

z/OS



MVS System Messages Volume 9 (IGF - IWM)

Version 2 Release 1

Note

Before using this information and the product it supports, read the information in "Notices" on page 1083.

This edition applies to Version 2 Release 1 of z/OS (5650-ZOS) and to all subsequent releases and modifications until otherwise indicated in new editions.

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About this document

MVS™ System Messages primarily describe messages that are issued to the system operator at the system console and system messages that are logged. These include the following messages:

- Operator messages issued by the BCP and DFSMS/MVS.
- Log messages issued by the BCP and DFSMS/MVS.
- Some SYSOUT messages issued by the BCP and DFSMS/MVS. SYSOUT messages are issued by utilities that normally run in batch, such as SPZAP.
- Batch job messages issued by the BCP. Messages issued by JES2 or JES3 for batch jobs are in the JES messages documents.

For the most part, messages issued at interactive terminals (like TSO/E and CICS® terminals) are documented by the specific elements and products that support those terminals.

The titles of the MVS System Messages indicate the range of message prefixes in the documents:

- *z/OS MVS System Messages, Vol 1 (ABA-AOM)*
- *z/OS MVS System Messages, Vol 2 (ARC-ASA)*
- *z/OS MVS System Messages, Vol 3 (ASB-BPX)*
- *z/OS MVS System Messages, Vol 4 (CBD-DMO)*
- *z/OS MVS System Messages, Vol 5 (EDG-GFS)*
- *z/OS MVS System Messages, Vol 6 (GOS-IEA)*
- *z/OS MVS System Messages, Vol 7 (IEB-IEE)*
- *z/OS MVS System Messages, Vol 8 (IEF-IGD)*
- *z/OS MVS System Messages, Vol 9 (IGF-IWM)*
- *z/OS MVS System Messages, Vol 10 (IXC-IZP)*

Here are some of the other types of messages on that bookshelf:

- *z/OS MVS Dump Output Messages*
- *z/OS MVS System Codes*
- *z/OS and z/VM HCD Messages*
- *z/OS JES3 Messages*
- *z/OS TSO/E Messages*
- *z/OS UNIX System Services Messages and Codes*

This document also contains the routing and descriptor codes that IBM assigns to the messages that z/OS components, subsystems, and products issue. Routing and descriptor codes are specified by the ROUTCDE and DESC keyword parameters on WTO and WTOR macros, which are the primary methods that programs use to issue messages. The routing code identifies where a message will be displayed. The descriptor code identifies the significance of the message and the color of the message on operator consoles with color.

Who should use documentation for MVS System Messages

The system messages documents are for people who receive messages from the system. Usually, these people are system operators, system programmers, and application programmers who do any of the following tasks:

- Initialize the operating system and its subsystems
- Monitor system activity
- Keep the system running correctly
- Diagnose and correct system problems
- Diagnose and correct errors in problem programs

How to use these documents

The system messages contain descriptions of messages. See *z/OS MVS System Messages, Vol 1 (ABA-AOM)* for details about z/OS message formats and descriptions.

z/OS information

This information explains how z/OS references information in other documents and on the web.

When possible, this information uses cross document links that go directly to the topic in reference using shortened versions of the document title. For complete titles and order numbers of the documents for all products that are part of z/OS, see *z/OS Information Roadmap*.

To find the complete z/OS® library, go to IBM Knowledge Center (<http://www.ibm.com/support/knowledgecenter/SSLTBW/welcome>).

How to send your comments to IBM

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Use one of the following methods to send your comments:

1. Send an email to mhvrcfs@us.ibm.com.
2. Send an email from the "Contact us" web page for z/OS (<http://www.ibm.com/systems/z/os/zos/webqs.html>).
3. Mail the comments to the following address:
IBM Corporation
Attention: MHVRCFS Reader Comments
Department H6MA, Building 707
2455 South Road
Poughkeepsie, NY 12601-5400
US
4. Fax the comments to us, as follows:
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From all other countries: Your international access code +1+845+432-9405

Include the following information:

- Your name and address.
- Your email address.
- Your telephone or fax number.
- The publication title and order number:
z/OS V2R1.0 MVS System Messages, Vol 9 (IGF-IWM)
SA38-0676-03
- The topic and page number that is related to your comment.
- The text of your comment.

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- Contact your IBM service representative.
- Call IBM technical support.
- Visit the IBM Support Portal at [IBM support portal](http://ibm.com/support).

Summary of changes

This information includes terminology, maintenance, and editorial changes. Technical changes or additions to the text and illustrations for the current edition are indicated by a vertical line to the left of the change.

Summary of message changes for z/OS MVS System Messages, Vol 9 (IGF-IWM) for Version 2 Release 1, as updated February 2015

The following messages are new, changed, or no longer issued for z/OS MVS System Messages, Vol 9 (IGF-IWM) in the February 2015 update of z/OS V2R1. For more information, see *z/OS MVS System Messages, Vol 9 (IGF-IWM)* .

New

The following messages are new.

IGF960I
IOS634I
IOSHC099I
IOSHC140I
IOSHC141I
IOSHC142E
IOSHC143I
IOSHC144I
IOSHC145I
IOSHM0316I
IOSHM0433I
IOSHM0434I
IOSHM0818I
IOSHM0819I

Changed

The following messages are changed.

IOS090I
IOS156I
IOS157I
IOS158I
IOS500I
IOS502I
IOS1500I
IOSHM0201I
IOSHM0303I
IOSHM0304I
IOSHM0399I
IOSHM0401I

IOSHM0416I
IOSHM0420I
IOSHM0427I
IOSHM0806I

Deleted

The following messages are no longer issued.

IOS583I

Summary of changes for z/OS Version 2 Release 1 as updated March 2014

The following changes are made to z/OS Version 2 Release 1 (V2R1) as updated March 2014.

New

ILRH0112I

Changed

No messages were changed in this document.

Deleted

No content was removed from this document.

Summary of changes for z/OS Version 2 Release 1 as updated December 2013

This information summarizes the changes for z/OS Version 2 Release 1 (V2R1) as updated December 2013.

Changed

The following message is restored in this publication:

IGW702I

z/OS Version 2 Release 1 summary of changes

See the following publications for all enhancements to z/OS Version 2 Release 1 (V2R1):

- *z/OS Migration*
- *z/OS Planning for Installation*
- *z/OS Summary of Message and Interface Changes*
- *z/OS Introduction and Release Guide*

Chapter 1. IGF messages

IGF500D REPLY 'YES', DEVICE, OR 'NO'

Explanation: The swap request (operator-initiated or system-initiated, as per message IGF500I) will not complete until the operator responds **YES** or **NO** to this message.

This message is issued at the start of a swap sequence.

Note: This message will not be issued for tape devices attached to a tape library, and it will also not be issued for SMS managed mountable devices.

System action: The system continues processing. The operator-initiated request will not complete until the operator responds to the message. The 'YES' or 'DEVICE' reply invokes the DDR function. The 'NO' reply causes a permanent I/O error to be posted for device *dev1*, operator SWAP command to be canceled as appropriate.

Operator response:

- If a SWAP to device *dev2* is desired, reply 'YES'. For tape devices, message IGF502E will be issued and a tape must be mounted on *dev2* before swap can successfully complete. This must be done in a timely manner. Resources during this time may be restricted and can potentially cause hangs until this tape mount is satisfied.
- If a SWAP is desired, but device *dev2* is not acceptable, enter the device number of the device to which the volume on *dev1* is to be moved. Make sure that the device has an available path before entering this reply.
- If a SWAP is not desired, enter reply 'NO'.
- If PAGING I/O ERROR appears in the message text, one or more jobs will almost certainly be ended if a 'NO' response is given.

Note:

1. When continuing with the SWAP, either by answering 'YES' or a device number, do not move the volume until the 'PROCEED' message, IGF502E, is issued or data set integrity may be lost.
2. If device *dev1* is a 3340/3344 device with the fixed-head feature, device *dev2* must also have the fixed-head feature.
3. If you are using magnetic tape units and *dev1* contains reels of different tape densities for input, be sure that *dev1* and *dev2* have the same dual density capability.
4. If device *dev2* was offline, the system might request operator intervention (via message IEA000A) before it can issue message IGF502E. If so, mount a scratch tape. It will be unloaded, and then message IGF502E will be issued.

Caution: If the volume is a direct access storage device, care must be taken to ensure that no head-disk interference ("head crash") problem exists.

Source: Dynamic device reconfiguration (DDR)

Module: IGFDV0

Routing code: 1,3,4,7,11

Descriptor code: 2

IGF500I SWAP *dev1* TO *dev2* - {*text*}

Explanation: *text* is one of the following:

- OPERATOR
- I/O ERROR
- PAGING I/O ERROR

This message is issued at the start of a swap sequence.

IGF501I • IGF502E

The message is a repeat for verification of a SWAP command entered by the operator or a request to move a volume as a result of a permanent I/O error on the device with a device number of *dev1*. PAGING I/O ERROR indicates that a duplexed paging request has received an I/O error.

If JES3 is in use on your system and device *dev1* is the same as device *dev2*, see the restrictions for using DDR (dynamic device reconfiguration) that are documented in *z/OS JES3 Initialization and Tuning Reference*.

If the device number is not allowed in reply, *dev1* is a shared direct access storage device. It can only be removed and replaced on a spare drive on the same control unit and readied with the device number *dev1*.

System action: The system issues message IGF500D to prompt the operator for a reply.

Note: Message IGF500D will not be issued for tape devices attached to a tape library, and it will also not be issued for SMS managed mountable devices.

Operator response: See the operator response for message IGF500D.

Source: Dynamic device reconfiguration (DDR)

Module: IGFDV0

Routing code: 1

Descriptor code: 2,7

IGF501I WARNING - *dev1* AND *dev2* ARE OF UNEQUAL BUT COMPATIBLE DENSITIES

Explanation: While processing a tape swap, DDR chose a 'TO' device that can operate at the density of the tape being swapped. However, the densities of the 'TO' and 'FROM' devices, though compatible, are unequal.

System action: The system issues message IGF500D and waits for the operator to reply.

Operator response: Reply to message IGF500D. If you do not want to swap between densities you can use the DEVICE reply and choose an alternate device of equal density.

Source: Dynamic device reconfiguration (DDR)

Module: IGFDV0

Routing code: 1,3,11

Descriptor code: 4

IGF502E PROCEED WITH SWAP OF *dev1* TO *dev2*

Explanation: DDR is waiting for the operator to swap volumes.

System action: The system continues operation.

Operator response: For tape swaps, move the volume on the device with device number *dev1* to *dev2* and DO NOT mount any tape on *dev1* as this will cause the loss of buffered write data. For disk swaps, move the volume on the device with device number *dev1* to *dev2*, and if a volume is on *dev2*, move that volume to *dev1* and make both devices ready. For disk swaps, when *dev1* and *dev2* are the same device, make the device not ready and then make it ready.

Note: The tape must be mounted in a timely manner. This will ensure resources that are currently held will be freed. If a tape is not able to be mounted, some event must occur to allow the DDR swap to complete. Examples of such events are (1) Manually mounting a tape (if in an automated environment), (2) Cancelling the job that initiated the DDR swap, (3) Issuing the VARY OFFLINE,dev2,FORCE operator command to force the dev2 device offline.

Source: Dynamic device reconfiguration (DDR)

Module: IGFDV0

Routing code: 1,3,4,7,11

Descriptor code: 11

IGF503I **ERROR ON *dev*, SELECT NEW DEVICE**

Explanation: A permanent I/O error has occurred during DDR tape repositioning, which was in process in response to a SWAP request to *dev*. The error occurred positioning the tape from load point on *dev*. This message is followed by IGF509D to allow the operator to respond.

System action: The tape is rewound and unloaded. The system continues operation.

Operator response: Specify a new device number to replace *dev*, in response to message IGF509D, or reply 'NO'. If the reply is 'NO', the associated job must be canceled by the operator because the tape is not positioned correctly.

Source: Dynamic device reconfiguration (DDR)

Module: IGFDT2

Routing code: 1,3,11

Descriptor code: 4

IGF505I **SWAP FROM *dev1* TO *dev2* COMPLETE**

Explanation: The tape SWAP requested for the volume originally on *dev1* is now complete. This message does not appear for direct access devices or for unit record devices.

System action: The system continues operation.

Source: Dynamic device reconfiguration (DDR)

Module: IGFDI1

Routing code: 1,3,11

Descriptor code: 4

IGF508A **MOUNT AN UNLABELED SCRATCH TAPE ON *dev* TO EXIT SWAP PROCESSING**

Explanation: Following a DDR tape repositioning error (after the tape was mounted on *dev*), and the operator replied "NO" to IGF509D, an unlabeled scratch tape needs to be mounted on *dev* before DDR swap processing can successfully complete.

System action: The system continues processing. The swap will not complete until a tape is mounted on *dev* or the device is forced offline.

Operator response: Do one of the following:

1. Mount a unlabeled scratch tape on *dev*.
2. Force the device offline by issuing VARY *dev*,OFFLINE,FORCE.

Source: Dynamic device reconfiguration (DDR)

Module: IGFDV0

IGF509D **REPLY DEVICE, OR 'NO'**

Explanation: The swap request (operator-initiated or system-initiated, as per message IGF509I) will not complete until the operator responds with a device number or **NO** to this message.

This message is issued if there is another error during the original swap sequence.

System action: The system continues processing. The SWAP will not complete until the operator responds with one of the indicated replies.

Operator response: If the DDR function is desired, reply with a device number for a device of the same type as *dev* (in message IGF503I or IGF509I). The device number can be optionally preceded with a slash to differentiate a device number from a device (for example, /3480). A deallocated device on a different channel is usually preferred. Make sure that the device has an available path before replying to this message. If the DDR function is not desired, reply 'NO'.

Note:

IGF509I • IGF511A

1. If PAGING I/O ERROR appears in the message text, a 'NO' reply to the request will almost certainly result in an abnormal ending for one or more jobs.
2. When continuing with the swap by answering a device number, do not move the volume until the 'PROCEED' message, IGF502E, is issued or data set integrity may be lost.
3. When swapping a 3340/3344 device with the fixed-head feature, be sure that the "TO" device also has the fixed-head feature installed.

Caution: If the volume is a direct access storage device, care must be taken to ensure that no head-disk interference ("head crash") problem exists.

For tape swaps, if you reply 'NO' to this message and this message was preceded by message IGF503I, DDR will unload the tape. The UCB indicator of the drive is set to describe that the correct tape positioning has been lost. When this bit is set after a BSAM SYNAD routine indicates to restart tape IO write operations, the system issues ABEND001. BEcasue tape positioning has been compromised, no further attempt is made in the EOVS force comments : e ESTAE routine to issue any writes to the volume since tape positioning has been compromised.

For a D/T3480 ACL drive running in AUTO mode, if you reply 'NO' to this message, DDR will unload the tape and load the next available tape in the hopper. The drive will become ready. CLOSE processing will be satisfied with the newly loaded tape (most likely a labeled scratch tape) and the label will be written over. You should load a non-labeled scratch tape before replying 'NO' to this message.

Source: Dynamic device reconfiguration (DDR)

Module: IGFDV0

Routing code: 1,3,4,7,11

Descriptor code: 2

IGF509I SWAP *dev* - {*text*}

Explanation: *text* is one of the following:

- OPERATOR
- I/O ERROR
- PAGING I/O ERROR

This message is issued if there is another error during the original swap sequence.

If OPERATOR appears in the message text, the SWAP was requested by the operator. No valid 'TO' device is known and a response is required. This message follows a SWAP command when the 'TO' device is not valid for a SWAP.

If I/O ERROR or PAGING I/O ERROR appears in the message text, the SWAP is a result of a permanent I/O error. The I/O recovery procedures may be repeated on a new device. PAGING I/O ERROR indicates that a duplexed request has received an I/O error.

System action: The system issues message IGF509D to prompt the operator for a reply.

Operator response: See the operator response for message IGF509D.

Source: Dynamic device reconfiguration (DDR)

Module: IGFDV0

Routing code: 1,3,4,7,11

Descriptor code: 2,7

IGF511A WRONG VOLUME MOUNTED ON *dev*, MOUNT *ser*, {*text*}, *nnn*

Explanation: *text* is one of the following:

- AL
- NL
- NSL

- SL

In performing a swap, the volume that had been on the "FROM" device was not put on *dev*. This message appears only for tape swaps.

System action: The system continues operation.

Operator response: Remove the volume on the device with device number *dev* and replace it with the correct volume serial, label type (AL, NL, NSL, or SL), and sequence number (nnn). This message can be repeated as many as five times if a wrong volume is consistently mounted, then IGF509D is issued allowing you to reply 'NO' to the swap request or select another device.

Source: Dynamic device reconfiguration (DDR)

Module: IGFDT2

Routing code: 1,3,11

Descriptor code: 2

IGF512I SWAP FROM *dev* TERMINATED - *text* BUFFERED DATA EXCEEDS XXXX M-BYTES

Explanation: During a swap, DDR has encountered an error, preventing successful completion of the swap request from a device. The various errors are indicated by the variable portion of the message text.

In the message text:

BUFFERED DATA EXCEEDS XXXX M-BYTES

The amount of buffered data in the failing device that needs to be recovered by DDR is larger than the DDR storage limit set in the DEVSUPxx member of SYS1.PARMLIB. Swap processing from *dev* is terminated.

dev

The device number of the device being swapped from.

text

The possible message texts and their meanings:

NO USER FOUND

DDR was unable to locate the user of the device after the swap commenced. The user of the device has ended, or the user's control blocks could not be located.

ERP IN PROGRESS

While attempting to rewind and unload the "FROM" tape involved in an operator-requested swap, an error recovery procedure (ERP) was found to be in progress.

OPEN/CLOSE/EOV IN PROGRESS

DDR has found that the user of the "FROM" tape is in the process of OPEN, CLOSE, or EOV. The position of the tape is not known.

BLOCKCOUNT UNRELIABLE

If the user of the tape is using the EXCP macro for I/O, he did not code the REPOS=Y parameter in his DCB macro. As a result, the block count is not considered to be accurate and DDR cannot reposition the tape.

If the user of the tape is using the basic sequential access method, DDR has encountered a condition where the tape is open for the CNTRL macro format and the block count is zero.

As a consequence, DDR cannot determine the position of the tape. This message also appears for all access methods if an attempt is made to SWAP a NL tape opened for the MOD disposition.

CANCELED BY OPERATOR

This message is confirmation that the operator has replied 'NO' to message IGF500D or IGF509D. The swap from *dev* is not completed.

INVALID USER EXIT

The installation-written NSLREPOS routine has returned an incorrect return code to DDR.

CATASTROPHIC ERROR

DDR has encountered a machine check, program check, ABEND, an I/O error that it cannot retry, or contention exists for an MIH resource. The current swap from the indicated device is ended.

IGF512I

INVALID DEVICE

The device *dev* entered as the "FROM" device in the swap command is not valid.

CANCELED BY USER

The installation-written NSLREPOS routine has indicated that the swap is to be ended.

JES3 ERROR

An error occurred in a DDR/JES3 subsystem exit routine. The current swap from *dev* abnormally ends.

BY DEVICE SUPPORT MODULE

The device support module could not validate the swap.

RD BLKID ERROR

DDR received a unit check in response to a Read Block ID command before the actual swap. The tape position cannot be determined, nor can the degree of data buffering be calculated.

RD BUFFER ERROR

DDR received a unit check in response to a Read Buffer command before the actual swap. The buffered data, which had not yet been written to tape, but had been sent from the host processor, cannot be retrieved.

GETMAIN FAILED

During DDR processing before the actual swap, the storage for saving the buffered data was insufficient.

DEVICE FORCED OFFLINE

An unrecoverable I/O error occurred which resulted in a loss of data. The tape subsystem is boxed (forced offline).

ACTIVATE IN PROGRESS

The direct access storage device (DASD) swap ended because an I/O configuration change is in progress.

PAGE FIX ERROR

During DDR processing before the actual swap, the storage for saving the buffered data was unable to be page fixed for the read buffer operation.

UNSUPPORTED RECORD LENGTH

During DDR processing before the actual swap, it was determined that records buffered in the device exceed the 64 kilobytes maximum record length supported by the 3480/3490 device support module.

FAILURE DURING LIBRARY PROCESSING

DDR encountered an error associated with the mount or dismount services performed by the library automation communication services (LACS), or an error during the volume verification services for a system-initiated swap in a 3495 Tape Library Dataserver.

READ ERROR IN LIBRARY

DDR encountered an error while attempting to read the label on the tape mounted on the 'TO' device during a system-initiated swap in a 3495 Tape Library Dataserver.

REPOSITIONING ERROR IN LIBRARY

DDR encountered an error while attempting to reposition the tape on the 'TO' device during a system-initiated swap in a 3495 Tape Library Dataserver.

EXIT I/O ERROR IN LIBRARY

The Device Service Exit performed the read of the volume label and the repositioning of the tape on the device. The swap is a system-initiated swap in a 3495 Tape Library Dataserver. The exit returned an error code to DDR indicating a failure during the read or repositioning stage.

SWITCH FAILED DUE TO I/O ERROR

While attempting to terminate a PPRC pair, an I/O error was encountered.

NOT A VALID PPRC PAIR

The 'FROM' and 'TO' devices are permanent resident DASD but are not a valid PPRC pair. Only permanent resident DASD that are part of a PPRC pair can be swapped.

GETMAIN FAILED - SP245

During DDR processing before the actual swap, the storage to read attention messages could not be obtained.

SWAP TERMINATED BY OPERATOR

The operator indicated that the swap should be terminated in response to IGF520A, IGF521A, or IGF522A.

ERROR ACQUIRING TAPE FORMAT INFO

DDR was unable to obtain tape format information from the FROM device. The swap is ended.

CATASTROPHIC ERROR - RSN=xx

DDR encountered an error and cannot retry. The current swap from device *dev* ended. The reason code displayed indicates the specific reason for the failure.

See operator response for the description of the reason codes.

UCB SWAP FAILURE - RSN=xx

The attempt to swap UCBs failed. *xx* is the reason code which describes the failure. For a list of reason codes, see mapping macro IOSDSWAP in *z/OS MVS Data Areas* in the *z/OS Internet* library (<http://www.ibm.com/systems/z/os/zos/bkserv/>).

System action: Processing continues.

Operator response: The response by the operator depends on the text of the message. Responses to each of the conditions are detailed as follows:

NO USER FOUND

Issue a DISPLAY U command to determine if the "FROM" tape is allocated. If it is not, no one is using the tape and you need not use DDR to move the volume on it. If the tape is allocated, reenter the swap command to retry the swap. For a swap requested by the system as a result of a permanent error, no further action is necessary.

ERP IN PROGRESS

If a system-initiated DDR request does not occur as a result of a permanent error, reenter the SWAP command to retry the swap.

OPEN/CLOSE/EOV IN PROGRESS

Reenter the SWAP command after the OPEN, CLOSE, or EOV processing is complete. This would involve making required volume mounts prior to issuing the SWAP command.

BLOCKCOUNT UNRELIABLE

If the user is using EXCP level I/O, he must correct the program so that it maintains an accurate block count and ensure that the DCB macro is coded with REPOS=YES. This will allow DDR to support the I/O for both operator requests and upon the occurrence of errors.

If the user is known to be using BSAM, or the tape is NL, opened for the MOD disposition, you may attempt to reenter the SWAP command after tape motion has taken place.

CANCELED BY OPERATOR

If the tape is an emulator tape, no action is required since DDR does not support emulator tape.

INVALID USER EXIT

Contact the system programmer to make sure that the NSLREPOS program is in the system. If it is, make sure that a valid return code (0, 4, 8, 12, 16, or 20) is being returned to DDR and that no programming errors exist in NSLREPOS.

CATASTROPHIC ERROR

This may result when the application that had originally held an allocation for device *dev* either ends or issues a close against *dev* while DDR is processing the swap. If this is the case, then a SVC dump for a program check in DDR accompanies this message. Give this dump to the system programmer.

This may result when an I/O error occurs for the device being swapped to. In this case, no additional messages are issued (i.e., IOS000I) or LOGREC entries recorded to report this error as the DDR I/O driver bypasses error recovery procedure under certain conditions when handling I/O, such as rewind unload in preparation for a swap. If the DDR swap was operator-initiated, reissue the command specifying a new TO device. If the DDR swap was system-initiated, the application holding an allocation for device *dev* is posted back with a permanent error.

