later.

STRB86E `UPDATE for tape not valid`

Explanation: The UPDATE command is not supported for tape files.

STRB99I `Final return code was xxxx`

Explanation: StarBat issues a final return code for each job step in the job stream. The final return code is the highest return code value issued by any StarBat function executed during the job step.

Note that some StarBat functions may return multiple return codes under special circumstances. In this situation, if a lower return code value overrides a previously issued, higher return code for the function, it is the overriding return code value that is assessed by StarBat when determining the final return code for the job step.

NOTE If the final return code is nonzero, this message will be issued with either a W (Warning) or E (Error) message suffix rather than an I (Information). A warning message (STRB99W) is issued for nonzero return codes less than the value configured to force end-of-job. An error message (STRB99E) is issued for return codes equal to or greater than the forced end-of-job value.

Solution: You can customize the forced end-of-job return code setting globally for all StarBat functions. This is done by changing the value of the `FCEOJRC` parameter in the StarBat return code table. The default value is RC=12.

Alternatively, for certain error conditions, you can change the return codes issued by each StarBat function individually. This is done by customizing the values in the StarBat return code table for individual functions.

See the *StarTool FDM StarBat Option* manual for information about customizing StarBat return code processing.

Index

S

T

U

V