This may also occur if a DISPLAY IOS, MIH or SETIOS or SET IOS=xx command is active at the time of the DDR swap. If the DDR swap was operator-initiated, reissue the SWAP command. If the DDR swap was system-initiated, the application holding an allocation for device *dev* is posted back with a permanent error.

INVALID DEVICE

Reenter the SWAP command using a valid device for the "FROM" device.

IGF512I

CANCELED BY USER

No action is required.

JES3 ERROR

If the swap was initiated through a SWAP command, you may attempt to reenter the command. If, however, the swap was requested by the system as a result of a permanent error, the affected user has been posted with a permanent error.

BY DEVICE SUPPORT MODULE

No action is required.

ERROR ON RD BLKID

No action is required.

ERROR ON RD BUFFER

No action is required.

GETMAIN FAILED

No action is required.

PAGE FIX ERROR

No action is required.

FAILURE DURING LIBRARY PROCESSING

If there is a tape or library hardware problem, contact hardware support.

READ ERROR IN LIBRARY

If there is a tape or library hardware problem, contact hardware support.

REPOSITIONING ERROR IN LIBRARY

If there is a tape or library hardware problem, contact hardware support.

EXIT I/O ERROR IN LIBRARY

If there is a tape or library hardware problem, contact hardware support.

SWITCH FAILED DUE TO I/O ERROR

If there is a hardware problem, contact hardware support.

NOT A VALID PPRC PAIR

Reenter the swap command, specifying 'FROM' and 'TO' devices that are the primary and secondary devices in the same PPRC pair.

GETMAIN FAILED - SP245

No action is required.

SWAP TERMINATED BY OPERATOR

No action is required.

ERROR ON MEDIUM SENSE COMMAND

No action is required.

ERROR WRITING DATA

No action is required.

ERROR SETTING MODE CNTL INFORMATION

No action is required.

ERR ON SYNC CMD - DEV FORCED OFFLINE

No action is required.

ERROR ON LOCATE CMD

No action is required.

CATASTROPHIC ERROR - RSN=xx

The reason code in xx specifies what failure occurred.

- 01 A program check occurred during DDR execution. The recovery routine of DDR swap should have taken an SVC dump for this condition.
- 02 A terminating condition occurred early in DDR swap processing.
- 03 An internal error in DDR logging occurred.

- 04 An I/O error occurred on the TO device making it not usable for swapping. For operator and system-initiated swaps, it is possible to select a new TO device to be used for the SWAP.
- 05 An internal error occurred. The device type recognized by DDR swap was not a tape, DASD, or unit record device type.
- 06 An internal error in DDR device validation occurred.
- 07 An internal error occurred. An attempt to pagefix a DDR module failed.
- 08 A required resource could not be obtained. This condition will most likely occur when a DISPLAY IOS, SETIOS, or SET IOS=xx command is active at the time of the swap. For an operator swap, reissue the SWAP command. For a system-initiated swap, the application holding an allocation for device *dev* is posted back with a permanent error.

Unless otherwise noted, obtain a console dump which includes both the MASTER and IOS address spaces (IOSAS) and contact the IBM® Support Center for dump assistance.

UCB SWAP FAILURE - RSN=xx

For a list of reason codes, see mapping macro IOSDSWAP in *z/OS MVS Data Areas* in the *z/OS Internet* library (<http://www.ibm.com/systems/z/os/zos/bkserv/>). If IBM support is required, obtain a console dump which includes both the MASTER and IOS address spaces (IOSAS) and contact the IBM Support Center for dump assistance.

Source: Dynamic device reconfiguration (DDR)

Module: IGFDT2

Routing code: 1,3,4,7,11

Descriptor code: 4

IGF513I **DEVICE dddd INVALID FOR SWAP - [text] [NAME=name CODE=code]**

Explanation: The value of *text* is one of the following lines:

- MOUNT PENDING
- UNIT REFERENCE INVALID
- UNSUPPORTED USE
- INCOMPATIBLE
- NOT ALLOCATED
- DEVICE TYPE INVALID
- JES3 INCOMPATIBLE
- JES3 DEVICE IS IN USE
- JES3 DEVICE IS ONLINE
- JES3 DEVICE IS OFFLINE
- COULD NOT BE BROUGHT ONLINE
- DYNAMIC/STATIC INCOMPATIBLE
- VOLSER DOES NOT MATCH
- MUST BE QUIESCED WITH IOACTION
- DEVICE MUST BE OFFLINE
- ACTIVE PAGING DATASET
- MUST SWAP TO A 3490
- MUST SWAP TO A 3590-1
- MUST SWAP TO A 3590-E
- MUST SWAP TO A 3590-H
- MUST SWAP TO A 3590-J
- MUST SWAP TO A 3590-1 IN 3490 MODE
- MUST SWAP TO A 3590-E IN 3490 MODE

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- MUST SWAP TO A 3590-E OR 3590-H
- MUST SWAP TO A WORM-CAPABLE 3592-J
- MUST SWAP TO A 60GB-CAPABLE 3592-J
- MUST SWAP TO A 3592-3E
- MUST SWAP TO A 3592-J OR 3592-2
- MUST SWAP TO A 3592-2 OR 3592-3E
- MUST SWAP TO A 3592-3E OR 3592-4E
- MUST SWAP TO A 3592-4E
- ERROR ACQUIRING TAPE FORMAT INFO
- PAGE FIX ERROR
- UNSUPPORTED RECORD LENGTH
- DEV LIB MISMATCH
- NO DEV LIB INFO
- ERROR ACQUIRING MODE CNTL INFORMATION
- ERROR RESTORING MODE CNTL INFORMATION
- BLOCKED BY HYPERSWAP
- DEVICE DOES NOT SUPPORT SWAP TO SELF
- DEVICE IS MARKED UNAVAILABLE

A device was specified for a swap either in the SWAP command or in response to message IGF500D or IGF509D. However, the device cannot be used for one of the reasons listed above.

This message can be issued in a multiline message, in which case *name* and *code* will be specified.

In the message text:

ddd

The device specified for a swap.

MOUNT PENDING

Dynamic device reconfiguration (DDR) found that the T0 device has a mount outstanding for it. The device cannot be used as an alternate for the FROM device because of a conflict with device allocation.

UNIT REFERENCE INVALID

A device was specified in response to message IGF500D or IGF509D or was entered as the T0 device in a SWAP command; however, no corresponding device could be found in the list of devices defined at system generation.

UNSUPPORTED USE

A condition exists on device *ddd* that temporarily prevents a swap from taking place, although the indicated device is supported for a swap.

INCOMPATIBLE

The T0 device specified in response to message IGF500D or IGF509D or in the original SWAP command was not compatible with the FROM device. The device selected as the T0 device does not have the same features as the FROM device or is not in the same device class. This message also appears if an attempt is made to swap a shared direct access storage device (DASD) to an address other than itself.

NOT ALLOCATED

The FROM tape *ddd* in the SWAP command is not allocated to any user.

DEVICE TYPE INVALID

Device *ddd* is of a device type not supported by DDR for swaps.

JES3 INCOMPATIBLE

The T0 device specified in response to message IGF500D or IGF509D or in the original SWAP command was not compatible with the FROM device from the JES3 point of view.

JES3 DEVICE IS IN USE

The T0 device specified in response to message IGF500D or IGF509D or in the original SWAP command is currently in use from the JES3 point of view.

JES3 DEVICE IS ONLINE

The T0 device specified in response to message IGF500D or IGF509D or in the original SWAP command is currently online from the JES3 point of view but should be offline.

JES3 DEVICE IS OFFLINE

The T0 device specified in response to message IGF500D or IGF509D or in the original SWAP command is currently offline from the JES3 point of view but should be online.

COULD NOT BE BROUGHT ONLINE

The vary command processor failed the vary online request issued by DDR.

DYNAMIC/STATIC INCOMPATIBLE

The T0 device does not have the same configuration status as the FROM device. Either one of the devices is a static device and the other a dynamic device, or one device is static supporting dynamic and the other is static not supporting dynamic.

VOLSER DOES NOT MATCH

The T0 device does not have the same volume serial as the FROM device.

MUST BE QUIESCED WITH IOACTION

The FROM device is a shared DASD but the device was found not to be quiesced by the IOACTION command.

DEVICE MUST BE OFFLINE

The T0 device is a permanent resident DASD but was found to be online.

ACTIVE PAGING DATASET

The T0 device is a permanent resident DASD that contains an active paging data set.

MUST SWAP TO A 3490

The operator attempted to swap a non-3490. This is an error. The operator must swap to a 3490.

MUST SWAP TO A 3590-1

The operator attempted to swap to a drive other than a native 3590-1. This is an error. The operator must swap to a native 3590-1.

MUST SWAP TO A 3590-E

The operator attempted to swap to a drive other than a 3590-E. This is an error. The operator must swap to a 3590-E.

MUST SWAP TO A 3590-H

The operator attempted to swap to a drive other than a 3590-H. This is an error. The operator must swap to a 3590-H.

MUST SWAP TO A 3592-J

The operator attempted to swap to a drive other than a 3592-J. This is an error. The operator must swap to a 3592-J.

MUST SWAP TO A 3590-1 IN 3490 MODE

The operator attempted to swap to a drive other than a 3590-1 in 3490 mode. This is an error. The operator must swap to a 3590-1 in 3490 mode.

MUST SWAP TO A 3590-E IN 3490 MODE

The operator attempted to swap to a drive other than a 3590-E in 3490 mode. This is an error. The operator must swap to a 3590-E in 3490 mode.

MUST SWAP TO A 3590-E OR 3590-H

The operator attempted to swap to a drive other than a 3590-E or 3590-H. This is an error. The operator must swap to a 3590-E or 3590-H.

MUST SWAP TO A 3590-H

The operator attempted to swap to a drive other than a 3590-H. This is an error. The operator must swap to a 3590-H.

MUST SWAP TO A 3592-2

The operator attempted to override the system and selects the wrong type. This is an error. The operator must swap to a 3592-2.

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MUST SWAP TO A WORM-CAPABLE 3592-J

The operator attempted to swap to a drive other than a WORM-CAPABLE 3592-J. This is an error. The operator must swap to a WORM-CAPABLE 3592-J.

MUST SWAP TO A 60GB-CAPABLE 3592-J

The operator attempted to swap to a drive other than a 60GB ECONOMY 3592-J. This is an error. The operator must swap to a 60GB ECONOMY 3592-J.

3592-3E DRIVE DETECTED BUT NOT ALL 3592-3E SUPPORT IS PRESENT

Support for the 3592 Model E06 was shipped as program temporary fixes (PTFs) on z/OS DFSMS V1R7 and later releases. If these PTFs are not installed, DFSMSDfp issues this message.

System Programmer Response: Install the required maintenance.

MUST SWAP TO A 3592-4E

The operator attempted to swap to a drive other than a 3592-4E. This is an error. The operator must swap to a 3592-4E.

ERROR ACQUIRING TAPE FORMAT INFO

DDR was unable to obtain tape format information from the FROM device. The swap is ended.

PAGE FIX ERROR

DDR was unable to page fix storage to retrieve buffered data. The swap is ended.

UNSUPPORTED RECORD LENGTH

DDR could not retrieve a buffered record because the length was greater than 64 KB. The swap is ended.

DEV LIB MISMATCH

The operator attempted to swap to a device that is outside the automated tape library. The swap must be to a device within the same library.

NO DEV LIB INFO

The device is an automated tape library and DDR was unable to obtain the library ID to ensure that the FROM and T0 devices are in the same library. The swap is ended.

ERROR ACQUIRING MODE CNTL INFORMATION

DDR was unable to obtain mode control information from the FROM device. The swap is ended.

ERROR RESTORING MODE CNTL INFORMATION

DDR was unable to restore mode control information on the T0 device. The swap is ended.

ERROR ACQUIRING TAPE FORMAT INFO

DDR was unable to obtain tape format information from the FROM device. The swap is ended.

BLOCKED BY HYPERSWAP

Dynamic device reconfiguration (DDR) has found that either the FROM or T0 device is currently being monitored by hyperswap processing and is therefore ineligible for DDR swap processing.

DEVICE DOES NOT SUPPORT SWAP TO SELF

The operator attempted to swap back to the same drive address. This is an error. The operator must swap to a different drive address.

DEVICE IS MARKED UNAVAILABLE

A device in the UNAVAILABLE state cannot be chosen as the swap TO device.

System action: The system rejects the command and continues processing.

Operator response: The response depends on the message text. Respond as follows for each of the message texts:

MOUNT PENDING

For swaps initiated by a SWAP command, reenter the command after the mount request is satisfied if the device is the FROM device. If the device is the T0 device either for swaps requested by the system or for those initiated by a SWAP command, reenter another device or NO to the IGF509D message, which follows this one.

UNIT REFERENCE INVALID

Reenter a device number known to the system or NO to the IGF509D message, which follows this one. You can determine what devices are known to the system by using the DISPLAY U command.

UNSUPPORTED USE

Reenter the SWAP command using a supported device if *ddd* is the FROM device. Otherwise, reenter the address of a device supported by DDR to the IGF509D message, which follows this one, or enter NO.

DDR does not permit swaps for the following devices:

- Offline FROM devices
- Devices under control of the online test executive program (OLTEP)
- Integrated emulator tapes in original second-generation format (RECFM=U) coded on the device control block (DCB)
- Nonstandard label (NSL) tapes, if the user exit NSLREPOS is unavailable
- Tape swaps in which the T0 device is allocated
- Unit record devices in ready status
- A T0 device about which outstanding messages that might require operator action exist

INCOMPATIBLE

Reply to message IGF509D, which follows this message, with a device compatible to the FROM device, or reply NO. Compatible devices follow.

Disk swaps supported:

- 3330 to 3330
- 3330 mod 11 to 3330 mod 11
- 3340 to 3340

Unit record swaps supported:

- 1403 to 1403
- 1443 to 1443
- 3211 to 3211
- 3505 to 3505
- 3525 to 3525

Tape swaps supported:

- 7-track to 7-track
- 9-track (single or dual density) to 9-track (single or dual density), provided that the density in use on the *xxx* unit is a valid density specification for the *yyy* unit.

If a 7-track tape drive is being used at 200 BPI, you must ensure that the T0 device has 200 BPI feature.

Volumes on 3400 series tape drives can be moved only to other 3400 series drives. However, volumes on 2400 series tape drives can be moved either to 2400 series drives or to 3400 series drives.

NOT ALLOCATED

Because the tape is not allocated, you need not use DDR to move the tape.

DEVICE TYPE INVALID

Reply to the IGF509D messages with the control unit address of one of the following devices:

- Tape: 3410, 3411, 3420 (all models)
- Disk: 3330, 3330 model 11, 3340
- Unit record: 1403, 1443, 3211, 3505, 3525

JES3 INCOMPATIBLE

Reply to message IGF509D, which follows this message, supplying a device compatible with the FROM device from the JES3 point of view, or reply NO. For information on JES3 device compatibility, see *z/OS JES3 Initialization and Tuning Reference*.

JES3 DEVICE IS IN USE

Reply to message IGF509D, which follows this message, supplying a device that is not in use from the JES3 point of view, or reply NO. For information on JES3 device requirements for DDR swap, see *z/OS JES3 Initialization and Tuning Reference*.

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JES3 DEVICE IS ONLINE

Reply to message IGF509D, which follows this message, supplying a device that is offline from the JES3 point of view, or reply NO. For information on JES3 device requirements for DDR swap, see *z/OS JES3 Initialization and Tuning Reference*.

JES3 DEVICE IS OFFLINE

Reply to message IGF509D, which follows this message, supplying a device that is online from the JES3 point of view, or reply NO. For information on JES3 device requirements for DDR swap, see *z/OS JES3 Initialization and Tuning Reference*.

COULD NOT BE BROUGHT ONLINE

Enter the address of a new T0 device or NO in response to message IGF509D.

DYNAMIC/STATIC INCOMPATIBLE

Reply to message IGF509D, which follows this message, with a device that has the same configuration status as the FROM device. If the FROM device is dynamic, respond with a device defined as dynamic. If the FROM device is static supporting dynamic, respond with a device defined as static supporting dynamic. If the FROM device is static not supporting dynamic, respond with a device defined as static not supporting dynamic.

VOLSER DOES NOT MATCH

Reenter the SWAP command, selecting a T0 device that is the secondary device for the peer-to-peer remote copy (PPRC) pair to which the FROM device belongs.

MUST BE QUIESCED WITH IOACTION

Issue the IOACTION command to quiesce the FROM device, and reenter the SWAP command.

DEVICE MUST BE OFFLINE

Vary the T0 device offline and reenter the SWAP command.

ACTIVE PAGING DATASET

Reenter the SWAP command, selecting a T0 device that is the secondary device for the PPRC pair to which the FROM device belongs.

MUST SWAP TO A 3490

Reenter the SWAP command, specifying a 3490.

MUST SWAP TO A 3590

Reenter the swap command, specifying a 3590.

MUST SWAP TO A 3590-1 IN 3490 MODE

Reenter the SWAP command, specifying a 3590-1.

MUST SWAP TO A 3590-E IN 3490 MODE

Reenter the SWAP command, specifying a 3590-E.

MUST SWAP TO A 3590-E OR 3590-H

Reenter the SWAP command, specifying a 3590-E or 3590-H.

MUST SWAP TO A 3590-H

Reenter the SWAP command, specifying a 3590-H.

GETMAIN FAILED

Reenter the SWAP command. DDR might be able to obtain storage on subsequent attempts.

PAGE FIX ERROR

Reenter the SWAP command.

UNSUPPORTED RECORD LENGTH

No action required. The swap is ended.

DEV LIB MISMATCH

Reenter the SWAP command, selecting a T0 device that is within the same automated tape library.

NO DEV LIB INFO

Reenter the SWAP command. DDR might be able to obtain the library information on subsequent attempts. If the error continues to occur, contact your service representative.

ERROR ACQUIRING MODE CNTL INFORMATION

Reenter the SWAP command. If the error continues to occur, contact your service representative.

ERROR RESTORING MODE CNTL INFORMATION

Reenter the SWAP command. If the error continues to occur, contact your service representative.

ERROR ACQUIRING TAPE FORMAT INFO

Reenter the SWAP command. If the error continues to occur, contact your service representative.

BLOCKED BY HYPERSWAP

End hyperswap monitoring for both the FROM and TO devices and reissue the SWAP command.

DEVICE IS MARKED UNAVAILABLE

VARY the device to the available state and then re-enter the SWAP command.

Source: Dynamic device reconfiguration (DDR)

Routing code: 1,3,4,7,11

Descriptor code: 4

IGF514I CAUTION: ENSURE THAT THERE IS NO HEAD OR DISK PACK INTERFERENCE

Explanation: The permanent I/O error occurring on a direct access storage device (in the previous message) with channel unit address *xxx* may be due to a defective disk drive or pack.

System action: The system continues operation. The SWAP request does not complete until the operator responds to the succeeding reply message.

Operator response: The disk drive or pack may be defective. If so, moving the pack or installing a different pack on the same drive will propagate the damage. Do not physically move the pack until both the pack and the drive have been inspected. Damage is indicated by a strange noise prior to turning the drive off. Another indication of damage to the device is a brown powder (dust) on disk surfaces or within the pack enclosure. Visually inspect the disk surfaces before removing the pack from the drive.

If after SWAP, an additional permanent I/O error occurs, or if there are additional indications of problems, do not swap the pack again.

System programmer response: Contact hardware support if there is *any* indication of damage.

Source: Dynamic device reconfiguration (DDR)

Module: IGFDV0

Routing code: 1,4

Descriptor code: 4

IGF515I SWAP FROM *dev1* TO *dev2* FAILED

Explanation: While swapping devices, dynamic device reconfiguration (DDR) encountered an error associated with either the mount or dismount services. This message might be accompanied by other messages describing the error.

In the message text:

dev1

The device number of the device being swapped from.

dev2

The device number of the device being swapped to.

System action: The system abnormally ends the swap and issues message IGF512I.

System programmer response: See the accompanying messages for information about the cause of the swap failure.

Source: Dynamic device reconfiguration

Module: IGFDT2

Routing code: 1,3,11

Descriptor code: 4

IGF516I • IGF519I

IGF516I SWAP IN PROGRESS IN LIBRARY *libname*, NO ONLINE DEVICES CAN BE FOUND

Explanation: In the environment, dynamic device reconfiguration (DDR) could not find any online devices to swap to.

In the message text:

libname

Library name in which the swap is occurring.

System action: This message will be accompanied by messages IGF509I and IGF509D, which prompt the operator for a 'TO' device. DDR processing will then continue.

Operator response: Vary a device online in the named library, and then answer message IGF509D with the new 'TO' device.

Source: Dynamic device reconfiguration

Module: IGFDV0

Routing code: 1,3,11

Descriptor code: 4

IGF517I DEVICE ACCEPTED, SWAP PROCESSING RESUMED

Explanation: A system-initiated swap in is in progress but no online devices were found. This message is issued when the operator has responded to messages IGF516I, IGF509I, and IGF509D and entered a valid online device for the swap.

System action: processing continues normally.

Source: Dynamic device reconfiguration

Module: IGFDV0

Routing code: 1,3,11

Descriptor code: 4

IGF518I WARNINGS ISSUED DURING LIBRARY DEMOUNT PROCESSING

Explanation: Warning messages were issued during the demount of the 'FROM' or 'TO' device. This message may be accompanied by other messages describing these warnings.

System action: processing continues normally.

Source: Dynamic device reconfiguration

Module: IGFDT2

Routing code: 1,3,11

Descriptor code: 4

IGF519I WARNINGS ISSUED DURING LIBRARY MOUNT PROCESSING

Explanation: Warning messages were issued during the mount of the 'TO' device. This message may be accompanied by other messages describing these warnings.

System action: Processing continues normally.

Source: Dynamic device reconfiguration

Module: IGFDT2

Routing code: 1,3,11

Descriptor code: 4

IGF520A VERIFICATION COMPLETE: REPLY 1 TERMINATE PAIR, AND SWAP | 2 SWITCH PAIR, AND SWAP | 3 CONTINUE SWAP | 4 TERMINATE SWAP

Explanation: The 'FROM' and 'TO' DASD devices were verified as a PPRC pair with the 'FROM' device being the source and the 'TO' device being the target. The operator is provided with three options for continuing processing or the option to terminate processing.

System action: Depends on the option selected by the operator.

- Reply 1: The PPRC pair is terminated and processing continues.
- Reply 2: The PPRC pair is terminated. A PPRC pair is then reestablished in the opposite direction, the 'TO' device becomes the source device and the 'FROM' device becomes the target device. This PPRC pair is then suspended with change recording enabled, and processing is allowed to continue.
- Reply 3: Processing continues with no action taken on the PPRC pair.
- Reply 4: Processing is terminated.

Operator response: The operator must choose one of the four options.

Source: Dynamic device reconfiguration

Module: IECLDDRD

IGF521A NO PATH IN OPPOSITE DIRECTION: REPLY 1 TO CONTINUE SWAP | 2 TRY AGAIN | 3 TERMINATE SWAP

Explanation: This message is in response to option 2 of IGF520A when an ESCON logical path does not exist from the 'TO' device to the 'FROM' device. This message is issued prior to any action being taken that would change the status of the PPRC pair.

System action: Depends on the option selected by the operator.

- Reply 1: The PPRC pair is terminated and processing continues.
- Reply 2: The PPRC pair is terminated. A PPRC pair is then reestablished in the opposite direction, the 'TO' device becomes the source device and the 'FROM' device becomes the target device. This PPRC pair is then suspended with change recording enabled, and processing is allowed to continue.

Operator response: The operator must establish an ESCON logical path from the 'TO' device to the 'FROM' device before selecting option 2. If a path is not established, then only option 1 or option 3 may be used.

Source: Dynamic device reconfiguration

Module: IECLDDRD

IGF522A UNABLE TO SWITCH, FROM DEVICE IS SMALLER THAN TO DEVICE: REPLY 1 TO CONTINUE SWAP | 2 TO TERMINATE SWAP

Explanation: This message is in response to option 2 of IGF520A when the 'TO' device has a greater physical capacity than the 'FROM' device and therefore cannot establish a PPRC pair between the 'TO' device and the 'FROM' device. This is a limitation of the hardware. This message is issued prior to any action being taken that would change the state of the PPRC pair.

System action: Depends on the option selected by the operator.

- Reply 1: The PPRC pair is terminated and processing continues.
- Reply 2: Processing is terminated.

Operator response: The operator may continue processing or terminate processing.

Source: Dynamic device reconfiguration

Module: IECLDDRD

IGF523A WARNING THE DEVICES SELECTED ARE NOT A VALID PPRC PAIR REPLY 1 TO CONTINUE SWAP | 2 TERMINATE SWAP

Explanation: The 'FROM' device and 'TO' device are not a valid PPRC pair. This means that there is no guarantee that data on the 'TO' device is a mirror copy of data on the 'FROM' device.

System action: Depends on the option selected by the operator.

- Reply 1: Processing continues.
- Reply 2: Processing is terminated.

Operator response: The operator should use caution when using option 1 since there is no guarantee that the 'TO' device is a mirror copy of the 'FROM' device.

Source: Dynamic device reconfiguration

Module: IECLDDRD

IGF912W EXTENDED STORAGE FAILURE, RE-IPL THE SYSTEM

Explanation: A hardware error exists in expanded (extended) storage.

System action: The system enters a wait state.

Operator response: See the operator response for the accompanying wait state.

Source: Machine check handler (MCH)

Module: IGFPMAIN

Routing code: 2,10

Descriptor code: 4

IGF913W MACHINE CHECK HANDLER INITIALIZATION FAILED -- *text*

Explanation: Machine check handler initialization failed during the nucleus initialization program (NIP).

In the message *text*:

REQUIRED DATA AREAS COULD NOT BE ALLOCATED

The system could not allocate the loaded request block (LRB) and processor work area (PWA) data areas for machine check handler.

CONTROL REGISTERS COULD NOT BE INITIALIZED

The system could not initialize the required control registers during machine check handler initialization.

System action: The system loads nonrestartable wait state X'0E8' with a reason code of X'81xxx' or X'82xx'.

Operator response: See the operator response for wait state X'81xxx' or X'82xx'.

System programmer response: See the system programmer response for wait state X'81xxx' or X'82xx'.

Source: Machine check handler (MCH)

Module: IGFRIM00

Routing code: 1,10

Descriptor code: 1

IGF931E *nnn* {SR | DG} EVENTS HAVE OCCURRED ON CPU *x*, STATUS={ QUIET | RECORD}

Explanation: This message shows the number and types of system recovery or degradation machine check interruptions that occurred on a processor, and whether future interruptions will be recorded.

In the message text:

nnn The number of machine check interruptions.

SR Indicates a system recovery type of machine check interruption.

DG Indicates a degradation type of machine check interruption.

x The processor identifier.

QUIET Further machine check interruptions of the indicated type will not be recorded.

RECORD

Further machine check interruptions of the indicated type will be recorded.

System action: If **QUIET** appears in the message, the system stopped recording machine check interruptions and continued processing. If **RECORD** appears in the message, the system continues recording machine check interruptions in the logrec data set.

Operator response: Contact hardware support if the machine check interruptions are excessive. Provide the logrec data set error records.

Source: Machine check handler (MCH)

Module: IGFPMTA

Routing code: 2,10

Descriptor code: 11

IGF953I **EVENT=***type* {**CPU=***x*} **MODE-**
{**QUIET** | **RECORD=***nnn* | **RECORD=ALL**} **CNT=***ccc*[**INTERVAL=***iiii*][**REPORT=***rrr*]

Explanation: In response to the MODE STATUS command, this message displays the hardware error recovery status for each error type for each online processor.

In the message text:

type

The type of event, which is one of the following:

SR System recovery

DG Degradation

PD Instruction processing damage

SD System damage

IV Machine check interrupt indicates an incorrect PSW or register

TC Time-of-day clock damage

PT Processor timer damage

CC Clock comparator damage

PS Primary synch damage

AD External time reference (ETR) attachment damage

SC ETR synch check

SL ETR switch-to-local synch

SS STP Sync Check

IC Island Condition

CO CTN Configuration Change

CS Clock Source Error

CPU=*x*

The address of the processor on which the event occurred.

QUIET

Further machine check interruptions of this type will not be recorded.

IGF955I

RECORD=*rrr*

The system will record hardware errors of this type until the number of errors is *rrr*. When the number of errors equals *rrr*, the system does one of the following:

SR and DG

The system issues message IGF931E and places the indicated processor in QUIET mode for the respective event.

PD, SD, IV, TC, PT, CC, PS, AD, and SL

If the time interval has not expired, the system invokes alternate CPU recovery (ACR) to take the indicated processor offline.

SC The system switches to local mode.

RECORD=ALL

The system will record all hardware errors of this type. For SR and DG events, the system issues message IGF931E whenever the count reaches a multiple of *rrr*.

CNT=*ccc*

The number of events that occurred since the current timing interval began. For SR and DG events, the current counting interval began at the last IPL or the last time the operator entered the mode command. For PD, SD, IV, TC, PT, CC, PS, AD, SL and SC events, the counting interval is controlled by the value of INTERVAL.

INTERVAL=*iiii*

The length of time (in seconds) comprising a timing interval elapsed for PD, SD, IV, TC, PT, CC, PS, AD, SL, or SC events.

If the counting interval elapses before the specified number of events occurs, the system resets the elapsed time to 0. If a hardware error occurs, the event count is set to 1.

REPORT=*rrr*

The number of SR or DG hardware errors which can occur before the operator is notified. Whenever the count for the SR or DG event reaches a multiple of *rrr*, the system issues message IGF931E.

System action: Processing continues.

Source: Machine check handler (MCH)

Module: IGF2603D

Routing code: 2

Descriptor code: 5

IGF955I **MODE {QUIET | RECORD=ALL | RECORD=*nnn*} FOR type**
 EVENTS ON {CPU=*x* | CPU=ALL}{INTERVAL=*iiii* SECS}{REPORT=*rrr*}

Explanation: In response to a MODE command, the machine check handler changed the mode of the indicated event class on the specified processor to the indicated state:

QUIET

The system will not record hardware failures of the specified type. QUIET applies only to SR and DG events.

RECORD=*rrr*

The system will record hardware errors of this type until the number of errors is *rrr*. When the number of errors equals *rrr*, the system does one of the following:

SR and DG

The system issues message IGF931E and places the indicated processor in QUIET mode for the respective event.

PD, SD, IV, TC, PT, CC, PS, AD, and SL

If the time interval has not expired, the system invokes alternate CPU recovery (ACR) to take the indicated processor offline.

SC The system switches to local mode.

RECORD=ALL

The system will record all hardware errors of this type. For SR and DG events, the system issues message IGF931E whenever the count reaches a multiple of *rrr*.

type

The type of event, which is one of the following:

SR	System recovery
DG	Degradation
PD	Instruction processing damage
SD	System damage
IV	Machine check interrupt indicates an incorrect PSW or register
TC	Time-of-day clock damage
PT	Processor timer damage
CC	Clock comparator damage
PS	Primary synch damage
AD	External time reference (ETR) attachment damage
SC	ETR synch check
SL	ETR switch-to-local synch

EVENTS ON CPU = *x*

The system is monitoring the indicated event on processor *x*.

EVENTS ON CPU = ALL

The system is monitoring the indicated event on all processors.

INTERVAL=*iiii*

The length of time (in seconds) comprising a timing interval elapsed for PD, SD, IV, TC, PT, CC, PS, AD, SL, or SC events.

If the counting interval elapses before the specified number of events occurs, the system resets the elapsed time to 0. If a hardware error occurs, the event count is set to 1.

REPORT=*rrr*

The number of SR or DG hardware errors which can occur before the operator is notified. Whenever the count for the SR or DG event reaches a multiple of *rrr*, the system issues message IGF931E.

System action: Processing continues.

Source: Machine check handler (MCH)

Module: IGF2603D

Routing code: 2

Descriptor code: 5

IGF957A MANUALLY STOP PROCESSOR(*x*) SO THAT ACR CAN PROCEED. REPLY U WHEN THE STOP HAS BEEN PERFORMED

Explanation: A processor issued a malfunction alert, but the system was unable to stop the processor. The operator must stop the processor manually so alternate CPU recovery (ACR) can remove the processor from the system.

System action: The system waits for the operator to reply.

Operator response:

- If you stop processor *x*, reply U to the message.
- If you are unable to stop processor *x*, do not reply U. Retain the error records from the logrec data set and contact hardware support.

Source: Machine check handler (MCH)

Module: IGFPXMFA

Routing code: 1, Note 12

IGF958I • IGF970E

Descriptor code: 2

IGF958I MODE COMMAND REJECTED, *prm* PARAMETER INVALID

Explanation: The indicated parameter is not valid for the MODE command as specified.

System action: Processing continues. The system rejects the MODE command.

Operator response: Enter the MODE command again.

Source: Machine check handler (MCH)

Module: IGF2603D

Routing code: 2

Descriptor code: 5

IGF959I MODE COMMAND REJECTED, CPU SPECIFIED IS {INVALID | OFFLINE}

Explanation: The MODE command was rejected. Either the processor specified was not valid, or the processor specified was offline.

System action: Processing continues; the MODE command is rejected and has no effect.

Operator response: Reenter the MODE command. Be sure that the processor specified is online, that the processor number specified is 0 through F, and that the processor supports the parameter specified. See *z/OS MVS System Commands* to determine which processor(s) support the specified parameter.

Source: Machine check handler (MCH)

Module: IGF2603D

Routing code: 3

Descriptor code: 5

| IGF960I MODE COMMAND REJECTED. PROCVIEW CORE IS IN EFFECT.

| **Explanation:** The MODE command for this type of machine check was rejected because machine check thresholding
| is not supported with PROCVIEW CORE and this type of machine check. The MODE command for this type of
| machine check only accepts RECORD=ALL,CPU=ALL and cannot be changed. For more information on the types of
| machine checks that no longer support machine check thresholding with PROCVIEW CORE, see the MODE
| command in *z/OS MVS System Commands*.

| **System action:** Processing continues; the system rejects the MODE command.

| **Operator response:** None.

| **Source:** Machine check handler (MCH)

| **Module:** IGF2603D

| Descriptor code: 5

IGF970E VF *x* NOW OFFLINE. UNRECOVERABLE ERROR DETECTED

Explanation: The machine check handler detected a failure in a vector facility (VF).

In the message text:

x The VF identifier.

System action: The system takes the failing VF offline, and then continues processing. The system ends any vector work that was running at the time of the failure.

- If other VFs are in the configuration, the system will dispatch the VF work on a processor with an available VF.
- If other VFs are not available, the system cannot run the VF work. The system then issues message IRA700I.

Operator response: Enter the DISPLAY M=CPU command to find out if the configuration has other VFs for existing jobs. If the system issues message IRA700I, see its operator response.

Source: Machine check handler (MCH)

Module: IGFPMHCA

Routing code: 2,10

Descriptor code: 11

Chapter 2. IGGHC messages

IGGHCI03I CHECK(IBM CATALOG,CATALOG_IMBED_REPLICATE) ran successfully and found no exceptions.

Explanation: The check was successful and found no catalogs defined with the IMBED attributes, REPLICATE attributes, or both.

System action: The system continues processing.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: DFSMS Catalog

Module: IGG0CLHY

Routing code: N/A

Descriptor code: N/A

Automation: N/A

Reference Documentation: N/A

IGGHCI04E The health check has detected one or more catalogs defined with the IMBED and/or REPLICATE attributes.

Explanation: CHECK(IBM CATALOG,CATALOG_IMBED_REPLICATE) found one or more catalogs defined with the IMBED attributes, REPLICATE attributes, or both. The IMBED and REPLICATE attributes were intended as performance improvements but have proven to be otherwise. They have proven to waste DASD space and degrade performance. They have been obsoleted by the newer, cached DASD devices. In some cases, unplanned outages have occurred. No supported release of z/OS allows you to define a user catalog or master catalog with either the IMBED or REPLICATE attributes. IBM intends to drop support for these attributes in the future.

AVAILABILITY

Column reports the status of the catalog.

YES Catalog was processed by the check.

NO Catalog was not available for processing either because the volume was offline or the volume was reinitialized. Attribute information could not be returned.

ERROR

CSI reported that the catalog entry was in error. Attribute information could not be returned. Running a DIAGNOSE on the catalog could help diagnose the problem. For more information about the DIAGNOSE command, see *z/OS DFSMS Access Method Services Commands*.

System action: The system continues processing.

Operator response: Report this message to the System Programmer.

System programmer response: Perform EXPORT/IMPORT on the affected catalogs reported by message IGGHC106I to remove the IMBED and REPLICATE attributes. For more information about EXPORT/IMPORT of a catalog, see Chapter 6 'Backing up and Recovering Catalogs' in *z/OS DFSMS Managing Catalogs*.

Problem determination: See IGGHC106I in the message buffer that identifies the catalogs defined with the obsolete attributes.

Source: DFSMS Catalog

Routing code: See Note 35.

Descriptor code: 12 is the default set by this check. See Note 1.

Automation: N/A

IGGHC106I • IGGHC107I

Reference Documentation: Chapter 6 'Backing up and Recovering Catalogs' in *z/OS DFSMS Managing Catalogs*.

IGGHC106I	Following catalog(s) were inspected by the health check.	CATALOG NAME	ATTRIBUTE
COMPONENT	AVAILABILITY	catname	attribute component status

Explanation: In the message text:

catname Name of the catalog defined with the obsolete attribute

attribute

Obsolete attribute catalog is defined with (IMBED or REPLICATE)

component

The name of the component of the catalog (Data/Index)

availability

Whether the catalog is available for processing or not because the volume was offline, or was reinitialized in which case there is an orphan UCON in the master catalog.

Exception message IGGHC104E follows in the message buffer that describes the error condition and steps to resolve the exceptions.

System action: The system continues processing.

Operator response: N/A

System programmer response: Resolve the exception reported for each catalog listed in the report.

Problem determination: N/A

Source: DFSMS Catalog

Module: IGG0CLHY

Routing code: N/A

Descriptor code: N/A

Automation: N/A

Reference Documentation: See IGGHC104E.

IGGHC107I CSI has encountered an error in its processing while attempting to return data from the Catalog Address Space. Check message HZS1002E for diagnostic information. The check is disabled.

Explanation: CHECK(IBM-CATALOG,CATALOG_IMBED_REPLICATE) encountered an error in the processing of CSI.

This message provides additional information for the CSI error that follows HZS1002E.

System action: The check does not run.

Operator response: Report this message to the system programmer.

System programmer response: Check message HZS1002E for diagnostic information. The first 4 bytes contain the CSI return code, and the next 4 bytes contain the CSI reason code. For an explanation on the return and reason codes from CSI, see 'Return Codes for General Purpose Register 15' in Appendix C of *z/OS DFSMS Managing Catalogs*.

Problem determination: Check the diagnostic information returned to diagnose the error.

Source: DFSMS Catalog

Module: IGG0CLHY

Routing code: N/A

Descriptor code: N/A

Automation: N/A

Reference Documentation: Appendix C of *z/OS DFSMS Managing Catalogs*.

IGGHC108I No user catalog connector entries were found in the master catalog.

Explanation: CHECK(IBM CATALOG,CATALOG_IMBED_REPLICATE) found no user catalogs in the master catalog.

System action: The system continues processing.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: DFSMS Catalog

Module: IGG0CLHY

Routing code: N/A

Descriptor code: N/A

Automation: N/A

Reference Documentation: N/A

IGGHC109I IMBED/REPLICATE Health Check Summary Report:

A total of TOTCAT catalogs were processed by the Health Check.

TOTSUC catalogs did not have either IMBED or REPLICATE attributes on them.

TOTECXEP catalogs were not processed by the Health Check either because the catalog volume was offline or the catalog entry was in error.

TOTERR catalogs were detected with either IMBD and/or REPLICATE attributes on them.

Explanation: CHECK(IBM CATALOG,CATALOG_IMBED_REPLICATE) summary report describes the findings of the check.

System action: The system continues processing.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: DFSMS Catalog

Module: IGG0CLHY

Routing code: N/A

Descriptor code: N/A

Automation: N/A

Reference Documentation: N/A

| **IGGHC110I** CHECK(IBM CATALOG,CATALOG_RNLS) ran successfully and found no exceptions.

| **Explanation:** The configuration of resources SYSIGGV2, SYSZVVDS and SYSVTOC conforms to IBM recommendations. IBM recommends that ALL reserves be converted unless you are sharing DASD outside the sysplex. These resources should be included on the GRS conversion list (CON RNL), and none should be found on the GRS inclusion list (INCL RNL) or the GRS exclusion list (EXCL RNL).

| **System action:** The system continues processing.

| **Operator response:** N/A

| **System programmer response:** N/A

| **Problem determination:** N/A

| **Source:** DFSMS VSAM RLS

| **Module:** IGG0CLHR

IGGHC111E • IGGHC112I

| **Routing code:** N/A

| **Descriptor code:** N/A

| **IGGHC111E** CHECK(IBM CATALOG,CATALOG_RNLS) found that the Catalog/DADSM resources do not conform to IBM recommendations.

| **Explanation:** IBM now recommends that ALL reserves be converted. Resources SYSIGGV2, SYSZVVDS and SYSVTOC should all be listed on the GRS conversion list (CON RNL), and none should be found on the GRS inclusion list (INCL RNL) nor the GRS exclusion list (EXCL RNL).

| IGGHC112I has been placed in the message buffer to provide detail on which Catalog resources are found in the INCL list and EXCL list and which resources are missing from the CON list.

| **System action:** The system continues processing.

| **Operator response:** Report this problem to the system programmer.

| **System programmer response:** See the Problem Determination section below to determine which resources should be removed or added to the GRS RNLS.

| **Problem determination:** If catalogs are not shared outside the sysplex, remove any resource found in the INCL or EXCL list and add any resource that is missing in the CON list.

| **Source:** DFSMS VSAM RLS

| **Module:** IGG0CLHR

| **Routing code:** See note 35.

| **Descriptor code:** 12 is the default set by this check. See note 1.

| **Reference Documentation:** For more information on converting RESERVES, see "RESERVE conversion" in z/OS MVS Planning: Global Resource Serialization.

| **IGGHC112I** Please see the list below for non-conforming resources:

| -----
| RESOURCE RNL ISSUE

| -----
| SYSIGGV2 INCL FOUND

| SYSZVVDS EXCL FOUND

| SYSZVVDS CON MISSING

| **Explanation:** In the message text:

| **RESOURCE**

| The name of the resource that has issue, which can be SYSIGGV2, SYSZVVDS, or SYSVTOC.

| **RNL**

| The name of one of the GRS RNLS, which can be INCL, EXCL, or CON.

| **ISSUE**

| The issue of the indicated resource, which can be FOUND or MISSING.

| **System action:** The system continues processing.

| **Operator response:** N/A

| **System programmer response:** See IGGHCH0111E

| **Problem determination:** See IGGHCH0111E

| **Source:** DFSMS VSAM RLS

| **Module:** IGG0CLHR

| **Routing code:** N/A

| **Descriptor code:** N/A

| **Reference Documentation:** See IGGHCH0111E

| IGGHC114I CHECK(IBM CATALOG,CATALOG_RNLS) determined that GRS=NONE is in effect, so no checking
| will be done.

| **Explanation:** GRS=NONE is in effect, so no RNLs are used, and either all requests are serialized only within the
| current system, or an alternative method of serialization is being used.

| **System action:** The system continues processing.

| **Operator response:** N/A

| **System programmer response:** N/A

| **Problem determination:** N/A

| **Source:** DFSMS Catalog

| **Module:** IGG0CLHR

| **Routing code:** N/A

| **Descriptor code:** N/A

Chapter 3. IGGN messages

IGGN000I MESSAGE TABLE UNUSABLE

Explanation: During nucleus initialization program (NIP) processing, a logical error in the NIPSERV message table (IGG0NTAB) was detected while trying to issue a message. The system then tried to issue diagnostic message IGG0N501A but failed.

System action: The system continues processing. Depending upon the condition that caused the original message, an initial program load (IPL) may fail or continue.

Operator response: If the IPL fails and the system programmer requests it, take a stand alone dump.

System programmer response: If the error recurs, contact the IBM Support Center. Provide the stand-alone dump.

Source: DFSMSDfp

Routing code: 2

Descriptor code: 4

IGGN301I *dsname*, OBTAIN FAILED FOR DATASET

Explanation: During nucleus initialization program (NIP) OPEN processing, a read of the format 1 DSCB for data set *dsname* failed with an input/output (I/O) error.

In the message text:

dsname The specified data set name.

System action: The system continues processing.

Operator response: Notify the system programmer.

System programmer response: Examine messages that follow this message for information about the I/O error.

Source: DFSMSDfp

Routing code: 2

Descriptor code: 4

IGGN302I *dev, volser, path, op_code, status, sense*, I/O ERROR READING VOLUME LABEL

Explanation: During nucleus initialization program (NIP) processing, a read of the volume label received an input/output (I/O) error. In the message text:

dev The device number.

volser The volume serial number.

path The channel path.

op_code The failing I/O command.

status The channel status word (CSW) status.

sense The first two bytes of sense data.

The volume serial occurs only for direct access storage device (DASD) devices.

System action: The system continues processing.

Operator response: Notify the system programmer of the error.

System programmer response: Save the console log. Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

IGGN303I • IGGN305I

Source: DFSMSdfp

Routing code: 2

Descriptor code: 4

IGGN303I *dev*, UNLABELED DASD DEVICE

Explanation: During nucleus initialization program (NIP) processing, an attempt to read the volume label on the specified device failed because the label did not exist.

In the message text:

dev The device number of the specified device.

System action: The system continues processing.

Operator response: If this message is unexpected for the volume on device *dev*, report the message to the system programmer.

System programmer response: Ensure that the device mounted on device *dev* has been properly initialized by the ICKDSF program.

Source: DFSMSdfp

Routing code: 2

Descriptor code: 4

IGGN304I *dev* OFFLINE

Explanation: During nucleus initialization program (NIP) processing, the system has placed the specified device offline. A previous message will have indicated the reason for this action.

In the message text:

dev The device number of the specified device.

System action: The system continues processing without the device.

Source: DFSMSdfp

Routing code: 2

Descriptor code: 4

IGGN305I *dev, volser, dsname*, VOLUME IN USE

Explanation: During nucleus initialization program (NIP) processing, an incorrect specification was detected while the system attempted to mount volume *volser* on device *dev* for data set *dsname* which is not required for initial program load (IPL). The volume serial is correct but the device type is unacceptable. The volume currently mounted on device *dev* is permanently resident.

In the message text:

dev The device number of the specified device.

volser The specified volume serial number.

dsname The specified data set name.

System action: The system continues processing.

Operator response: Change response to IGGN505A when it is re-issued.

Source: DFSMSdfp

Routing code: 2

Descriptor code: 4

IGGN306I *dev*, UNIT UNACCEPTABLE,*reason-code*

Explanation: During nucleus initialization program (NIP) processing, the device number provided by the operator, *dev*, is incorrect based on a specific reason code.

In the message text:

dev The device number provided by the operator.

reason-code

One of the following:

- 1 The device number has not been installed.
- 2 The device type is incorrect for the volume.
- 3 There is a permanently mounted volume currently on the device or the unit contains a volume serial other than the one required.
- 4 The device could not be brought physically or logically online.

System action: The system re-issues message IGGN504A or IGGN505A.

Operator response: Respond to message IGGN504A or IGGN505A with the specification for an alternate device.

System programmer response: Ensure that the device specified is the proper device type for the volume to be mounted, does not contain a required system data set, and is demountable.

Source: DFSMSdfp

Routing code: 2

Descriptor code: 4

IGGN307I *volser*, *dsname*, DATASET NOT FOUND ON VOLUME

Explanation: During nucleus initialization program (NIP) OPEN processing, the system was unable to find a format 1 DSCB for data set *dsname* on the specified volume.

In the message text:

volser The specified volume serial number.

dsname The specified data set name.

System action: Either processing will continue without the specified data set or message IGGN602W will be issued if the data set is required for initial program load (IPL).

Operator response: Notify the system programmer.

System programmer response: List the volume table of contents (VTOC) of volume *volser*. If the data set is not on the volume, create the data set and re-IPL. If the data set is on the volume, contact the IBM Support Center.

Source: DFSMSdfp

Routing code: 2

Descriptor code: 4

IGGN308I *dev*, INVALID TAPE VOLUME, STANDARD LABEL

Explanation: During nucleus initialization program (NIP) processing, a tape on device *dev* was determined to contain an IBM standard label. An unlabeled scratch tape is required.

In the message text:

dev The device number of the specified device.

System action: Processing continues with a request to dismount the tape on device *dev* and mount an unlabeled scratch tape.

Operator response: Mount an unlabeled tape when requested to do so.

IGGN309A • IGGN310I

Source: DFSMSdfp

Routing code: 2

Descriptor code: 4

IGGN309A *dev, return-code, 'SCRATCHN', MSGDISP (VERIFY) FAILED*

Explanation: During nucleus initialization program (NIP) processing, a request to verify the mount of an unlabeled scratch tape using MSGDISP failed.

In the message text:

dev The device number.

return-code

The return code from the MSGDISP service.

The defined return codes, in decimal, from MSGDISP are as follows:

Return Code

Explanation

4 Device *dev* does not support the message display.

8 The message display was requested by an unauthorized program.

12 An input/output (I/O) error occurred when the system tried to display the message.

System action: The system continues processing.

Operator response: Verify the tape mounted on device *dev* is an unlabeled scratch tape. Record the contents of the message display on device *dev* and contact the system programmer.

System programmer response: If the return code is 12, contact your hardware support personnel. Otherwise contact IBM software service. Provide the console log and the contents of the message display.

Source: DFSMSdfp

Routing code: 1

Descriptor code: 2

IGGN310I *dev, volser, dsname, CONFLICTING VOLUME REMOVED*

Explanation: During nucleus initialization program (NIP) processing, a non-permanently resident volume was removed because there was a conflict of volume serials. Volume *volser* was removed from device *dev* in order to allow access to the specified data set.

In the message text:

dev The device number of the specified device.

volser The specified volume serial number.

dsname The specified data set.

System action: The system continues processing.

Operator response: Mount the required volume when requested to do so.

Source: DFSMSdfp

Routing code: 2

Descriptor code: 4

IGGN311E *dsname*, **INVALID DATASET FORMAT**,*reason-code*

Explanation: During nucleus initialization program (NIP) processing, an attempt was made to OPEN a partitioned data set extended (PDSE), *reason-code* is 1, or an extended format data set, *reason-code* is 2. PDSEs cannot be OPENed early in NIP processing.

In the message text:

dsname The specified data set name.

System action: The system continues processing.

Operator response: Notify the system programmer.

System programmer response: If the data set is a PDSE, provide a PDS in its place. If the data set is an extended format data set, provide a non-extended format data set in its place. Then re-IPL the system. If the failure persists, contact the IBM Support Center.

Source: DFSMSdftp

Routing code: 2

Descriptor code: 4

IGGN312I *dsname*, **DEB EXTENT LIMIT EXCEEDED WHILE PROCESSING DATASET**

Explanation: During nucleus initialization program (NIP) OPEN processing, the system was requested to build a concatenation of partitioned data sets (PDS) that had too many extents to fit into a data extent block (DEB).

In the message text:

dsname The specified data set name.

System action: The system continues processing.

Operator response: Notify the system programmer.

System programmer response: Decrease the number of extents in the concatenation. This can be done by reducing the number of extents in individual data sets or by reducing the number of data sets in the concatenation. Data set *dsname* was being OPENed but any data set in the concatenation may be changed or deleted to solve the problem.

Source: DFSMSdftp

Routing code: 2

Descriptor code: 4

IGGN313I *dev*, **INVALID TAPE VOLUME, FILE PROTECTED**

Explanation: During nucleus initialization program (NIP) processing, a tape on device *dev* was determined to be file protected. An unlabeled scratch tape is required.

In the message text:

dev The device number of the specified device.

System action: Processing continues with a request to dismount the tape on device *dev* and mount an unlabeled scratch tape.

Operator response: Mount a writable tape when requested to do so.

Source: DFSMSdftp

Routing code: 2

Descriptor code: 4

IGGN314I *dev*, INVALID TAPE VOLUME, FILE PROTECTED & STANDARD LABEL

Explanation: During nucleus initialization program (NIP) processing, a tape on device *dev* was determined to be file protected and to contain an IBM standard label. An unlabeled scratch tape is required.

In the message text:

dev The device number of the specified device.

System action: Processing continues with a request to dismount the tape on device *dev* and mount an unlabeled scratch tape.

Operator response: Mount a writable tape when requested to do so.

Source: DFSMSdfp

Routing code: 2

Descriptor code: 4

IGGN315I UNIT SPECIFICATION IS REQUIRED

Explanation: During nucleus initialization program (NIP) OPEN processing, the system, through message IGGN504A, requested specification of a device number for a volume mount. No device number was specified. The device number must have three characters and have no imbedded blanks.

System action: Message IGGN504A is reissued.

Operator response: Supply a device number to message IGGN504A.

Source: DFSMSdfp

Routing code: 2

Descriptor code: 4

IGGN316A *dev*, *return-code*, 'MSCRTCHN', MSGDISP (MOUNT) FAILED

Explanation: During nucleus initialization program (NIP) processing, a request to mount an unlabeled scratch tape using MSGDISP failed.

In the message text:

dev The device number.

return-code

 The return code from the MSGDISP service.

The defined return codes from MSGDISP (in decimal) are as follows:

Return Code**Explanation**

- | | |
|----|--|
| 4 | Device <i>dev</i> does not support the message display. |
| 8 | The message display was requested by an unauthorized program. |
| 12 | An input/output (I/O) error occurred when the system tried to display the message. |

System action: The system continues processing.

Operator response: Mount an unlabeled scratch tape on device *dev*. Record the contents of the message display on device *dev* and contact the system programmer.

System programmer response: If the return code is 12, contact your hardware support personnel. Otherwise contact the IBM software service. Provide the console log and the contents of the message display.

Source: DFSMSdfp

Routing code: 1

Descriptor code: 2

IGGN317A *dev, return-code, 'Dvolser', 'MSCRTCHN', MSGDISP (DISMOUNT) FAILED*

Explanation: During nucleus initialization program (NIP) processing, a request to dismount a tape using MSGDISP failed.

In the message text:

dev The device number.

return-code
 The return code from the MSGDISP service.

volser The volume serial number.

The defined return codes, in decimal, from MSGDISP are as follows:

Return Code**Explanation**

- 4 Device *dev* does not support the message display.
- 8 The message display was requested by an unauthorized program.
- 12 An input/output (I/O) error occurred when the system tried to display the message.

System action: The system continues processing.

Operator response: Dismount the tape on device *dev*. Mount a nonlabeled scratch tape on device *dev*. Record the contents of the message display on device *dev* and contact the system programmer.

System programmer response: If the return code is 12, contact your hardware support personnel. Otherwise contact IBM software service. Provide the console log and the contents of the message display.

Source: DFSMSdfp

Routing code: 1

Descriptor code: 2

IGGN501I *return-code, reason-code, msgid, MESSAGE ERROR*

Explanation: During nucleus initialization program (NIP) processing, a logical error in the NIPSERV message table (IGG0NTAB) was detected while trying to issue a message.

In the message text:

return-code
 The return code from IGG0NMSG.

reason-code
 The reason code from IGG0NMSG.

msgid The identifier of the failing message.

System action: The system continues processing. Depending upon the condition that caused the original message, an initial program load (IPL) may fail or continue.

Operator response: If the IPL fails and the system programmer requests it, take a stand-alone dump.

System programmer response: If the problem persists, contact the IBM Support Center. Provide the stand-alone dump.

Source: DFSMSdfp

Routing code: 2

Descriptor code: 4

IGGN502A • IGGN505A

IGGN502A M *dev, volser, dsname*

Explanation: During nucleus initialization program (NIP) processing, a mount of a direct access storage device (DASD) volume is required to access data set *dsname*.

In the message text:

dev The device number of the specified device.

volser The volume serial number.

dsname The specified data set name.

System action: The system waits for the mount.

Operator response: Mount the volume on device *dev*.

Source: DFSMSdfp

Routing code: 1

Descriptor code: 2

IGGN503A D *dev*

Explanation: During nucleus initialization program (NIP) processing, a dismount of an unlabeled tape volume is required.

In the message text:

dev The device number of the specified device.

System action: The system continues processing.

Operator response: Dismount the volume on device *dev*.

Source: DFSMSdfp

Routing code: 1

Descriptor code: 2

IGGN504A SPECIFY UNIT FOR *dsname* ON *volser*

Explanation: During nucleus initialization program (NIP) processing, the system determined that volume *volser* must be mounted to access data set *dsname*.

In the message text:

dsname The specified data set.

volser The volume serial number.

System action: The system waits for the reply.

Operator response: Select an available device of the type required and respond R *xx,dev*, where *xx* is the reply number and *dev* is the device number of the volume containing the data set for which allocation failed.

Source: DFSMSdfp

Routing code: 1

Descriptor code: -

IGGN505A SPECIFY UNIT FOR *dsname* ON *volser* OR CANCEL

Explanation: During nucleus initialization program (NIP) processing, the system determined that the volume must be mounted to access data set *dsname*.

In the message text:

dsname The specified data set name.

volser The volume serial number.

System action: The system waits for the reply.

Operator response: Select an available device of the type required and respond R *xx,dev*, where *xx* is the reply number and *dev* is the device number of the selected device. You may also respond by signalling EOB (pressing the enter key on the console). This action indicates that the volume is not available and is not to be used for this initial program load (IPL). If you are receiving this message unexpectedly, verify that your IODF configuration has a DEVICE definition for the required *volser*, and the OFFLINE=YES parameter is not specified. OFFLINE=YES will cause the device to be offline at IPL.

Source: DFSMSdfp

Routing code: 1

Descriptor code: -

IGGN506A M *dev*, NL, *dsname*

Explanation: During nucleus initialization program (NIP) processing, a mount of an unlabeled tape volume is required for data set *dsname*.

In the message text:

dev The device number of the specified device.

dsname The specified data set name.

System action: The system waits for the mount.

Operator response: Mount an unlabeled scratch tape on device *dev*.

Source: DFSMSdfp

Routing code: 1

Descriptor code: 2

IGGN507A D *dev*, *volser*

Explanation: During nucleus initialization program (NIP) processing, a dismount of a direct access storage device (DASD) volume or a tape volume with IBM standard labels is required.

In the message text:

dev The device number of the specified device.

volser The volume serial number.

System action: The system continues processing.

Operator response: Dismount the volume *volser* on device *dev*.

Source: DFSMSdfp

Routing code: 1

Descriptor code: 2

IGGN508W *utility*, *return-code*, *reason-code*, *dsname*, *volser*, MOUNT SERVICE ERROR

Explanation: During nucleus initialization program (NIP) MOUNT processing, an unrecoverable error occurred.

In the message text:

utility A code indicating the failing service.

return-code

Return code from the failing service.

reason-code

Reason code from the failing service.

IGGN509I • IGGN510I

dsname Name of data set that caused the mount request.

volser Volume serial being mounted.

System action: The system is put into a X'39' wait state.

Operator response: If the system programmer requests it, take a stand-alone dump.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the console log and the stand-alone dump.

Source: DFSMSdfp

Routing code: 1

Descriptor code: 1

IGGN509I *utility, return-code, reason-code, dsname, volser*, OPEN SERVICE ERROR

Explanation: During nucleus initialization program (NIP) OPEN processing, an unrecoverable error occurred.

In the message text:

utility A code indicating the failing service.

return-code

Return code from the failing service.

reason-code

Reason code from the failing service.

dsname Name of data set that caused the open request.

volser Associated volume serial number.

System action: The system continues processing.

Operator response: Notify the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: DFSMSdfp

Routing code: 2

Descriptor code: 4

IGGN510I *utility,return-code,reason-code, concat_num* CLOSE SERVICE ERROR.

Explanation: During nucleus initialization program (NIP) CLOSE processing, an unrecoverable error occurred.

In the message text:

utility

A code indicating the failing service.

return-code

Return code from the failing service.

reason-code

Reason code from the failing service.

concat_num

Concatenation number of the data set that encountered the failure.

System action: The system continues processing.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Data Facility Product (DFP)

Module:

Routing code: 2

Descriptor code: 4

IGGN601W *dev, volser, dsname*, **DEVICE TYPE CONFLICT**

Explanation: During nucleus initialization program (NIP) processing, an incorrect specification was detected while the system attempted to mount volume *volser* on device *dev* for data set *dsname* required for initial program load (IPL). The volume serial is correct but the device type is unacceptable. The volume currently mounted on device *dev* is permanently resident.

In the message text:

dev The device number of the specified device.

volser The volume serial number.

dsname The specified data set name.

System action: The system is put into a X'39' wait state.

Operator response: If the system programmer requests it, take a stand-alone dump.

System programmer response: Change the volume where data set *dsname* resides. If the data set is cataloged, the catalog must be updated. If the error recurs, contact the IBM Support Center. Provide the stand-alone dump.

Source: DFSMSdfp

Routing code: 1

Descriptor code: 1

IGGN602W *dsname*, **DATASET REQUIRED FOR IPL**

Explanation: During nucleus initialization program (NIP) processing, an OPEN of data set *dsname* required for the initial program load (IPL) failed. An earlier message should indicate the specific problem.

In the message text:

dsname The specified data set name.

System action: The system is put into a X'37' wait state.

Operator response: If the system programmer requests it, take a stand-alone dump.

System programmer response: See messages that precede this message for more information.

Source: DFSMSdfp

Routing code: 1

Descriptor code: 1

Chapter 4. IGV messages

IGV002E COMMON STORAGE TRACKING HAS BEEN DEACTIVATED DUE TO AN UNEXPECTED ERROR

Explanation: The system found an error while running the storage tracking function.

System action: The system stops the storage tracking function. The system does not allow users to restart the storage tracking function until the next IPL. The system takes an SVC dump and continues processing.

Operator response: To free the storage that the storage tracking function is currently using, enter a SET DIAG=02 command (to set the IBM-supplied parmlib member DIAG02, which turns storage tracking off).

System programmer response: Use the SVC dump to diagnose the problem.

Source: Virtual Storage Manager (VSM)

Module: IGVRVSM

Routing code: 2

Descriptor code: 4

IGV003I IN PARMLIB MEMBER=*memname* ON LINE *linenum*: COMMON STORAGE TRACKING CANNOT BE TURNED ON BECAUSE OF A PREVIOUS UNEXPECTED ERROR

Explanation: Previously the system issued message IGV002E, indicating that an error occurred in the storage tracking function. The storage tracking function cannot be started until the next IPL. A SET DIAG=xx command specified a parmlib member that requested that the system turn the storage tracking function on.

In the message text:

memname

The parmlib member containing the parameter(s) that activate the storage tracking function.

linenum

The line number in parmlib member *memname* that specifies the parameters needed to activate the storage tracking function.

System action: The system does not allow users to start the storage tracking function until the next IPL. The system continues processing.

System programmer response: See the system programmer response for message IGV002E.

Source: Virtual storage manager (VSM)

Module: IGVRVSM

Routing code: -

Descriptor code: 5

IGV007I *hh.mm.ss* DIAG DISPLAY *line* [*line*]

Explanation: In response to a DISPLAY DIAG command, this message displays information about the current DIAGxx parmlib settings.

In the message text:

hh.mm.ss

The time given as the hour (00-23), the minute (00-59), and the second (00-59).

line

A line in the format described in *z/OS MVS Initialization and Tuning Reference* as the contents of the DIAGxx parmlib member.

System action: The system continues processing.

IGV008I • IGV010I

Source: Initiator

Module: IGVDGNDC

Routing code: -

Descriptor code: 5

IGV008I UNABLE TO OBTAIN STORAGE, REASON=*reason*

Explanation: The system cannot process the DISPLAY DIAG command completely. The system needed more storage to build the output display.

In the message text:

reason

The internal reason for the error.

System action: The system stops processing the DISPLAY DIAG command.

Operator response: If the error persists, notify the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Virtual Storage Manager (VSM)

Module: IGVDGNDC

Routing code: -

Descriptor code:

IGV009I IN PARMLIB MEMBER=*memname* ON LINE *linenum*: AUTOIPL WAS NOT PROCESSED, DUE TO AN INVALID PARAMETER OR PROCESSING ERROR

Explanation: DIAGxx processing detected a parameter that is not valid or suffered a processing error.

System action: For a parameter that is not valid, processing of the AUTOIPL statement is terminated, and no update is made to the existing AUTOIPL policy, if any. For a processing error, any existing AUTOIPL policy might be nullified. Processing continues with the next statement in the DIAGxx member, if any.

Operator response: Issue the SET DIAG=xx command again. If the problem persists, notify the system programmer. Issue DISPLAY DIAG to display information about the current DIAGxx parmlib settings.

System programmer response: Ensure that the SADMP and MVS device numbers and load parameters as stated in the DIAGxx member are correct. If they are correct, search problem reporting databases for a fix for the problem; if no fix exists, contact the IBM Support Center.

Source: Virtual Storage Manager (VSM)

Routing code: -

Descriptor code: 5

IGV010I IN PARMLIB MEMBER=*memname* ON LINE *linenum*: AUTOIPL WAS NOT PROCESSED, DUE TO AN ENVIRONMENT ERROR

Explanation: DIAGxx processing determined that AutoIPL actions cannot be performed on this system because required hardware support is not present.

System action: Processing of the AUTOIPL statement is terminated, and no update is made to the existing AUTOIPL policy, if any. Processing continues with the next statement in the DIAGxx member, if any.

Operator response: Notify the system programmer.

System programmer response: Ensure that the required hardware support is present. If it is, search problem reporting databases for a fix for the problem; if no fix exists, contact the IBM Support Center. The required hardware support is present on all z10™ machines. On z9® machines, it is provided by Feature Code 9904 and hardware driver 67 or later (both are required).

Note:

1. z/OS must be IPLed in order to detect the support.
2. AutoIPL can also be used by a z/OS guest on z/VM[®] Release 5.3.0 or later.

Source: Virtual Storage Manager (VSM)

Routing code: -

Descriptor code: 5

Chapter 5. IGVH messages

IGVH100I The current allocation of area storage is bytes of the total size of totalbytes. (mclause4 ConvertedPages mclause5 area mclause6 Pct) mclause7 hwm. Ensuring an appropriate amount of storage is available is critical to the long term operation of the system. An exception will be issued when the allocresid size of area is greaterless than the checkowner_or_installation specified threshold of limit.

Explanation: CHECK(IBMVSM,VSM_SQA_THRESHOLD) or CHECK(IBMVSM,VSM_CSA_THRESHOLD) ran successfully and found no exceptions. It determined that the storage allocation is under the specified threshold.

In the message text:

area

The area of common storage being reported on (SQA, CSA, ESQA or ECSA).

bytes

The number of bytes allocated in the indicated area.

totalbytes

The total size of the specified area.

mclause4

A text string that resolves into the phrase "The additional allocation of" when the area being reported on is (E)CSA, and current allocations from this area include overflow of (E)SQA into (E)CSA. Otherwise, this field is left blank.

ConvertedPages

When the area being reported on is (E)CSA, and current allocations from this area include overflow of (E)SQA into (E)CSA, this is the number of pages (from the area being reported on) that have been converted to handle (E)SQA allocation requests. Otherwise, this field is left blank.

mclause5

A text string that resolves into the phrase "pages of" when the area being reported on is (E)CSA, and current allocations from this area include overflow of (E)SQA into (E)CSA. Otherwise, this field is left blank.

area

Indicates the common storage area being reported on, if needed.

mclause6

A text string that resolves into the phrase "storage to (E)SQA, puts current allocation at" when the area being reported on is (E)CSA, and current allocations from this area include overflow of (E)SQA into (E)CSA. Otherwise, this field is left blank.

Pct

The current amount of storage allocated in the indicated area, expressed as a percentage of the total area size. Note that when (E)SQA expands into other common storage areas, this percentage may be greater than 100 for the (E)SQA areas. For (E)CSA, any pages that have been allocated to handle (E)SQA requests are included in this percentage.

mclause7

A text string that resolves into the phrase "The IPL HWM for this allocation is" when an IPL high water mark for this area's allocations can be reported. Otherwise, this field is left blank. (It is not possible to report a high water mark for (E)CSA allocations that includes a history of (E)SQA overflow into (E)CSA. When current (E)CSA allocations include overflow from (E)SQA, a high water mark for the indicated area is not reported.)

hwm

The highest percentage of the total storage area that has been allocated in this IPL, if this information is available. Otherwise, this field is left blank.

allocresid

One of the words "allocated" or "remaining" depending on whether the threshold was specified as a percentage or as a number of bytes, respectively.

IGVH100E

greaterless

One of the words "greater" or "less" depending on whether the threshold was specified as a percentage or as a number of bytes, respectively.

limit

The *checkowner_or_installation* threshold, expressed as either a utilization percentage, or as size specification for the minimum amount to remain unallocated.

System action: The system continues normally.

Operator response: n/a

System programmer response: n/a

Problem determination: n/a

Source: Virtual Storage Manager

Module: IGVHCHK1

Routing code: See note 35.

Descriptor code: n/a

Automation: n/a

IGVH100E *StorageArea* *mclause1* **Threshold** **Current allocation is** *CurrentAllocPct* **of** *TotalSize*. *mclause2* *PagesFromCSA* *mclause3* **Unallocated amount is** *BytesRemaining* **bytes.**

Explanation: CHECK(IBMVSM,VSM_SQA_THRESHOLD) or CHECK(IBMVSM,VSM_CSA_THRESHOLD) determined that the current allocation of SQA, ESQA, CSA or ECSA is greater than check-owner or installation threshold.

The current allocation of *StorageArea* storage is *CurrentAllocPct* of *TotalSize*.

This allocation exceeds the *checkowner_or_installation* threshold.

BytesRemaining bytes or *PctRemaining* is still available.

PagesFromCSA CSA/ECSA pages were converted to SQA/ESQA.

The highest allocation during this IPL is *HighestAllocPct*.

NOTE: An (E)SQA allocation which exceeds 100% is an indication that (E)CSA was converted to (E)SQA to handle (E)SQA allocation requests.

For a GETMAIN storage request for SQA storage where the request can be satisfied with storage either below or above 16MB, the virtual storage manager (VSM) will try to satisfy the request with space above 16MB. That is, VSM attempts to satisfy the request with space in the extended SQA. However, if such space is not available, VSM then attempts to satisfy the request with space in the extended common service area (extended CSA). If there is no space available above 16MB, VSM will then try to satisfy the request with space below 16MB, first from the SQA, and finally from the CSA.

For a GETMAIN request for SQA storage where the request must be satisfied with storage below 16MB, VSM tries to satisfy the request with space in the SQA, and, if none is available, VSM then tries to satisfy the request with space in the CSA.

In the message text:

StorageArea

Indicates the common storage area whose threshold has been exceeded.

mclause1

A text string that resolves into one of the following phrases, depending on whether the check threshold was expressed as a percentage or as a number of bytes.

- when expressed as *percentage* the phrase is "has exceeded the threshold percentage of"
- when expressed as *bytes* the phrase is "no longer has a minimum unallocated of"

Threshold

The *checkowner_or_installation* threshold, expressed as either a utilization percentage, or as size specification for the minimum amount to remain unallocated.

CurrentAllocPct

The current amount of storage allocated in the indicated area, expressed as a percentage of the total area size. Note that when (E)SQA expands into other common storage areas, this percentage may be greater than 100 for the (E)SQA areas. For (E)CSA, any pages that have been allocated to handle (E)SQA requests are included in this percentage.

TotalSize

The total size of the indicated area, including both allocated and unallocated storage areas, but not including other areas into which allocations may expand to satisfy requests for (E)SQA.

mclause2

If (E)SQA has expanded into other common storage areas, causing the allocation percentage to be greater than 100, the text string "Allocation percent exceeds 100 because" is inserted into the message.

PagesFromCSA

If (E)SQA has expanded into other common storage areas, causing the allocation percentage to be greater than 100, the total number of (E)CSA pages converted is displayed.

mclause3

If (E)SQA has expanded into other common storage areas, causing the allocation percentage to be greater than 100, the text string "(E)CSA pages were converted to (E)SQA" is inserted into the message.

BytesRemaining

The number of bytes of storage in the indicated area that are still available for allocation. If the area has expanded into additional common storage areas, this value is zero.

PctRemaining

The percentage of the total storage still available for allocation.

HighestAllocPct

The highest percentage of the total storage area that has been allocated in this IPL, if this information is available. (It is not possible to report a high water mark for (E)CSA allocations that includes a history of (E)SQA overflow into (E)CSA. When current (E)CSA allocations include overflow from (E)SQA, a HighestAllocPct for the indicated area is reported as unknown.)

System action: The system continues processing. However, eventual action may need to be taken to prevent a critical depletion of virtual storage resources.

Operator response: Report this problem to the system programmer.

System programmer response: Ensuring that CSA and SQA storage are an appropriate size is critical to the long-term operation of the system. If the size of the extended SQA is not large enough, the system attempts to use extended CSA, then SQA and CSA below 16M to satisfy common storage requests. This could eventually lead to system failure.

Check the settings for (E)SQA and (E)CSA in IEASYSxx. These settings cannot be changed by quick start.

Problem determination: N/A

Source: Virtual Storage Manager

Module: IGVHCHK1

Routing code: See note 35.

Descriptor code: 3 is the default set by this check. See note 1.

IGVH101I The current size of area is size, and satisfies the *checkowner_or_installation* specified minimum of specified for this area.

Explanation: CHECK(IBMVSM,VSM_SQA_LIMIT), CHECK(IBMVSM,VSM_CSA_LIMIT), or CHECK(IBMVSM,VSM_PVT_LIMIT) ran successfully and found no exceptions. The storage area size is above the specified minimum.

In the message text:

IGVH101E • IGVH102I

area

Indicates the area being reported on.

size

Specifies the size of the indicated area.

specified

The installation-specified or default minimum size for the indicated area.

System action: The system continues normally.

Operator response: n/a

System programmer response: n/a

Problem determination: n/a

Source: Virtual Storage Manager

Module: IGVHCHK1

Routing code: See note 35.

Descriptor code: n/a

IGVH101E *area* Below Minimum

Explanation: CHECK(IBMVSM,VSM_SQA_LIMIT), CHECK(IBMVSM,VSM_CSA_LIMIT), or CHECK(IBMVSM,VSM_PVT_LIMIT) determined that the current storage area size of *area* is *size*, which is less than the *checkowner_or_installation* specified minimum of *specified*.

In the message and Explanation text:

area

Indicates the area being reported on.

size

Specifies the size of the indicated area.

specified

The installation-specified or default minimum size for the indicated area.

System action: The system continues processing. However, eventual action may need to be taken to prevent a critical depletion of virtual storage resources.

Operator response: Please report this problem to the system programmer.

System programmer response: Ensuring that CSA, SQA, and private storage are an appropriate size is critical to the long-term operation of the system. If the size of extended SQA is not large enough, the system attempts to use extended CSA, then SQA and CSA below 16M to satisfy common storage requests. This could eventually lead to system failure. The sizes of CSA and SQA will impact the amount of storage available for private.

Check the settings in IEASYSxx. SQA cannot be changed by quick start.

Problem determination: n/a

Source: Virtual Storage Manager

Module: IGVHCHK1

Routing code: See note 35.

Descriptor code: 12 is the default set by this check.

IGVH102I **The size of *area* has *indec* by *difference* since the last IPL. This is within the *checkowner_or_installation* specified limit of *specified*.**

Explanation: CHECK(IBMVSM,VSM_CSA_CHANGE) ran successfully and found no exceptions. It determined that while the storage area has changed in size, the change is still within an acceptable amount.

In the message text:

area

Indicates the area being reported on.

indec

This variable resolves into one of the following words, depending on the comparison between the area's current and previous IPL sizes.

- Resolves to "increased" when the current size of the indicated area is greater than the area's size during the prior IPL.
- Resolves to "decreased" when the current size of the indicated area is less than the area's size during the prior IPL.

difference

The change amount between the current size of the specified area and its size from the prior IPL.

specified

The installation-specified or default value used to monitor the change amount for the indicated area.

System action: The system continues normally.

Operator response: n/a

System programmer response: n/a

Problem determination: n/a

Source: Virtual Storage Manager

Module: IGVHCHK1

Routing code: See note 35.

Descriptor code: n/a

Automation: n/a

IGVH102E *marea* Change Limit Exceeded

Explanation: CHECK(IBMVSM,VSM_CSA_CHANGE) has determined that the size of *area* has *indec* by *difference* since the last IPL. This equals or exceeds the *checkowner_or_installation* specified limit of *specified*.

In the message and Explanation text:

*marea**area*

Indicates the area being reported on.

indec

This variable resolves into one of the following words, depending on the comparison between the area's current and previous IPL sizes.

- Resolves to "increased" when the current size of the indicated area is greater than the area's size during the prior IPL.
- Resolves to "decreased" when the current size of the indicated area is less than the area's size during the prior IPL.

difference

The change amount between the current size of the specified area and its size from the prior IPL.

specified

The installation-specified or default value used to monitor the change amount for the indicated area.

System action: The system continues processing. However, eventual action may need to be taken to prevent a critical depletion of virtual storage resources.

Operator response: Please report this problem to the system programmer.

System programmer response: Determine the reason that storage has changed. A change in configuration, a change in the size of LPA or insufficient SQA can cause changes to the size of CSA, and indirectly, to private storage.

Problem determination: n/a

IGVH104I • IGVH106I

Source: Virtual Storage Manager

Module: IGVHCHK1

Routing code: See note 35.

Descriptor code: 11 is the default set by this check.

Automation: n/a

IGVH104I Common Storage Tracker is Inactive

Explanation: Common Storage Tracker is not active. Storage utilization information can not be displayed.

System action: Contact the system programmer.

Operator response: Consider creating a DIAGxx member to start common storage tracking.

System programmer response: n/a

Problem determination: n/a

Source: Virtual Storage Manager

Module: VSM

Routing code: n/a

Descriptor code: n/a

Automation: n/a

IGVH104E Common Storage Tracker Information Not Complete

Explanation: Common Storage Tracker information is not complete; tracking was inactive at some time since the last IPL.

System action: Contact the system programmer.

Operator response: Consider creating a DIAGxx member to start common storage tracking.

System programmer response: n/a

Problem determination: n/a

Source: Virtual Storage Manager

Module: VSM

Routing code: n/a

Descriptor code: n/a

Automation: n/a

IGVH106I Prior IPL Information is not available. *addtext*

Explanation: The HZSPDATA dataset contains no prior IPL information.

In the message text:

addtext

Additional text that describes the impact that the lack of prior IPL information has on the current processing. For example:

- "Historical storage threshold information will not be displayed"
- "The check for changes in common storage allocation will not be performed."

System action: The system continues normally.

Operator response: n/a

System programmer response: n/a

Problem determination: n/a

Source: Virtual Storage Manager

Module: IGVHCHK1

Routing code: See note 35.

Descriptor code: n/a

Automation: n/a

IGVH107I The size of *area* has not changed since the last IPL.

Explanation: CHECK(IBMVSM,VSM_CSA_CHANGE) ran successfully and found no exceptions. It determined that no change in the size of the indicated storage area has occurred.

In the message text:

area

Indicates the area being reported on.

System action: The system continues normally.

Operator response: n/a

System programmer response: n/a

Problem determination: n/a

Source: Virtual Storage Manager

Module: IGVHCHK1

Routing code: See note 35.

Descriptor code: n/a

IGVH108I The report of the five highest users of common storage can not be produced at this time. Please try re-running this check at a later time.

Explanation: n/a

System action: n/a

Operator response: n/a

System programmer response: n/a

Problem determination: n/a

Source: n/a

Module: VSM

Routing code: n/a

Descriptor code: n/a

IGVH109E The ALLOWUSERKEYCSA DIAGxx option has been set to (YES)

Explanation: ALLOWERUSERKEYCSA(YES) has been specified in the active DIAGxx parmlib member. IBM recommends that you specify ALLOWUSERKEYCSA(NO) in order to prevent user key CSA from being obtained. User key CSA CSA creates a security risk because any unauthorized program can modify it. However, specifying ALLOWUSERKEYCSA(NO) may cause programs obtaining this storage to fail.

System action: The system continues processing.

Operator response: Report this problem to the system programmer.

System programmer response: Consider coding ALLOWUSERKEYCSA(NO) in the DIAGxx parmlib member. You can issue the SET DIAG= command to have your changes take immediate effect.

IGVH109I • IGVH111I

Problem determination: n/a

Source: Virtual Storage Manager

Module: IGVHCHK1

Routing code: See note 35.

Descriptor code: 12 is the default set by this check.

IGVH109I ALLOWUSERKEYCSA(NO) has been specified in the active DIAGxx parmlib member. This is the IBM recommended setting for this option.

Explanation: AllowUserKeyCSA is set to NO.

System action: The system continues normally.

Operator response: n/a

System programmer response: n/a

Problem determination: n/a

Source: Virtual Storage Manager

Module: IGVHCHK1

Routing code: See note 35.

Descriptor code: n/a

| **IGVH111I** The current size of the largest contiguous free block of *area* is *size*, and satisfies the owner specified
| minimum of *minimum* for this area.

| **Explanation:** CHECK(IBMVSM,VSM_CSA_LARGEST_FREE) ran successfully and found no exceptions. It
| determined that the size of the largest contiguous free common storage block is greater than the specified minimum.

| In the message text:

| *area*

| Indicates the area being reported on (CSA or ECSA).

| *size*

| Specifies the size of the indicated area, rounded up to the nearest 1K boundary.

| *minimum*

| The installation-specified or default minimum size of the largest contiguous free block of the indicated area,
| rounded up to the nearest 1K boundary.

| **System action:** The system continues processing.

| **Operator response:** n/a

| **System programmer response:** n/a

| **Problem determination:** n/a

| **Source:** Virtual Storage Manager

| **Module:** IGVHCHK1

| **Routing code:** See note 35.

| **Descriptor code:** n/a

| **Reference Documentation:** n/a

| **IGVH112E** Largest contiguous free *area* block is below minimum.

| **Explanation:** CHECK(IBMVSM,VSM_CSA_LARGEST_FREE) determined that the size of the largest contiguous free *area* block is *size*, which is less than the specified minimum.

| If the free contiguous common storage blocks are too small, the system may not be able to satisfy all storage obtain requests, which could eventually lead to system failure.

| In the message text:

| *area*

| Indicates the area being reported on (CSA or ECSA).

| *size*

| Specifies the size of the indicated area, rounded up to the nearest 1K boundary.

| *minimum*

| The installation-specified or default minimum size of the largest contiguous free block of the indicated area, rounded up to the nearest 1K boundary.

| **System action:** The system continues processing. However, eventual action may need to be taken to ensure the system can continue to satisfy storage obtain requests made by critical applications.

| **Operator response:** Report this problem to the system programmer.

| **System programmer response:** Review usage data provided by RMF and other VSM health checks to determine whether any applications are consuming large amount of common storage abnormally. For example, the Five Highest Users reports provided by the VSM_CSA_THRESHOLD check show the five highest users of various common storage areas. It may be necessary to cancel one or more of these applications to alleviate the problem. Check the settings for CSA or ECSA in IEASYSxx to ensure that appropriate sizes are specified for these common storage areas.

| **Problem determination:** n/a

| **Source:** Virtual Storage Manager

| **Module:** IGVHCHK1

| **Routing code:** See note 35.

| **Descriptor code:** 12 is the default set by this check.

| **Reference Documentation:** *z/OS MVS Initialization and Tuning Reference*.

IGVH500I *check_name*

Virtual Storage Configuration Report

Explanation: This message serves as a header to the Storage Configuration report for the specified check.

System action: n/a

Operator response: n/a

System programmer response: n/a

Problem determination: n/a

Source: Virtual Storage Manager

Module: IGVHCHK1

Routing code: See note 35.

Descriptor code: n/a

IGVH501I	Storage Location	Change	Current Size	Compare size	Start	End
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Explanation: This message serves as a header for the storage change report.

System action: n/a

Operator response: n/a

IGVH502I • IGVH503I

System programmer response: n/a

Problem determination: n/a

Source: Virtual Storage Manager

Module: IGVHCHK1

Routing code: See note 35.

Descriptor code: n/a

IGVH502I **Five Highest Users of *type***
 Asid JobName JobId *a b c d*

Explanation: Header for the report that lists the five highest users of each indicated grouping of common storage areas.

In the message text:

type

Resolves into one of the following text strings, depending on the storage areas being considered for calculation of this Five High report.

- Common Storage (CSA/ECSA/SQA/ESQA)
- Common Storage Below 16M (CSA/SQA)
- CSA
- CSA/ECSA
- SQA

a "SQA" for report type SQA and "CSA" for other report types.

b One of either "ECSA", "SQA", or "ESQA", depending on the report type.

c One of either "SQA", "ECSA", or "CSA", depending on the report type.

d "ECSA" for report type SQA and "ESQA" for other report types. *type*.

System action: n/a

Operator response: n/a

System programmer response: n/a

Problem determination: n/a

Source: Virtual Storage Manager

Module: IGVHCHK1

Routing code: See note 35.

Descriptor code: n/a

IGVH503I **Threshold History Report**

Storage	Current	System	Prior	Current
Location	Alloc	HWM	IPL HWM	size

Explanation: This message serves as a header for the threshold history report.

For each of the common storage areas (ESQA, SQA, ECSA and CSA), this report specifies the current area size, the number of bytes currently allocated in each area, the high water mark (HWM) for allocations in each area, and the prior IPL's HWM for allocations.

System action: n/a

Operator response: n/a

System programmer response: This report can be used to review your virtual storage map in comparison with a prior IPL.

Problem determination: n/a

Source: Virtual Storage Manager

Module: IGVHCHK1

Routing code: See note 35.

Descriptor code: n/a

| **IGVH504I** Five Largest Contiguous Free Blocks of *area*.

| **Explanation:** This message serves as a header for the five largest contiguous free blocks report. For each of the reported common storage areas, this report specifies the current sizes, starting addresses, and ending addresses of the five largest contiguous free blocks in the area.

| In the message text:

| *area*

| Indicates the area being reported on (CSA or ECSA).

| **System action:** n/a

| **Operator response:** n/a

| **System programmer response:** n/a

| **Problem determination:** n/a

| **Source:** Virtual Storage Manager

| **Module:** IGVHCHK1

| **Routing code:** See note 35.

| **Descriptor code:** n/a

| **Reference Documentation:** *z/OS MVS Initialization and Tuning Reference*.

IGVH900E An internal error has occurred.

Explanation: An internal error has occurred. *description*. RC: *rc* RSN: *rsn*

In the Explanation text:

description

A description of the service that failed.

rc The return code.

rsn

The reason code.

System action: The system continues normally.

Operator response: Report this problem to the system programmer.

System programmer response: Search problem reporting data bases for a fix for the problem. If a fix does not exist, call the IBM Support Center.

Problem determination: Provide the messages, the logrec data set record, the syslog output for the check, and the dump, if one was taken.

Source: Virtual Storage Manager

Module: IGVHCHK1

Routing code: See note 35.

Descriptor code: n/a

Chapter 6. IGW messages

For messages with the prefix IGW01, the type codes indicate the severity of the detected error and are:

E	Error: Return code 8
I	Information: Return code 0
S	Severe: Return code 16
T	Ending: Return code 12
W	Attention: Return code 4

IGW001I PDSE SUPPORT NOT AVAILABLE

Explanation: A fatal error occurred during initialization of Data Facility Product (DFP). The system may issue IGW008D following this message.

System action: The system will continue to IPL without support for partitioned data set directory entries (PDSE) or other DFP products supported by the PDSE function.

Operator response: Notify the system programmer.

System programmer response: Save the console listing containing system message IGW001I. Contact the IBM Support Center.

Source: Storage management subsystem (SMS)

Routing code: 2,20

Descriptor code: 4

IGW002I LOAD MODULE *lmname* IS NOT REQUIRED UNLESS THE OPTICAL DISK SUPPORT FEATURE IS INSTALLED

Explanation: During initialization of the storage management subsystem (SMS), the specified load module, which supports the optical disk feature, could not be loaded. If the optical disk feature is not installed, this message can be ignored.

In the message text:

lmname The name of the load module.

System action: The system continues processing.

Operator response: If object access method (OAM) support is not desired, ignore this message. If OAM support is desired, notify the system programmer.

System programmer response: Determine whether these load modules have been installed correctly. If they are required load modules and they have been installed incorrectly, re-install them. If the error recurs, contact the IBM Support Center. Provide the console listing and a stand-alone dump.

Source: Storage management subsystem (SMS)

Module: IGWFSSBR

Routing code: 2,10

Descriptor code: 4

IGW003I UNEXPECTED ERROR DETECTING MODULE: *modname1* DETECTING PROCEDURE: *procname*
 CALLED MODULE: *modname2* RETURN CODE: *return-code* REASON CODE: *reason-code*

Explanation: An unexpected error occurred while processing the specified detecting module, which was called from the specified procedure in that module during Data Facility Product (DFP) initialization. This message may be useful in determining problems encountered later during processing for partitioned data set directory entries (PDSE) or other DFP products supported by the PDSE function.

In the message text:

modname1

The specified detecting module.

procname

The specified procedure from which the detecting module was called.

modname2

The specified called module.

return-code

The return code.

reason-code

The reason code.

System action: The system will continue to IPL without support for PDSEs or other DFP products supported by the PDSE function.

Operator response: Notify the system programmer.

System programmer response: Save the console listing containing message IGW003I. Contact the IBM Support Center.

Source: Storage management subsystem (SMS)

Routing code: 2,10

Descriptor code: 4

IGW004I SERVICE ERROR SERVICE NAME: *sname* DETECTING MODULE: *dname1* DETECTING
 PROCEDURE: *procname* RETURN CODE: *return-code*

Explanation: An unexpected error occurred while processing the specified procedure in the specified detecting module while trying to perform service *sname* during Data Facility Product (DFP) initialization. This message may be issued at IPL because certain DFP functions have not been installed.

In the message text:

sname The name of the service.

dname1 The specified detecting module.

procname

The specified detecting procedure.

return-code

The return code.

System action: The system will continue to IPL but may not support partitioned data set directory entries (PDSE) or other DFP products supported by the PDSE function.

Operator response: Notify the system programmer.

System programmer response: Save the console listing containing the message IGW004I. Contact the IBM Support Center.

Source: Storage management subsystem (SMS)

Routing code: 2,10

Descriptor code: 4

IGW005I LOAD MODULE *modname* CANNOT BE FOUND

Explanation: The specified module could not be found during Data Facility Product (DFP) initialization. This message may be issued at IPL for the following reasons:

- Certain DFP functions have not been installed.
- A module is missing possibly due to errors that occurred during installation of DFP corrective service maintenance.

In the message text:

modname

The specified module.

System action: The system continues the IPL.

Operator response: Notify the system programmer.

System programmer response: Save the console listing containing the message IGW005I. Contact the IBM Support Center.

Source: Storage management subsystem (SMS)

Routing code: 2,10

Descriptor code: 4

IGW006I INVALID SMS TRACE OPTION: *option*

Explanation: The specified option is not valid and could not be resolved.

In the message text:

option The specified trace option.

System action: Processing of the TRACE command terminates.

Operator response: Check options on the TRACE reply against the options in and correct any errors. Enter the TRACE command again.

Source: Storage management subsystem (SMS)

Routing code: 2,10

Descriptor code: 4

IGW007E SMS HAS BEEN DEACTIVATED DUE TO A FATAL ERROR RETURN CODE (IN HEX): *return-code*
REASON CODE (IN HEX): *reason-code* {A DUMP HAS BEEN TAKEN|NO DUMP HAS BEEN
TAKEN}

Explanation: An attempt was made to perform an SMS operation and SMS was not active, or was previously ended due to a fatal error.

In the message text:

return-code

The return code.

reason-code

The reason code.

System action: The system will continue to IPL without support for partitioned data set directory entries (PDSE) or other SMS functions.

Operator response: Notify the system programmer.

System programmer response: Save the output from the failing job, the SVC dump, and the console listing containing message IGW007E. Contact the IBM Support Center.

Source: Storage management subsystem (SMS)

Routing code: 2,10

IGW008D • IGW011I

Descriptor code: 1

IGW008D SMS INITIALIZATION FAILED. ENTER *wait* TO STOP THE IPL, OR ENTER *go* TO CONTINUE.

Explanation: DFP encountered an ending error during NIP initialization.

System action: The system will enter a disabled wait state if the operator responds **wait** or the system is marked disabled and the IPL continues if the operator replies **go**.

Operator response: Notify the system programmer.

System programmer response: Provide software support personnel with console listing and stand-alone dump. Be sure that message IGW010I is included in the console listing.

Programmer response: Have the operator reply **wait** to this message, and obtain a stand-alone dump. The system may then be re-IPLed, and this message may be answered with a reply of **go** to complete system IPL without SMS active.

Source: Storage management subsystem (SMS)

Routing code: 2,10

Descriptor code: 4

IGW009D INVALID RESPONSE. ENTER *wait* TO STOP THE IPL PROCESS, OR ENTER *go* TO CONTINUE.

Explanation: This message is issued in response to an incorrect reply to the IGW008D message. See the IGW008D message explanation for details.

Source: Storage management subsystem (SMS)

Routing code: 2,10

Descriptor code: 4

IGW010I SMS FAILED WITH A TERMINATING ERROR IN MODULE *mod* RETURN CODE (IN HEX) *return-code* REASON CODE (IN HEX) *reason-code*

Explanation: SMS encountered an ending error during NIP initialization in the module. See the IGW008D message explanation for further information.

In the message text:

mod The module name.

return-code
The return code.

reason-code
The reason code.

Source: Storage management subsystem (SMS)

Routing code: 2,10

Descriptor code: 1

IGW011I LOAD OF TRACE USER EXIT *exitname* FAILED

Explanation: A module could not be found in the libraries in the linklist or there was a failure in trying to load the module that was found.

In the message text:

exitname
The name of the user exit.

System action: The system continues processing. The system will not call a diagnostic exit during tracing of partitioned data set directory entries (PDSE) or other DFP products supported by the PDSE function.

Operator response: Notify the system programmer.

System programmer response: Ensure that the diagnostic exit routine is linked as authorized (AC=1), it is placed in an authorized library, and that library is in the LINKLIST.

Source: Storage management subsystem (SMS)

Routing code: 2,10

Descriptor code: 4

IGW012I TRACE BUFFERS FOR SYSSMS CTRACE ARE WRAPPING POSSIBLY BEFORE THEY CAN BE WRITTEN.

Explanation: The trace buffers used by PDSE, OAM and DFM may be being overlaid before they can be written by the external writer specified on the CTRACE command. Therefore, trace entries may be lost.

System action: The system will continue with no changes.

Operator response: Consult your system programmer for a determination of possible responses.

System programmer response: There are three possible responses: do nothing and allow some trace entries to be lost, specify a larger trace buffer via the TRACE CT command, or reduce the number of options specified to be traced for SYSSMS.

IGW013I COMPONENT TRACE *SYSSMS* NOT ACTIVE DUE TO PARMLIB MEMBER *CTISMS00* MISSING

Explanation: CTISMS00 is not in SYS1.PARMLIB. Therefore no tracing is available for OAM, PDSE or DFM.

System action: The system will continue with no changes.

Operator response: Inform your system programmer of this situation to determine if any action is desired.

System programmer response: To make tracing available for OAM, PDSE or DFM, the SYS1.PARMLIB member CTISMS00 must be created and the system IPL'd.

IGW014I COMPONENT TRACE *SYSSMS* NOT ACTIVE; RETURN CODE (IN HEX): *return-code* REASON CODE (IN HEX): *reason-code*

Explanation: Tracing for PDSE, OAM, or DFM is not active due to an undetermined problem.

System action: The system will continue with no changes.

Operator response: Inform your system programmer of this situation to determine if any action is desired.

System programmer response: If RC=OC and RSN=0400, a parmlib member is missing. Refer to previously issued message IEA301I for the member name. For other return and reason codes, see *z/OS MVS Programming: Authorized Assembler Services Reference ALE-DYN*, CTRACE return and reason codes.

IGW015I SMSVSAM SUPPORT NOT AVAILABLE

Explanation: A fatal error occurred during the initialization of the DFSMS/MVS product VSAM record-level sharing function.

System action: IPL processing continues without the VSAM record-level sharing function.

Operator response: Save the console listing containing message IGW015I and any messages issued by SMSVSAM initialization. Notify the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: DFSMSdfp

Module: IEAVNP26

IGW016I HFS INITIALIZATION PARAMETER *xxxxxxx* IS NOT VALID

Explanation: The system encountered an incorrect parameter in the PARM field of the FILESYSTYPE statement for TYPE(HFS) in parmlib member BPXPRMxx.

In the message text:

xxxxxxx

The specified parameter that is incorrect.

System action: The incorrect parameter is ignored and HFS initialization completes using default values for initialization parameters.

Operator response: Contact the system programmer

System programmer response: Examine the parameter string near the indicated character string for a misspelling or other error. Correct the error before the next time z/OS UNIX System Services is initialized.

Source: HFS Initialization

IGW017I HFS ARGUMENT *xxxxxxx* IS NOT VALID FOR *keyword*

Explanation: The system encountered an incorrect parameter in the PARM field of the FILESYSTYPE statement for TYPE(HFS) in parmlib member BPXPRMxx.

In the message text:

xxxxxxx

The specified parameter that is incorrect.

keyword The keyword with the incorrect argument.

System action: The incorrect parameter is ignored and HFS initialization completes using default values for initialization parameters.

Operator response: Contact the system programmer

System programmer response: Examine the parameter string near the indicated character string for a misspelling or other error. Correct the error before the next time OS390 Unix System Services is initialized.

Source: HFS Initialization

IGW018I HFS ARGUMENT *xxxxxxx* IS BELOW THE MINIMUM ALLOWABLE SPECIFICATION FOR THE HFS VIRTUAL PARAMETER. THE MINIMUM DEFAULT (*yyyyyyy*) WILL BE USED INSTEAD

Explanation: The system encountered a VIRTUAL specification in the PARM field of the FILESYSTYPE statement for TYPE(HFS) in parmlib member BPXPRMxx, which is below the minimum value that is allowed to be specified.

In the message text:

xxxxxxx

The specified argument that is below the minimum.

yyyyyyy

The amount that will be used instead.

System action: The incorrect argument is ignored and HFS initialization completes using 128MB as the value for the VIRTUAL parameters.

Operator response: Contact the system programmer

System programmer response: No action is required.

Source: HFS Initialization

IGW019I HFS ARGUMENT *xxxxxxx* IS ABOVE THE MAXIMUM ALLOWABLE SPECIFICATION FOR THE HFS FIXED PARAMETER. *yyyyyyy* WILL BE USED INSTEAD

Explanation: The system encountered a FIXED specification in the PARM field of the FILESYSTYPE statement for TYPE(HFS) in parmlib member BPXPRMxx, which is above the maximum value that is allowed to be specified.

In the message text:

xxxxxxx

The specified argument that is below the minimum.

yyyyyyy The amount that will be used instead.

System action: The incorrect argument is ignored and HFS initialization completes using the maximum value allowed for FIXED parameter.

Operator response: Contact the system programmer

System programmer response: No action is required.

Source: HFS Initialization

IGW020I HFS WRITE-PROTECT ERROR DETECTED DATA SET:*dsname* HAS BEEN MOUNTED R/W ON ANOTHER SYSTEM:*sysname1* DATE/TIME: *date1 time1* THE EXPECTED CONTROL INFORMATION IS: *sysname2* DATE/TIME: *date2 time2* FILE SYSTEM OPERATIONS ARE DISABLED UNTIL MOUNT AND MOUNT

Explanation: The system detected that another system has issued a R/W mount for a file system that is currently mounted on this system.

In the message text:

dsname The name of the HFS data set that has been mounted R/W elsewhere.

sysname1

The system name of the other system that mounted the file system.

date1/time1

The date and time that the other system did a R/W mount of the HFS.

sysname2

The system name that this system expected to have ownership of the HFS.

date2/time2

The date and time that this system expected to be the last file read/write mount of the HFS.

System action: All file system operations are disabled except for unmount.

Operator response: Contact the system programmer

System programmer response: Determine why an illegal R/W mount was done on another system and take steps to prevent future occurrences. Putting both systems into the same GRS ring is the recommended prevention mechanism. The file system can be reactivated by unmounting it and then remounting it.

Source: HFS Sync Daemon

IGW021I HFS INITIALIZATION FAILED: *explanation*

Explanation: HFS failed to initialize.

In the message text:

explanation

The reason HFS was unable to initialize.

System action: HFS functions will be disabled.

Operator response: Contact the system administrator.

System programmer response: Resolve the configuration problem that prevented HFS initialization.

IGW022S

Source: HFS Initialization

IGW022S HFS DATA SET "*dsname*" OUT OF SPACE DURING SYNC PROCESSING. ERROR LOC: *location in Sync* RC=*return code* RSN=*reason code*

Explanation: The specified HFS file system is out of space.

In the message text:

dsname The HFS data set name.

location in Sync

Location of failure.

If **EXTEND**, the failure occurred attempting to extend the file system during Sync processing, and:

- *return code* = X'00000014x'
- *reason code* is either:
 - X'5B27C005x' - no space was available or no extents were allowed
 - X'5B27C007x' - an installation exit failure occurred.

If **ARNP**, Sync processing ran out of pages in the file system at a point where it could not extend the file system, and:

- *return code* = X'00000024x'
- *reason code* is either:
 - X'5B0C0101x' - internal error 1
 - X'5B0C0102x' - internal error 2.

System action: The specified HFS file system will not be usable after that point until it is extended. Any functions which are attempted against the file system, other than unmount, when it is in this state, will return an error with a return code of X'00000085x' and a reason code of X'5Bxx0E37x'.

Note:

1. Any functions which were performed on the file system since the last successful Sync processing occurred might be lost. The file system will revert back to the state it had after the last successful Sync.
2. There are chances even when the specified HFS file system is out of space, it can still accept requests, but further confirmation of these requests is required.

Operator response: Contact the system programmer.

System programmer response: Extend the file system with one of the following actions:

- Free some space on the volume which contains the last extent for the file system, and then extend the file system with the CONFIGHFS command. If the ERRORLOC specified in the message is EXTEND, and the extent was large enough to accommodate the pages required to complete the SYNC processing, the SYNC function will be reinvoked to complete its updates avoiding loss of that information. The HFS Out of Space error state will then automatically be reset, and all file system functions will work properly again.

Note: If the extend amount is not large enough to provide the amount of space required to complete the SYNC process, CONFIGHFS will issue the following response:

Inadequate space added to HFS.
At least another *nn* tracks required.

- Allocate a new larger data set and copy the contents of the old HFS to the new one. Mount the new data set and continue processing.
- Add volumes to the candidate volume list for this file system, and then extend the file system with the CONFIGHFS command. An unmount and remount of the file system will be required for this extend to take effect and the file system to be usable again. The failed SYNC updates will be lost in this case.

Source: HFS Sync Daemon

IGW023A HFS *dsname* EXCEEDS *percentage* % FULL

Explanation: The system detected that this HFS has exceeded the user-specified full threshold.

In the message text:

dsname The name of the HFS data set that exceeded its full threshold.

percentage

The percentage of space in the HFS file system that is used.

System action: The system reports space usage for this HFS file system and continues.

Operator response: Contact the system programmer.

System programmer response: Add space to the HFS with CONFIGHFS or by reallocating the HFS.

Source: HFS Mount and space allocation

IGW024E HFS DATA SET: *dsname* INTERRUPTED DURING FILE SYSTEM SYNC. PROBABLE HFS CORRUPTION. READ-WRITE MOUNT REJECTED

Explanation: During mount processing of the specified file system, HFS detected that a previous sync process of this file system was interrupted. The file system in the HFS data set may have been corrupted due to this interruption and hence should not be mounted Read/Write in order to prevent further damage to the data contained within it.

In the message text:

dsname The name of the HFS whose sync process was interrupted and is probably corrupted.

System action: The specified HFS was not mounted. The Read/Write mount was rejected in order to prevent further corruption.

Operator response: Create a new HFS data set with the same characteristics as the possibly corrupted one and mount it in a temporary directory. Mount the possibly corrupted HFS Read-Only in another temporary directory. Copy all the files from the possibly corrupted one into the new one that will replace it. Check for data corruption or data loss on the new one. Unmount both; discard the possibly corrupted one and use the new one as a replacement of the old one.

System programmer response: If the sync process was interrupted as part of a planned shutdown, make sure that stopping all HFS activity is part of the shutdown procedure. Please see "Planned Shutdowns" of *z/OS UNIX System Services Planning* for a discussion of how to stop all HFS activity.

Source: UNIX System Services HFS Mount processing

IGW025I HFS DATA SET: *dsname* INTERRUPTED DURING FILE SYSTEM SYNC. PROBABLE HFS CORRUPTION. READ-ONLY MOUNT REJECTED

Explanation: During mount processing of the specified file system, HFS detected that a previous sync process of this file system was interrupted. The file system in the HFS data set may have been corrupted due to this interruption; however, this mount is allowed because it is Read-Only.

In the message text:

dsname The name of the HFS whose sync process was interrupted and is probably corrupted.

System action: The specified HFS was successfully mounted. This is only an informational message.

Operator response: Create a new HFS data set with the same characteristics as the possibly corrupted one and mount it in a temporary directory. Copy all the files from the possibly corrupted one into the new one that will replace it. Check for data corruption or data loss on the new one. Unmount both; discard the possibly corrupted one and use the new one as a replacement of the old one.

System programmer response: If the sync process was interrupted as part of a planned shutdown, make sure that stopping all HFS activity is part of the shutdown procedure. Please see "Planned Shutdowns" of *z/OS UNIX System Services Planning* for a discussion of how to stop all HFS activity.

Source: UNIX System Services HFS Mount processing

IGW026I HFS FILE SYSTEM: *dsname* MOUNT REQUEST FAILED, RESOURCE HELD *enqueue type*
ON:*sysname* RESOURCE HOLDER: *jobname* ASID: X'*aaaa*' [TCB: X'*ttttttt*']

Explanation: During a mount processing for a file system, the system detected the file system is already mounted elsewhere. The mount request terminates.

In the message text:

dsname The name of the HFS data set that was the object of the mount command.

enqueue type
The resource is held shared or exclusive.

sysname
The system name of the system that is holding the enqueued resource.

jobname The job name of the job that is holding the enqueued resource.

aaaa The address space identifier, ASID, in hexadecimal.

ttttttt The task control block, TCB, address in hexadecimal. TCB address printed if available.

System action: The mount request for the named HFS fails because the HFS is currently in use elsewhere.

Operator response: This is an informational message to help determine where the HFS is mounted and where it should be mounted. If necessary, the operator should make the appropriate steps to ensure that the HFS is mounted on the correct system.

Source: UNIX System Services HFS Mount processing

IGW027E HFS DATA SET: *dsname* SYNC *type* ERROR. RC=*rc* RSN=*rsn*

Explanation: This message is written to the console when HFS finds an error during Synch processing of the referenced data set.

Note: For further information on the HFS reason codes, see Hierarchical File System (HFS) Reason Codes of z/OS UNIX System Services Messages and Codes.

In the message text:

dsname HFS data set name.

type The type of sync error: INTERNAL, I/O, WRITE-PROTECT, or OUT-OF-SPACE.

rc Return code of the error.

rsn Reason code of the error.

System action: The HFS in the referenced data set will be protected from damage by not being accessible to any request other than an Unmount. If the error is an OUT-OF-SPACE condition, a request to Extend the filesystem will also be honored if possible.

Operator response: If the error is OUT-OF-SPACE, please see IGW022S for further information.

If the error is WRITE-PROTECT, this is caused by mounting the HFS as R/W on another system that is not in the same GRS ring. Contact the system administrator to verify that the HFS is not mounted as R/W on another system.

If the error is I/O, contact the system programmer to diagnose and fix the problem.

If the error is INTERNAL, contact the IBM Support Center.

Note: Except for some OUT-OF-SPACE conditions, as documented in IGW022S, all other errors require an Unmount and Remount of the filesystem for it to be accessible again. However, you must be aware of possible user data corruption due to the error.

Source: UNIX System Services HFS Mount processing

IGW028E HFS FILE SYSTEM *dsname* FAILED MOUNT. SMS NOT ACTIVE.

Explanation: During a request to mount an SMS-managed HFS, SMS did not initialize in the given amount of time. The HFS mounting process could not continue without SMS starting, causing a failure.

In the message text:

dsname HFS data set name.

System action: HFS mount processing will continue to check to determine if SMS has started. This continues for fifteen minutes. If SMS starts within this interval, the message is deleted and the HFS mount process continues. However, if SMS does not start within fifteen minutes, the HFS mount fails.

Operator response: Contact the system programmer.

System programmer response: Determine why SMS is having problems initializing.

IGW028I HFS MOUNT WAITING. SMS NOT ACTIVE

Explanation: A request has been made to mount an SMS-managed HFS. However, SMS has not finished initialization, and the HFS mounting process cannot continue until SMS has started.

System action: HFS mount processing will continue to check to determine if SMS has started. This will continue for fifteen minutes. If SMS starts within this interval, the message will be deleted and the HFS mount process will continue. However, if SMS does not start within fifteen minutes, the HFS mount will fail.

Operator response: Contact the system programmer.

System programmer response: Determine why SMS is having problems initializing.

IGW030I SYNC OF HFS *dsname* HAS ALREADY BEEN COMPLETED BY UNMOUNT

Explanation: An HFS file system Sync has already been completed when the HFS was unmounted.

In the message text:

dsname The name of the HFS data set.

System action: The system exits file-system Sync processing without performing a Sync since it has already been Synced.

Source: HFS mount and file system Sync processing

IGW031I PDSE ANALYZE START OF REPORT (PDSE Address Space)*text* PDSE ANALYSIS END OF REPORT (PDSE Address Space)

Explanation: In the message, *text* contains one or more of the following lines:

++ no PDSEs connected

++ no exceptional data set conditions detected

-----data set name ----- --vsgt-----

dsname 01-volser-ttttrr

++ Unable to latch HL1b:hhhhhhh Holders Changing

**++ Unable to latch HL1b:hhhhhhh
Latch:11111111 Holder(aaaa,ttttttt)
Holding Job:jjjjjjj**

++ Unable to latch HL1bPlch:hhhhhhh Holders Changing

**++ Unable to latch HL1bPLch:hhhhhhh
Latch:11111111 Holder(aaaa,ttttttt)
Holding Job:jjjjjjj**

++ Unable to latch DIB:ddddddd Holders Changing

IGW031I

```
++ Unable to latch DIB:ddddddd
    Latch:11111111 Holder(aaaa,ttttttt)
    Holding Job:jjjjjjj

++ Unable to latch HL1B Hash Table Holders Changing

++ Unable to latch HL1B Hash Table Latch:11111111
Holder(aaaa,ttttttt)

++ Unable to latch DIB Hash Table Holders Changing

++ Unable to latch DIB Hash Table Latch:11111111
Holder(aaaa,ttttttt)

++ Unable to latch XCM

| ++ Unable to latch ASRBASCB Hash Table Latch:11111111
| Holder(aaaa,ttttttt)

Holders Changing

++ Unable to latch XCM Latch:11111111 Holder(aaaa,ttttttt)

++ Messages to ssssssss pending for iiii seconds

++ Lock GLOBAL|LOCAL DIRECTORY|FORMATWRITE
    SHARED|EXCLUSIVE held for at least iiii seconds
    H11b:hhhhhhh HOLDER(aaaa:ttttttt)
    Holding Job:jjjjjjj

++ cccc additional holders of DIRECTORY|FORMATWRITE lock

++ cccc waiting for DIRECTORY|FORMATWRITE lock exclusive

++ cccc waiting for DIRECTORY|FORMATWRITE lock shared

++ nummsg unresponded messages to ssssssss
```

The V SMS,PDSE,ANALYSIS,DSNAME command has completed successfully. You should consult the Recommended Usage of z/OS DFSMSdfp *Diagnosis* to interpret the results.

In the *text*:

01-volser-tttrr

The VSGT for the PDSE; this is the internal name that the PDSE processing uses to represent the PDSE.

dsname

The name of the PDSE.

volser

The volume where the PDSE is resident.

tttrr

The TTR for the format 1 DSCB for this PDSE.

hhhhhhh

The address of the HL1B (internal).

ddddddd

The address of the DIB (internal).

lllllll

The address of the latch which has not been released.

aaaa

The ASID of the holder of the latch which has not been released.

ttttttt

The address of the TCB of the holder of the latch which has not been released.

jjjjjjj

The jobname of the holder of the latch or lock.

cccc

The count of the holders or waiters for a lock.

iii

The number of seconds a lock has been held or a message has been outstanding.

nummsgs

The number of outstanding messages from this system.

sssssss

The name of the system which has not responded to messages.

System action: The system displayed the requested information.**Operator response:** None.**System programmer response:** Consult the *z/OS DFSMSdfp Diagnosis* to proceed with PDSE analysis and repair.**Source:** DFSMSdfp**Module:** IGWLHA10**IGW032I PDSE FREELATCH START OF REPORT** *text* **PDSE FREELATCH END OF REPORT****Explanation:** In the message, *text* contains one or more of the following lines:**++ Latch:11111111 released****++ Resetting Reserved FSN for DIB:ddddddd**
From hhhhhhhhhh1 To hhhhhhhhhh2
DataSet:dsname**++ Free latch failed latch:11111111 is not held****++ Free latch failed latch:11111111 is nullified****++ Free latch failed wrong holder specified for latch:11111111****Current Holder(aaaa,ttttttt)****++ Latch:11111111 release failed rc:rc rs:rs****++ Free Latch Failed latch:11111111 is either broken or not a latch****++ Latch obtained and released, any waiters released**

The V SMS,PDSE,FREELATCH command has completed. If you received **++ Latch:lllllll released**, the latch was released successfully; otherwise, the latch release failed for the reason specified in the ++ message text. You should consult the *z/OS DFSMSdfp Diagnosis* to interpret the results.

In the *text*:*lllllll*

The address of the latch which has not been released.

ddddddd

The address of the DIB which contained the latch which was released.

dsname

The name of the PDSE which was associated with the DIB which contained the latch being released.

hhhhhhhhh1

The FSN value which was reset.

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hhhhhhhhhh2

The new FSN value.

aaaa

The ASID of the holder of the latch which has not been released.

tttttttt

The address of the TCB of the holder of the latch which has not been released.

rc The internal return code why the latch was not released.

rs The internal reason code why the latch was not released.

System action: The system either released the latch or was unable to release the latch for the specified reason.

Operator response: None.

System programmer response: Consult the *z/OS DFSMSdfp Diagnosis* to proceed with PDSE analysis and repair.

Source: DFSMSdfp

Module: IGWLHA10

IGW033I PDSE ANALYZE DATA SET *datasetname* NOT CATALOGED

Explanation: The V SMS,PDSE,ANALYSIS,DSNAME command was unable to complete because the data set *datasetname* could not be found in the system determined catalog.

System action: The system was unable to complete the analysis.

Operator response: Reissue the command without the DSNAME parameter and examine the output for the desired data set.

System programmer response: None.

Source: DFSMSdfp

Module: IGWLHA00

IGW033I PDSE ANALYZE NON-PDSE ENCOUNTERED

Explanation: The V SMS,PDSE,ANALYSIS,DSNAME command was unable to complete because the data set specified was not a PDSE.

System action: The system was unable to complete the analysis.

Operator response: Reissue the command with the correct data set name.

System programmer response: None.

Source: DFSMSdfp

Module: IGWLHA00

IGW033I PDSE ANALYSIS DSCB NOT FOUND FOR *ddddddd* ON VOLUME *vvvvvvvv*

Explanation: The V SMS,PDSE,ANALYSIS,DSNAME command was unable to complete because the data set *ddddddd* did not exist on the volume *vvvvvvvv* specified on the command.

System action: The system was unable to complete the analysis.

Operator response: Reissue the command with the correct data set name and volser.

System programmer response: None.

Source: DFSMSdfp

Module: IGWLHA00

IGW034I V SMS,PDSE FAILED RC:rc RS:rsn

Explanation: The V SMS,PDSE command failed with an internal processing error. The return code was *rc* and the reason code was *rsn*.

System action: A dump will occur.

Operator response: Reissue the command without the DSNAME parameter and examine the output for the desired data set.

System programmer response: Contact your IBM service representative. If the V SMS,PDSE,DSNAME() command was issued, you may remove the DSNAME and VOLSER from the command and then reissue the command.

Source: DFSMSdfp

Module: IGWLHA00

IGW034I PDSE ANALYZE UNABLE TO ALLOCATE VOLUME vvvvvv

Explanation: The V SMS,PDSE,ANALYSIS,DSNAME command was unable to complete because it could not allocate volume *vvvvv*.

System action: The system was unable to complete the analysis.

Operator response: Reissue the command without the DSNAME parameter and examine the output for the desired data set.

System programmer response: None.

Source: DFSMSdfp

Module: IGWLHA00

IGW035I SMSPDSE1 IS NOT ENABLED,SMS=xx

Explanation: This message is issued during IPL processing or as a result of a VARY SMS,PDSE1,RESTART operator command. The restartable SMSPDSE1 server address space is not currently enabled for one of the following reasons:

- PDSE_RESTARTABLE_AS(YES) was not specified in the IGDSMSxx member of SYS1.PARMLIB.
- PDSESHARING(EXTENDED) was not specified in the IGDSMSxx member of SYS1.PARMLIB.
- During initialization of the non-restartable PDSE address space SMSPDSE, the attempt to migrate to extended sharing protocol did not succeed.
- There was no prior SMSPDSE1. A re-IPL is required to activate SMSPDSE1.

System action: SMSPDSE1 is not created. All subsequent PDSE processing is routed to the non-restartable address space SMSPDSE. If the message is issued as a result of an operator command, user tasks that were being processed by SMSPDSE1 prior to when it stopped might be delayed until SMSPDSE1 becomes available.

Operator response: If a restartable PDSE address space is desired then ensure that the SMSPDSE1 server address space is enabled on the system. To enable SMSPDSE1, specify the required keywords, PDSE_RESTARTABLE_AS(YES) and PDSESHARING(EXTENDED) in the IGDSMSxx member(s) of SYS1.PARMLIB. (These parameters can only be changed with a system IPL.) Verify that the xx value in the message text matches the value in the selected SYS1.PARMLIB member name IGDSMSxx. Failure to migrate to extended sharing protocol indicates an error in the PDSE lock manager subcomponent; contact the IBM Support Center. The most likely reason that Extended Sharing is not enabled is if one or more of the systems in the SYSPLEX have not specified Extended Sharing in their SMS parms.

System programmer response: A mismatch in the xx value indicates that a SET SMS=xx command might have been executed at some time after SMSPDSE initialization.

Source: DFSMSdfp

IGW036I VARY SMS,PDSE1,RESTART COMMAND ACCEPTED

Explanation: The VARY SMS,PDSE1,RESTART or VARY SMS,PDSE1,ACTIVATE command was entered from the operator's console. The restartable SMSPDSE1 server address is currently restarting.

System action: None.

Operator response: None. this is an information message only.

System programmer response: None.

Source: DFSMSdfp

**IGW037I PDSE ERROR DURING NIP PROCESSING, DSNAME: *pdsedsname* MODULE NAME: *modulename*
RETURN CODE: *retcd* REASON CODE: *rsncd***

Explanation: A corrupt PDSE data set has been identified at NIP time.

In the message text:

pdsedsname

The name of the corrupt PDSE data set at NIP time.

modulename

The name of the module that issues the message.

retcd

Return code.

rsncd

Reason code.

System action: IPL might continue without the data set; however, the system is not healthy. If the corrupt PDSE generates a program check, it will generate a disabled wait state. It is recommended to restore a valid copy of the corrupt PDSE and reIPL the system.

Operator response: Review the syslog and verify that there is no IGW037I message and that the IPL was successful.

System programmer response: Replace the corrupt PDSE with a valid copy of the PDSE.

Source: DFSMSdfp

Module: The following modules can issue this message: IGWDAALN, IGWDACND, IGWDACRD, IGWDACRN, IGWDADCD, IGWDADSN, IGWDAINA, IGWDARDA, IGWDAUPA, IGWDBHOM, IGWDDCNF, IGWDDCR1, IGWDDDCF, IGWDDDFSE, IGWDRCF, IGWDLEXT, IGWDPDMP, and IGWDPRSP

IGW038A POSSIBLE PDSE PROBLEM(S). (SMSPDSE|SMSPDSE1) RECOMMEND ISSUING V SMS,PDSE,ANALYSIS

Explanation: The PDSE monitor has detected a possible processing problem(s) for one or more PDSEs currently in use on the system. SMSPDSE or SMSPDSE1 identifies which PDSE address space has detected the problem. Types of processing problems include: hangs and broken latch conditions.

See the V SMS,PDSE,ANALYSIS command in *z/OS DFSMSdfp Diagnosis* for the complete list of situations which may also be detected by the PDSE Monitor. See System Programmer response for details on how to determine the actual problem.

System action: IGW038A is issued as a delete operator message to the console to indicate the detection of a possible PDSE processing problem.

Operator response: Notify System Programmer of the possibility of a PDSE problem.

System programmer response: Issue V SMS,PDSE,ANALYSIS command to determine what may be wrong with the PDSE(s). For detail about this command and what actions to take, see *z/OS DFSMSdfp Diagnosis*.

Source: DFSMSdfp

Module: IGWLHAT1

IGW039I CREATE SYNONYM PDSE FAILED VSGT: 01-volser-ttttr

Explanation: The attempt to create a new PDSE on this system failed because there is a PDSE OPEN on another system which has been assigned the same vsgt 01-volser-ttttrr. The problem is caused by duplicate volsers in the SYSPLEX.

System action: The data set creation will fail.

Operator response: Inform the system programmer if you do not believe you have duplicate volsers in the SYSPLEX.

System programmer response: If you do not believe you have duplicate volsers, obtain a dump of the system where the data set is open including the SMSX address space, and contact your IBM service representative.

Programmer response: You should attempt to create the data set on another volume. If that is possible, allocate a dummy data set on the same volume and re-attempt the allocation, as this will probably change the vsgt.

Source: Storage Management Subsystem (SMS)

Module: IGWLHJIN

Routing code: 2

Descriptor code: 11

IGW039I PDSE CONNECT MEMBER COUNT MISMATCH Count1=nnnn1 Count2=nnnn2 _MEMBER_

Explanation: The PDSE connect code detected a mismatch between the expected number of members in a PDSE and the actual number of members in the PDSE. The comparison was probably requested by DSS dump or copy. When there is a count mismatch there is a good probability that the PDSE structure is corrupted. The PDSE should be replaced as soon as possible.

In the message text:

nnnn1

The number of members expected to be in the PDSE.

nnnn2

The actual number of members in the PDSE.

System action: The connect to the PDSE fails.

Operator response: None.

System programmer response: Rebuild the PDSE as soon as possible. This can be done by going to a backup, or by using IEBCOPY to copy as many members as possible.

Programmer response: None.

Source: Storage Management Subsystem (SMS)

Module: IGWLHJIN

Routing code: 2

Descriptor code: 11

IGW039I CREATE SYNONYM PDSE REQUESTED BY ANOTHER SYSTEM DSNAME: dsname VSGT: 01-volser-ttttr

Explanation: A new PDSE data set is being created on another system. There is a PDSE open on this system which has been assigned the same vsgt 01-volser-ttttrr. This should not happen because there should be only one instance of each volser in a SYSPLEX where PDSE data sets can be allocated.

System action: The data set creation will fail.

Operator response: Inform the system programmer if you do not believe you have duplicate volsers in the SYSPLEX.

System programmer response: If you do not believe you have duplicate volsers, obtain a dump of the system where the data set is open including the SMSX address space, and contact your IBM service representative.

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Programmer response: None.

Source: Storage Management Subsystem (SMS)

Module: IGWLGLCN

Routing code: 2

Descriptor code: 11

IGW040I *text*

Explanation: In the message text, *text* is:

- PDSE CONNECTING TO XCF FOR IPLID
- PDSE CONNECTED TO XCF FOR IPLID
- PDSE CONNECTING TO XCF FOR SIGNALING
- PDSE CONNECTED TO XCF FOR SIGNALING
- END OF TASK AT EOM FAILED ASID:*aaaa*
- BUFFER PAST CLOSE ACTIVE FOR {SMSPDSE | SMSPDSE1}
- BUFFER PAST CLOSE NOT ACTIVE FOR {SMSPDSE | SMSPDSE1}

During PDSE initialization in a SYSPLEX environment, the system initializing PDSEs must establish communication through XCF with the other systems in the SYSPLEX in order to let the other systems know that PDSEs are accessible on the new system. Also, a system being varied offline must establish communication through XCF with the other systems in the SYSPLEX in order to let the other systems know that the PDSEs on the system are being taken off line are no longer accessible. This message is issued to indicate that the system has either started or completed establishing messaging between two systems. This message also is issued to notify you that EOM (End of Memory) processing for ASID *aaaa* was not successful. A dump accompanies the message in this case.

In addition when you IPL, restart the SMSPDSE address space, or issue the SET SMS=xx command you will see one of the Buffer Past Close messages. These messages let you know what the current state of buffering beyond close is for the PDSE address space (SMSPDSE or SMSPDSE1).

System action: None.

Operator response: None.

System programmer response: If PDSE processing is unavailable, consult the log to see if both IPLID and Signaling have completed connecting.

Programmer response: None.

Source: DFSMSdfp

Module: IGWLXFMX

IGW041A XCM MESSAGE UNABLE TO RECEIVE *sssssss* UNKNOWN SENDER RECEIVING GROUP
gggggggggggggggg

Explanation: XCM, which is the XCF subcomponent of DFSMS, has received a message from a member *sssssss* for group member *gggggggggggggggg*. XCM system has been unable to identify the member *sssssss* using the IXCQUERY service of XCF. This is an unexpected situation.

sssssss

The XCF connect token for the member which sent the message.

gggggggggggggggg

The member name for the receiving member.

System action: PDSE or SMSVSAM services may be unavailable.

Operator response: None.

System programmer response: If *gggggggggggggggg* is IGWSYS01----- or IGWSYS00-----, perform a dump of SMXC or SMSPDSE, XCFAS, the XCFAS data spaces, and notify IBM Service.

Programmer response: None.

Source: DFSMSdfp

Module: IGWLXFMX

IGW042A PDSE END OF MEMORY PROCESSING STALLED ASID:*aaaa*

Explanation: PDSE has been unable to complete EOM (End of Memory) processing for ASID *aaaa*. Run the V SMS,PDSE,ANALYSIS command to see if there are any problems associated with PDSE processing which may have to be cleared up to allow End of Memory processing to complete.

System action: None.

Operator response: None.

System programmer response: Run V SMS,PDSE,ANALYSIS to see if the underlying cause of the delayed EOM processing can be determined.

Programmer response: None.

Source: DFSMSdfp

Module: IGWLXFMX

IGW043I *text*

Explanation: In the message text, *text* is one of the following:

```
PDSE MONITOR IS HALTED
Issue V SMS,PDSE RESTART to activate
```

or

```
PDSE MONITOR IS INACTIVE
```

or

```
PDSE MONITOR IS ACTIVE
++ DISPLAY MODE ACTIVE
++ DUMP NEXT MODE ACTIVE
++INVOCATION INTERVAL: iiiiii SECONDS
++SAMPLE DURATION: ddddddd SECONDS
```

The operation parameters for the PDSE monitor function may have changed. The new operational parameters are displayed, where:

HALTED

The state where the monitor has been stopped because of a previous error in the monitor.

INACTIVE

The state where the monitor is not running because the SMS parameter or the V SMS,PDSE,MONITOR,OFF command was issued.

ACTIVE

The state where the monitor is running normally.

++ Display Mode Active

Monitor displays message IGW031I for all possible error conditions discovered.

++ Dump Next Mode Active

Monitor takes an SVC dump for the next possible error condition discovered.

iiiiiii

The number of seconds between monitor cycles.

ddddddd

The number of seconds an error condition must exist for it to be detected.

The parameters changed because:

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- The system IPLed.
- The V SMS,PDSE,MONITOR command was issued.
- The SET SMS=xx command was issued and the IGDSMSxx member contains the PDSE_MONITOR parameter.

Use the V SMS,PDSE,MONITOR command or the PDSE_MONITOR parameter of the IGDSMSxx parmlib member to change the operational parameters.

System action: None.

Operator response: None.

System programmer response: None; the message is informational.

Programmer response: None.

Source: Storage Management Subsystem (SMS)

Module: IGWLHAT1

IGW044I <SMPDSE|SMSPDSE1> BMF LRU FAILED, RC=return-code RSN=reason-code

Explanation: A failure occurred in the task which performs Least-Recently-Used (LRU) processing for the Buffer Management Facility (BMF) in the PDSE server address space SMSPDSE or SMSPDSE1. The system restarted the task, but the task failed a second time.

System action: PDSE processing will continue without the BMF LRU task.

Operator response: Loss of the BMF LRU task might degrade system performance because BMF buffers will be depleted. Depending on workload, the eventual exhaustion of all BMF buffers might occur, which would necessitate a PDSE server restart (in the SMSPDSE1 case) or a re-IPL (in the SMSPDSE case). To avoid an unscheduled outage, consider scheduling a restart of SMSPDSE1 or a system re-IPL, so that the BMF LRU task can be reinitialized.

System programmer response: Note the return code and reason code for subsequent problem determination. This is an unanticipated internal PDSE server error. An associated dump should have been produced by the failing task. If the problem persists, contact the IBM Support Center.

Source: DFSMSdfp

IGW045I PDSE LATCH DISPLAY START OF REPORT (SMSPDSE<1>)textPDSE LATCH DISPLAY END OF REPORT (SMSPDSE<1>)

Explanation: The operator entered the PDSE LATCH DISPLAY command. The system displays the current status of the latch. This includes the current holder and the waiters for the latch.

For each holder or waiter returned, the "holder unknown" status indicates the ASID is not associated with an active address space.

In the message, *text* contains one of the following lines:

```
++ Latch:11111111 not currently held
++ Latch:11111111 held by aaaa:ttttttt jobname:jjjjjjj
++ Latch:11111111 held by aaaa:ttttttt StartedTask:sssssss
++ Latch:11111111 held by aaaa:ttttttt Holder unknown
++ Latch:11111111 nullified
++ Latch:11111111 broken(qqqqqqqqqqqqqqq)
```

When detail specified

```
++ no waiters
++ Waiters follow:
++ Asid:aaaa Tcb:ttttttt jobname:jjjjjjj
```



```

++ Asid:aaaa Tcb:tttttttt StartedName:ssssssss
++ Asid:aaaa Tcb:tttttttt unknownCurrent Holder(aaaa,tttttttt)

```

When summary specified or defaulted

```

++ kw Known requests on the latch wait queue
++ uw Unknown requests on the latch wait queue

```

Where:

llllllll

Address of a latch.

aaaa

ASID for a latch holder or waiter.

tttttttt

TCB address for a latch holder or waiter.

jjjjjjjj

Job name for latch holder or waiter.

ssssssss

Started task name for latch holder or waiter.

qqqqqqqqqqqqqqqq

Hexadecimal data at address of specified latch.

kw Number of waiters for a latch for which a valid jobname or started task name exists.

uw Number of waiters for a latch which is no longer active.

System action: None.

Operator response: None.

System programmer response: None. This is an information only message.

Source: DFSMSdfp

Module: IGWLHA50

IGW046I PDSE Module *mmmmmmmmmm* not found

Explanation: The operator entered the D SMS,PDSE<1>, MODULE command for module *mmmmmmmmmm*, and the module does not exist.

System action: None.

Operator response: None.

System programmer response: None. This is an information only message.

Source: DFSMSdfp

Module: IGWLHA51

IGW046I PDSE Module *mmmmmmmmmm (aaaaaaaa) llllllll dddddd*

Explanation: The operator entered the D SMS,PDSE<1>, MODULE command for module *mmmmmmmmmm*, and the module is found at address *aaaaaaaa*. The module is at maintenance level *llllllll* and was compiled on date *ddddd*.

System action: None.

Operator response: None.

System programmer response: None. This is an information only message.

Source: DFSMSdfp

IGW047I • IGW048I

Module: IGWLHA51

IGW047I LNKST DCB CLOSE FOUND ONE OR MORE I/O LOCKS FOR *dsname* HELD BY ASID: *asid*
JOBNAME: *jobname*

Explanation: The operator issued a command that caused a lnkfst DCB to be closed. The DCB was not closed because at least one job was doing I/O to PDSE *dsname*. The ASID of one of the jobs is *asid*. Its job name is *jobname*. The PDSE remains open and you cannot delete it.

System action: The system will not close the DCB.

Operator response: Notify the system programmer. Take a console dump of the SMSPDSE address space and the job identified by *asid*.

System programmer response: Report this to IBM service.

Source: DFSMSdfp

Module: IGWDADCD

Routing code: 2, 8

Descriptor code: None.

| **IGW048A** BMF|IMF LRU Stalled insssssss [last completed:mm/dd/yyyy hh:mm:ss.ttttt] BUFFER SPACE USED:
| xxxxx

| **Explanation:** The PDSE monitor has detected that the BMF or IMF LRU processing has stalled. When the BMF or
| IMF LRU stalls, buffers are not reused and the amount virtual storage used by the PDSE address space will grow.
| Over time this can have an affect on system performance.

| In the message text:

| sssssss

| identifies the address space with the problem: SMSPDSE or SMSPDSE1.

| mm/dd/yyyy hh:mm:ss.ttttt

| The date and time when the BMR or IMF LRU last successfully completed its processing.

| xxxxx

| The buffer space used in MB.

| **System action:** IGW048A is issued as a delete operator message to the console to indicate the detection of a possible
| PDSE processing problem.

| **Operator response:** None.

| **System programmer response:** Issue V SMS,PDSE,ANALYSIS command to determine what may be wrong with the
| PDSE(s). For detail about this command and what actions to take, see *z/OS DFSMSdfp Diagnosis*. If the problem
| cannot be corrected and the amount of storage used affects the system operation, you may want to schedule a restart
| of the SMSPDSE1 address space.

| **Source:** DFSMSdfp

| **Module:** IGWLHAT1

IGW048I PDSE HSPSTATS START OF REPORT *text* PDSE HSPSTATS END OF REPORT

Explanation: This is in response to the D SMS,PDSE|PDSE1,HSPSTATS command. In the message, *text* contains one or more of the following lines:

When there are active PDSE

```
HiperSpace Size: aaaa MB
LRUTime : bbb Seconds LRUcycles: ccc Cycles
BMF Time interval dddd Seconds
-----data set name-----Cache--Always-DoNot
                               Elig---Cache--Cache
Pdsedataset1                   x    x    x
Pdsedataset2                   x    x    x
:
Pdsedatasetn                   x    x    x
```

When there are no PDSEs active

```
HiperSpace Size: aaaaa MB
LRUTime : bbb Seconds  LRUcycles: ccc Cycles
BMF Time interval dddd Seconds
```

++ no PDSE datasets found

In the message text:

aaaaa

A number that indicates the size of the hiper space in megabytes.

bbb

The number of seconds for the LRU.

ccc

The number of cycles for the LRU.

dddd

A number that indicates the BMF time interval in seconds.

pdsedataset1, pdsedataset2,...,pdsedatasetn

The name of the PDSE data sets that are active in the PDSE address space.

x Has a value of Y(es) or N(o) indicating the action specified by the column header of the report.

System action: None.

Operator response: None.

System programmer response: Information can be used for tuning the system.

Source: DFSMSdfp

Module: IGWLHA60

IGW049I PDSE Summary Statistics START OF REPORT *text* PDSE Summary Statistics END OF REPORT

Explanation: This is in response to the D SMS,PDSE|PDSE1,HSPSTATS,SUMMARY command. In the message, *text* contains the following lines:

- HiperSpace Size: *aaaaa* MB
- LRUTime : *bbb* Seconds LRUcycles: *ccc* Cycles
- BMF Time interval *dddd* Seconds
- Number of PDSE datasets: *eeeeee*
- Number of PDSEs Eligible for caching: *ffffff*
- Number of PDSEs Always in Cache: *gggggg*
- Number of PDSEs Maybe in Cache: *hhhhhh*
- Number of PDSEs Not Eligible for cache: *iiiiii*

In the message text:

aaaaa

A number that indicates the size of the hiper space in megabytes.

bbb

The number of seconds for the LRU.

ccc

The number of cycles for the LRU.

dddd

A number that indicates the BMF time interval in seconds.

eeeeee

Total number of PDSEs that are active in the PDSE address space.

ffffff

Total number of PDSEs that are eligible for caching in the PDSE address space.

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gggggg

Total number of PDSEs that are always in cache in the PDSE address space.

hhhhhh

Total number of PDSEs that might be in cache in the PDSE address space.

iiiiii

Total number of PDSEs that are not eligible for caching in the PDSE address space.

System action: None.

Operator response: None.

System programmer response: Information can be used for tuning the system.

Source: DFSMSdfp

Module: IGWLHA60

IGW050I PDSE Virtual Storage START OF REPORT *text* PDSE Virtual Storage END OF REPORT

Explanation: This is in response to the D SMS,PDSE|PDSE1,VSTOR command. In the message, *text* contains the following lines:

```
Large Virtual Memory allocated
for Address Space: aaaaaaaa Pages
Directory Storage Size: bbbbbb MB
Storage utilization in pages: cccccc
```

In the message text:

aaaaaaaa

A number that indicates the amount of storage in pages allocated for the PDSE address space.

bbbbbb

A number that indicates the size of storage in MB for Directory PDSE pages that are in 64-bit virtual storage.

cccccc

The number of pages that are used for directory PDSE pages.

System action: None.

Operator response: None.

System programmer response: Information can be used for tuning the system.

Source: DFSMSdfp

Module: IGWLHA60

```
| IGW051I PDSE CONNECTIONS Start of Report SMSPDSE|SMSPDSE1
| ++ No Connections found for VSGT:vsgt DSN: dsname
| -----data set name----- vsgt-----
| dsname vsgt
| --asid-- --name-- --tcb-- -open-
| asid jobname tcbaddr state
| asid jobname tcbaddr state
| PDSE CONNECTIONS End of Report SMSPDSE|SMSPDSE1
```

| **Explanation:** In the message text:

| **SMSPDSE|SMSPDSE1**

| PDSE address space where the PDSE is connected.

| *vsgt*

| Internal representation used to identify PDSE.

| *dsname*

| Name of the PDSE.

| *asid*
 | ASID where the PDSE is connected.

| *jobname*
 | Name of the JOB which has PDSE connected.

| *tcbaddr*
 | Address of the TCB which has PDSE connected.

| *state*
 | The type of connections.

| **Input**
 | One or more connections for INPUT exist.

| **Output**
 | One or more connections for OUTPUT exist.

| **InAndOut**
 | Connections for both INPUT and OUTPUT exist.

| **System action:** None.

| **Operator response:** None.

| **System programmer response:** None.

| **Source:** DFSMSdfp

| **Module:** IGWLHA60

| **IGW052I** The cached directory blocks for PDSE *dsname* have been discarded

| **Explanation:** The cached directory blocks for the PDSE *dsname* have been discarded.

| In the message text:

| *dsname*
 | Name of the PDSE being refreshed.

| **System action:** None.

| **Operator response:** None.

| **System programmer response:** None.

| **Source:** DFSMSdfp

| **Module:** IGWLHA60

| **IGW053I** Refresh Failed *dsname* RC:*rc* RS:*rs*

| **Explanation:** An attempt to refresh the PDSE cache for *dsname* failed with a return code of *rc* and a reason code of *rs*.

| In the message text:

| *dsname*
 | Name of the PDSE being refreshed.

| *rc* Return code from the refresh.

| *rs* Reason code from the refresh.

| **System action:** None.

| **Operator response:** None.

| **System programmer response:** Contact the IBM Support Center.

| **Source:** DFSMSdfp

| **Module:** IGWLHA60

IGW054I SMSPDSE1 IS ALREADY ACTIVE

Explanation: V SMS,PDSE1,ACTIVATE was issued, but the address space, SMSPDSE1, was already active.

System action: None.

Operator response: None.

System programmer response: None.

Source: DFSMSsdfp

Module: IGWDQVSP

IGW055I SMSPDSE1 SHUTDOWN IN PROGRESS

Explanation: The operator entered the VARY SMS,PDSE1,RESTART command. The SMSPDSE1 address space has begun to stop.

System action: None.

Operator response: None. This is an information only message.

Source: DFSMSsdfp

IGW056S SMSPDSE1 SHUTDOWN FAILED, RSN=*reason-code*

Explanation: The operator entered the VARY SMS,PDSE1,RESTART command, but the attempt to shutdown the SMSPDSE1 address space failed.

System action: The SMSPDSE1 address space remains operational.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. A dump of SMSPDSE1 and the master scheduler address space might be required for problem determination.

Source: DFSMSsdfp

IGW057I WAITING FOR SMSPDSE1 SHUTDOWN

Explanation: The operator entered the VARY SMS,PDSE1,RESTART command. The system is waiting for the SMSPDSE1 address space to stop prior to initiating restart.

Operator response: None. This is an information only message.

Source: DFSMSsdfp

IGW058I SMSPDSE1 SHUTDOWN COMPLETE

Explanation: The operator entered the VARY SMS,PDSE1,RESTART command. The SMSPDSE1 address space is completely stopped and will be restarted.

Operator response: None. This is an information only message.

Source: DFSMSsdfp

IGW059I SMSPDSE1 IS BEING ACTIVATED

Explanation: The operator entered the VARY SMS,PDSE1,RESTART command. The new SMSPDSE1 address space is being activated.

Operator response: None. This is an information only message.

Source: DFSMSsdfp

IGW061I [SMSPDSE | SMSPDSE1] INITIALIZATION COMPLETE

Explanation: The PDSE address space has been initialized, either due to a system IPL (SMSPDSE and SMSPDSE1), or because the operator entered the VARY SMS,PDSE1,RESTART command (SMSPDSE1 only).

Operator response: None. This is an information only message.

Source: DFSMSdfp

IGW062I SMSPDSE1 IS QUIESCING

Explanation: The operator entered the VARY SMS,PDSE1,RESTART command. The SMSPDSE1 address space has entered the quiesce phase of address space shutdown processing.

Operator response: None. This is an information only message.

Source: DFSMSdfp

IGW063S SMSPDSE1 IGNORING MUST-COMPLETE TASK ASID:JOBNAME, TCB=nnnnnnnnX

Explanation: The operator entered the VARY SMS,PDSE1,RESTART command. The SMSPDSE1 address space was in the quiesce phase of shutdown processing. The system determined that a task was in a "must-complete" state, but did not exit this state within the time limit specified in the quiesce parameter of the VARY SMS,PDSE1,RESTART command, or the default quiesce value if the quiesce parameter was not specified.

System action: The system ignores the "must-complete" state of the task in order to stop SMSPDSE1. The task might experience unpredictable results when the SMSPDSE1 address space is subsequently reactivated and the system attempts to resume the task and to complete any in-flight PDSE request.

Operator response: Note the ASID, JOBNAME and TCB address for possible problem determination.

Source: DFSMSdfp

IGW064I SMSPDSE1 IGNORING IN-PROGRESS TASK ASID:JOBNAME, TCB=nnnnnnnnX

Explanation: The operator entered the VARY SMS,PDSE1,RESTART command. The SMSPDSE1 address space was in the quiesce phase of shutdown processing. The system determined that a user task was running in the SMSPDSE1 address space, but did not return to the user address space within the time limit specified in the quiesce parameter of the VARY SMS,PDSE1,RESTART command, or the default quiesce value if the quiesce parameter was not specified.

System action: The system ignores the user task in order to shutdown SMSPDSE1. The task might experience unpredictable results when the SMSPDSE1 address space is subsequently reactivated and the system attempts to resume the task and to complete any in-flight PDSE request.

Operator response: Note the ASID, JOBNAME and TCB address for possible problem determination.

Source: DFSMSdfp

IGW065I SMSPDSE1 QUIESCE COMPLETE

Explanation: The operator entered the VARY SMS,PDSE1,RESTART command. The SMSPDSE1 address space has completed the quiesce phase of shutdown processing.

Operator response: None. This is an information only message.

Source: DFSMSdfp

IGW066I SMSPDSE1 IS RECONNECTING ALL USERS

Explanation: The operator entered the VARY SMS,PDSE1,RESTART or VARY SMS,PDSE1,ACTIVATE command. As part of the re-initialization process, SMSPDSE1 is attempting to reconnect all user address spaces and tasks that had open connections to PDSE directories and members when the previous SMSPDSE1 instance terminated. In this message text, "user" refers to all address spaces, including those that are performing system functions. Only connections that were being served by the restartable address space SMSPDSE1 are affected.

System action: The system attempts to complete all reconnections prior to making the new SMSPDSE1 server instance available for general use. Users that have connections to PDSEs might experience a short delay.

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Operator response: None. This is an information only message.

Source: DFSMSdfp

IGW067I SMSPDSE1 RECONNECT TIMEOUT FOR ASID:JOBNAME

Explanation: The operator entered the VARY SMS,PDSE1,RESTART command. SMSPDSE1 determined that address space *ASID*, executing job *JOBNAME*, might have had open connections to PDSE directories and members, but the attempt to reconnect this user address space did not succeed within 15 seconds.

System action: The system issues this message as well as IGW068D.

Operator response: Respond to message IGW068D.

Source: DFSMSdfp

IGW068D SMSPDSE1 IGNORE RECONNECT TIMEOUT(S)? (Y/N)

Explanation: One or more IGW067I messages were issued, identifying user address spaces for which SMSPDSE1 failed to complete "reconnect" processing within 15 seconds. The operator can choose one of the following responses:

- **Y:** Instructs SMSPDSE1 to ignore the reconnect timeouts in order to complete its re-initialization.
- **N:** Instructs SMSPDSE1 to continue, for another 15 seconds, attempting to reconnect all users.

System action: If the operator response is **Y**, the system immediately abandons all further attempts to reconnect user address spaces. Those user address spaces and jobnames identified in message(s) IGW067I might fail due to their inability to continue processing PDSEs. If the operator response is **N**, the system continues its attempts to reconnect all user address spaces for another 15 seconds. If reconnect processing is still not successful, message(s) IGW067I and IGW068D reappear.

Operator response: Determine if the address spaces and jobnames identified in message(s) IGW067I are critical to the successful operation of the system. If so, reply **N** to instruct SMSPDSE1 to continue attempting to reconnect them. If your installation can tolerate failures of these address spaces and jobs, reply **Y** to avoid any further delay in completing the initialization of SMSPDSE1. Note the *ASID*(s) and *JOBNAME*(s) for subsequent problem determination.

Source: DFSMSdfp

IGW069I SMSPDSE1 RECONNECT PHASE COMPLETE

Explanation: The operator entered the VARY SMS,PDSE1,RESTART or VARY SMS,PDSE1,ACTIVATE command. SMSPDSE1 has completed the "reconnect phase" of its re-initialization, either because it was successful in reconnecting all users, or because the operator replied **Y** in response to message IGW068D.

System action: Processing continues.

Operator response: None. This is an information only message.

Source: DFSMSdfp

IGW070I SMSPDSE1 IS ATTEMPTING TO RESUME ALL USER TASKS

Explanation: The operator entered the VARY SMS,PDSE1,RESTART or VARY SMS,PDSE1,ACTIVATE command. As part of its re-initialization, SMSPDSE1 is attempting to resume all user processing that was in progress when SMSPDSE1 shutdown processing completed.

System action: The system examines all user tasks in all address spaces to determine which ones were running PDSE requests in the SMSPDSE1 address space when it was stopped or attempting to start new requests after the SMSPDSE1 address space began to shutdown. Each such request is retried with the new SMSPDSE1 server instance.

Operator response: None. This is an information only message.

Source: DFSMSdfp

IGW0711 SMSPDSE1 IS NOT ACTIVE

Explanation: The operator entered the VARY SMS,PDSE1,RESTART command. SMSPDSE1 is not currently active.

System action: The command is ignored.

Operator response: Determine why the command was issued when SMSPDSE1 is not active.

Source: DFSMSdftp

IGW072S CREATION OF SMSPDSE1 FAILED DUE TO STORAGE SHORTAGE

Explanation: The system failed to create the restartable PDSE address space SMSPDSE1 due to a storage shortage. This error occurred either during IPL processing or when either a VARY SMS,PDSE1,ACTIVATE or a VARY SMS,PDSE1,RESTART command was issued.

System action: If the error occurred during IPL processing, PDSE processing is performed by the non-restartable address space SMSPDSE. If the error occurred as a result of either a VARY SMS,PDSE1,ACTIVATE command or a VARY SMS,PDSE1,RESTART command, PDSE processing which was being performed by SMSPDSE1 is delayed.

Operator response: If the error occurred as a result of a VARY SMS,PDSE1,ACTIVATE command or a VARY SMS,PDSE1,RESTART command, (re-)issue a VARY SMS,PDSE1,ACTIVATE command. If the problem persists, the systems programmer might need to reevaluate the installation-defined storage thresholds.

System programmer response: The problem might have been caused by a temporary strain on workload. If it persists, consider increasing the storage thresholds.

Source: DFSMSdftp

IGW073S CREATION OF SMSPDSE1 FAILED. MAXUSER EXCEEDED

Explanation: The system failed to create the restartable PDSE address space SMSPDSE1 because the maximum number of address spaces would have been exceeded. This error occurred either during IPL processing or when a VARY SMS command was issued.

System action: If the error occurred during IPL processing, PDSE processing is performed by the nonrestartable address space SMSPDSE. If the error occurred as a result of a VARY SMS,PDSE1,ACTIVATE command or a VARY SMS,PDSE1,RESTART command, PDSE processing which was being performed by SMSPDSE1 is delayed.

Operator response: If the error occurred as a result of a VARY SMS,PDSE1,ACTIVATE command or a VARY SMS,PDSE1,RESTART COMMAND, reissue a VARY SMS,PDSE1,ACTIVATE command. If the problem persists, contact the system programmer.

System programmer response: The problem might have been caused by a temporary strain on workload. Consider increasing the installation-defined maximum number of address spaces by increasing the value specified on the MAXUSER parameter in the IEASYSxx parmlib member. Alternatively, consider having the operator free one or more address spaces by identifying jobs or TSO/E sessions that can be stopped.

Source: DFSMSdftp

IGW074D SMSPDSE1 QUIESCE FAILED, RETRY? (Y/N)

Explanation: The operator entered the VARY SMS,PDSE1,RESTART command. One or more messages IGW063S, IGW064I, IGW075S or IGW076I were issued, identifying user tasks which were running in the SMSPDSE1 address space at the end of a quiesce time interval. The operator can choose one of the following responses:

- **Y:** Instructs SMSPDSE1 to retry the quiesce process.
- **N:** Instructs SMSPDSE1 to stop immediately and ignore the user tasks.

System action: If the operator response is **N**, the system immediately abandons all further attempts to quiesce SMSPDSE1, and terminates it. Those user tasks identified in messages IGW063S are likely to fail due to their inability to continue processing PDSEs. Those identified in messages IGW064I are likely to be successfully resumed when a new SMSPDSE1 address space becomes available. If the operator response is **Y**, the system continues its attempts to quiesce SMSPDSE1 for another quiesce time interval. If quiesce processing is still not successful, messages IGW063S, IGW064I, IGW075S and IGW076I reappear.

Operator response: Determine if the user tasks identified in messages IGW063S, and any job identified in message

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IGW076I, are critical to the successful operation of the system. If so, reply **Y** to instruct SMSPDSE1 to continue attempting to quiesce them. If your installation can tolerate failures of those user tasks, reply **N** to avoid any further delay in terminating SMSPDSE1. Note the *ASID(s)* and *JOBNAME(s)* for subsequent problem determination.

Source: DFSMSdfp

IGW075S SMSPDSE1 ADDRESS SPACE LIST HELD BY *ASID:JOBNAME, TCB=nnnnnnnnX*

Explanation: The operator entered the Vary SMS,PDSE1,Restart command. The SMSPDSE1 address space was in the quiesce phase of shutdown processing. The system could not obtain the list of user address spaces within the time limit specified in the Quiesce parameter.

System action: The system bypasses all monitoring of user tasks and address spaces in order to shutdown SMSPDSE1.

Operator response: Note the *ASID(s)*, *JOBNAME(s)*, and *TCB* address for possible problem determination. If possible, the operator should CANCEL the specified job or FORCE the specified address space, and then reply **Y** to message IGW074D.

Source: DFSMSdfp

IGW076I SMSPDSE1 TASK LIST FOR *ASID:JOBNAME HELD BY TCB=nnnnnnnnX*

Explanation: The operator entered the Vary SMS,PDSE1,Restart command. The SMSPDSE1 address space was in the quiesce phase of shutdown processing. The system could not obtain the list of user tasks for the specified user address space within the time limit specified in the Quiesce parameter.

System action: The system bypasses monitoring user tasks for the specified address space in order to shutdown SMSPDSE1. The specified user address space and its associated tasks might experience unpredictable results

Operator response: Note the *ASID(s)*, *JOBNAME(s)*, and *TCB* address for possible problem determination.

Source: DFSMSdfp

IGW077E SMSPDSE1 DEACTIVATED DUE TO A FATAL ERROR RETURN CODE: *return-code* REASON CODE: *reason-code* A RESTART OF SMSPDSE1 IS RECOMMENDED. TO RESTART ENTER: VARY SMS,PDSE1,RESTART

Explanation: An error occurred during PDSE processing in the restartable SMSPDSE1 address space. Because of the severity of the error all PDSE processing has been deactivated.

System programmer response:

- 1. Enter the VARY SMS,PDSE1,RESTART command to restart the SMSPDSE1 address space.
- 2. Save the output from the failing job, any related SVC dumps, and the console listing containing message IGW077E. Contact the IBM Support Center.

IGW280I CMM {LSQA|SQA} CELL POOL DELETE FAILED IN MODULE IGWME0J, RC=*return-code* RSN=*reason-code*

Explanation: An unexpected error occurred during FREEMAIN processing of a CMM cell pool. The CMM cell pool being freed is located in LSQA or SQA.

In the message text:

return-code

The return code

reason-code

The reason code

System action: System continues processing.

Operator response: Notify the system programmer.

System programmer response: Save the console listing message IGW280I. Contact the IBM Support Center.

Source: Common Measurement Manager (CMM)

Module: IGWME0J

Routing code: 2,10

Descriptor code: 4

IGW281I CMM OBTAIN LATCH FAILED IN MODULE IGWME0J, RC=*return-code* RSN=*reason-code*

Explanation: An unexpected error occurred while attempting to obtain the CMM latch.

In the message text:

return-code

The return code

reason-code

The reason code

System action: System continues processing.

Operator response: Notify the system programmer.

System programmer response: Save the console listing message IGW281I. Contact the IBM Support Center.

Source: Common Measurement Manager (CMM)

Module: IGWME0J

Routing code: 2,10

Descriptor code: 4

IGW282I CMM RELEASE LATCH FAILED IN MODULE IGWME0J, RC=*return-code* RSN=*reason-code*

Explanation: An unexpected error occurred while attempting to release the CMM latch.

In the message text:

return-code

The return code

reason-code

The reason code

System action: System continues processing.

Operator response: Notify the system programmer.

System programmer response: Save the console listing message IGW282I. Contact the IBM Support Center.

Source: Common Measurement Manager (CMM)

Module: IGWME0J

Routing code: 2,10

Descriptor code: 4

IGW283I IOSCAPU CALL FAILED IN MODULE IGWME0V, RC=*return-code* RSN=*reason-code*

Explanation: A failure occurred in IOSCAPU when called to return the real UCB address of a captured UCB.

In the message text:

return-code

The return code

reason-code

The reason code

System action: System continues processing.

Operator response: Notify the system programmer.

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System programmer response: Save the console listing message IGW283I. Contact the IBM Support Center.

Source: Common Measurement Manager (CMM)

Module: IGWMEOV

IGW284I OVERLAID DSSB DETECTED BY MODULE *module-name*

Explanation: In the message text:

module-name

The name of the CMM module that detected the overlaid DSSB.

System action: System continues processing.

Operator response: Notify the system programmer.

System programmer response: Save the console listing message IGW284I. This message is only issued for diagnostic purposes.

Source: Common Measurement Manager (CMM)

Module: Module name is listed in the message text.

Routing code: 2,10

Descriptor code: 4

IGW300E UNABLE TO ESTABLISH INTER-CPC LOCKING ENVIRONMENT

Explanation: An incompatible PDSE serialization protocol has been detected.

System action: Processing continues without access to PDSEs.

Operator response: Contact the system programmer.

System programmer response: Determine all systems on the global resource serialization ring with this system and their operating system level, then contact the IBM Support Center.

Source: Storage management subsystem (SMS)

Routing code: 2,10

Descriptor code: 3

IGW301E NORMAL PDSE SHARING FORCED, *membername* UNABLE TO JOIN *groupname* RC=*return-code*,RSN=*reason-code*

Explanation: The system was trying to establish EXTENDED PDSE sharing. An error occurred when *membername* attempted to join XCF group *groupname*.

This is an error situation which can occur during ordinary system operation or during system shutdown. While this message remains on the MVS console, any shared PDSEs which are open on this system may be inaccessible by other systems.

If this system hangs with this message on the console other systems may have problems accessing some PDSEs. As the system completes shutdown or is restarted, the message will disappear and the PDSEs will be usable.

System action: This system will run with the NORMAL sharing option. Until the inability to join the XCF group is resolved, this system cannot run the EXTENDED option.

Operator response: Notify the system programmer.

System programmer response: A dump and the logrec data set record accompany this message. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center and provide the dump and log data.

Source: Storage management subsystem (SMS)

IGW302E **NORMAL PDSE SHARING FORCED, membername UNABLE TO JOIN groupname. IXCJOIN**
RC=return-code,RSN=reason-code

Explanation: The system was trying to establish EXTENDED PDSE sharing. An error occurred when *membername* attempted to join XCF group *groupname*; where, *membername* is the name of the system within the sysplex, and *groupname* is the name of the other members of the XCF group in the sysplex.

The return code *return-code* and reason code *reason-code* are the internal codes received from the Cross-System Communication Manager that are used by IBM service to further analyze why the JOIN failed.

System action: The system runs with the NORMAL sharing option. Until the inability to join the XCF group is resolved, this system cannot run the EXTENDED option.

Operator response: Notify the system programmer of the internal return and reason codes.

System programmer response: This is a warning message that the XCF configuration may be incorrect. Report the internal return and reason codes to your IBM service representative.

Source: Storage management subsystem (SMS)

IGW303I **NORMAL PDSE SHARING FORCED, INCOMPATIBLE PROTOCOL FOUND**

Explanation: At least one system in the global resource serialization complex is down-level. The complex down-level is in XCF-Local mode, or is running with the NORMAL sharing option. Both options cannot be in effect within the same global resource serialization complex. This condition is detected during IPL or option migration. If detected during option migration, it is possible that issuing the SET SMS command a second time can trigger the system into PDSE EXTENDED sharing mode.

System action: The system runs with the NORMAL sharing option, and the EXTENDED sharing option is not used.

Operator response: Reissue a second SET SMS command on one of the systems. If IGW306I MIGRATION TO EXTENDED PDSE SHARING COMPLETE is not received, notify the system programmer.

System programmer response: Use the DISPLAY SMS command to obtain message IGD002I to determine the PDSESHARING option status on each system. For more information, see *z/OS MVS Initialization and Tuning Reference*.

Source: DFSMSdfp (PDSE)

IGW304I **NORMAL PDSE SHARING FORCED, OPERATING IN XCF LOCAL MODE**

Explanation: The system was trying to establish EXTENDED PDSE sharing. This system is configured in XCF Local mode, which requires normal PDSE sharing protocol.

System action: The system runs with the NORMAL sharing option. Unless this system is configured in an XCF group, this system cannot run the EXTENDED option.

Operator response: None; this is an informational message.

Source: Storage management subsystem (SMS)

IGW305I **EXTENDED PDSE SHARING FORCED, INCOMPATIBLE PROTOCOL FOUND.**

Explanation: The EXTENDED sharing option is currently in use in the global resource serialization complex, preventing this system from sharing with the NORMAL option. Both options cannot be in effect within the same global resource serialization complex. This condition is detected during NIP or option migration.

System action: The system runs with the EXTENDED sharing option, and the NORMAL sharing option is not used.

Operator response: Notify the system programmer.

System programmer response: If you want to migrate the global resource serialization complex to the NORMAL sharing option, see *z/OS MVS Initialization and Tuning Reference*. To avoid this message, set PDSESHARING(EXTENDED) in the IGDSMSxx member of SYS1.PARMLIB.

Source: Storage management subsystem (SMS)

IGW306I MIGRATION TO EXTENDED PDSE SHARING COMPLETE

Explanation: The system has migrated from NORMAL to EXTENDED PDSE sharing.

System action: The system will run with the EXTENDED sharing option.

Operator response: None; this is an informational message.

Source: Storage management subsystem (SMS)

IGW307E MIGRATION TO EXTENDED PDSE SHARING FAILED, RC=*return-code* RSN=*reason-code*

Explanation: The system was not able to migrate from NORMAL to EXTENDED PDSE sharing.

In the message text:

return-code

The return code

reason-code

The reason code

System action: The system will run with the NORMAL sharing option.

Operator response: Notify the system programmer.

System programmer response: This is a warning message that the XCF configuration may be incorrect, or the system was unable to obtain the protocol ENQs that are required to migrate.

Source: Storage management subsystem (SMS)

IGW308E UNABLE TO ESTABLISH INTER-SYSTEM LOCKING ENVIRONMENT, OPERATING IN XCF LOCAL MODE.

Explanation: The system was trying to establish EXTENDED PDSE sharing. The system cannot join the sysplex, and it is running in XCF local mode.

System action: The system will not allow use of PDSE. Until the inability to join the XCF group is resolved, this system cannot run with PDSE support. PDSE support is disabled because PDSE locking is not available.

Operator response: Notify the system programmer.

System programmer response: This is a warning message that the XCF configuration may be incorrect, or that there is a problem with XCF.

Source: Storage management subsystem (SMS)

IGW309E UNABLE TO ESTABLISH INTER-SYSTEM LOCKING ENVIRONMENT, *membername* UNABLE TO JOIN *groupname* RC=*return-code* RSN=*reason-code*

Explanation: An error occurred when the system tried to join XCF. The message text displays the return and reason code.

In the message text:

membername

The name of the system within the sysplex.

groupname

The name of other members of the XCF group in the sysplex.

return-code

The return code

reason-code

The reason code

System action: The system will not allow use of PDSE. Until the inability to join the XCF group is resolved, this system cannot run with PDSE support. PDSE support is disabled because PDSE locking is not available.

Operator response: Notify the system programmer.

System programmer response: This is a warning message that the XCF configuration may be incorrect, or there is a problem with XCF.

Source: Storage management subsystem (SMS)

IGW310E UNABLE TO ESTABLISH INTER-SYSTEM LOCKING ENVIRONMENT, *membername* UNABLE TO JOIN *groupname*. IXCJOIN RC=*return-code* RSN=*reason-code*. *text*

Explanation: An error occurred when the system tried to join XCF. The message text displays the IXCJOIN return and reason codes and the meaning of the reason code.

In the message text:

membername

The name of the system within the sysplex.

groupname

The name of other members of the XCF group in the sysplex.

return-code

The return code

reason-code

The reason code

text

One of the following:

- NO MORE GROUPS ALLOWED
- NO MORE MEMBERS ALLOWED IN GROUP
- SYSTEM BEING REMOVED FROM SYSPLEX
- XCF PROCESSING FAILED
- UNEXPECTED FAILURE

System action: The system will not allow use of PDSE. Until the inability to join the XCF group is resolved, this system cannot run with PDSE support. PDSE support is disabled because PDSE locking is not available.

Operator response: Notify the system programmer.

System programmer response: This is a warning message that the XCF configuration may be incorrect, or there is a problem with XCF.

Source: Storage management subsystem (SMS)

**IGW320I *hh.mm.ss* DISPLAY SMS,CFLS
 STRUCTURE NAME:*lockstructurename*
 VERSION:*vvvvvvvvvvvvvvvv*SIZE:*ssssK*
 RECORD TABLE ENTRIES:*rrrrr*
 USED:*uuuuuu***

Explanation:

System	Interval	LockRate	CountRate	FContRate	WaitQlen
sysname	1 minute	lll.l	cc.ccc	ff.fff	w.ww
sysname	1 hour	lll.l	cc.ccc	ff.fff	w.ww
sysname	8 hours	lll.l	cc.ccc	ff.fff	w.ww
sysname	1 day	lll.l	cc.ccc	ff.fff	w.ww
(nn)	1 minute	lll.l	cc.ccc	ff.fff	w.ww
(nn)	1 hour	lll.l	cc.ccc	ff.fff	w.ww
(nn)	8 hours	lll.l	cc.ccc	ff.fff	w.ww
(nn)	1 minute	lll.l	cc.ccc	ff.fff	w.ww

***** No other systems provided data**

Where:

IGW320I

- LockRate = number of lock requests per second
- ContRate = % of lock requests globally managed
- FContRate = % of lock requests falsely globally managed
- WaitQLen = Average number of requests waiting for locks

Note:

1. The data will be returned for the current system and for the average system in the sysplex. If there is only one system, then a message "*** No other systems provided data" will be returned instead of the display of the average value.
2. If no system has been active for the required interval, "-----" will be placed in the table.
3. All values except the number of systems are running averages weighted for the interval specified.

The operator issued the DISPLAY SMS,CFLS command. In response, this message shows the name and status of the DFP lock structure. It will only show the unavailable systems when the status is PUNAVAIL.

In the message text:

sysname

Name of the system returning the data.

(nn)

Number of systems which have returned data for this average value.

lll.l

Number of lock requests per second.

cc.ccc

Percentage of lock requests which required the request to be done asynchronously because of other systems requesting locks on the same resource.

ff.fff

Percentage of lock requests which required the request to be done asynchronously because the lock table was too small.

w.ww

Number of lock requests which are waiting.

vvvvvvvvvvvvvvvv

Structure version for the current active lock structure

ssss

Size of the lock structure in kilobytes.

rrrrr

Number of entries in the record table

uuuuu

Number of entries which are currently in use for the record table

System action: Processing continues

System programmer response: Examine results of display.

Source: DFSMSdfp

Module: IGWLNMR1

Routing code: 2,10

Descriptor code:

```

IGW321I  NO RETAINED LOCKS
         | llll RETAINED LOCKS HELD NO LOST LOCKS
         | rrrr RETAINED LOCKS
         | NO SPHERES IN LOST LOCKS
         | llll SPHERES IN LOST LOCKS
         | SYSTEM ORDINAL IS sysordinal
         | ssss RLS SPHERE RECORD TABLE ENTRIES READ
         | ssss RLS SPHERE RECORD TABLE ENTRIES DELETED

```

Explanation: The VSAM RLS address space has started or restarted and it is reporting the number of retained locks and spheres in lost locks that it has detected, or the number of sphere record table entries that it had read or deleted.

In the message text:

llll

Number of spheres in lost locks detected.

rrrr

Number of retained locks detected.

sysordinal

The unique number which identifies the VSAMRLS instance from a locking point. The number will not be changed by restart or the failure of any VSAMRLS.

ssss

Number of sphere entries that VSAM RLS read or deleted from the Record Table of lock structure IGWLOCK00.

Note: For each file, VSAM RLS creates a sphere entry for the sphere itself, one for the cluster, and one for each alternate index.

System action: Processing continues.

Source: DFSMSdfp

Module: IGWLNI16, IGWLNI61

Routing code: 2, 10

Descriptor code: 4

```

IGW322I  LOCK STRUCTURE lockstructurename CONNECT BYPASSED. SERVER WILL TERMINATE AND
         NOT RESTART. CONNECT LEVEL FOR THIS SYSTEM IS TOO {HIGH|LOW}
         REQUESTING:CCCCcccc00000000 PTF:UWxxxxx CONNECTION:SSSSSSSS AT RRRRrrrr00000000

```

Explanation: The system is trying to connect to the lock table with a protocol level which is too high for one of the active systems or too low for either an active or inactive system. This system is attempting to connect at protocol level CCCC which was established by PTF UWxxxxx. It will not be able to connect if there is an active or an inactive system which has a minimum acceptable level *rrrr* which is higher than CCCC. This system will only accept a minimum protocol level of *cccc*. It will not be able to connect if there is an active system which is running at a protocol level of *RRRR* which is lower than *cccc*. The system will not connect to the server. SSSSSSSS identifies one system which is preventing this system from connecting because of incompatible protocols.

In the message text:

lockstructurename

The name of the DFSMS coupling facility lock structure.

System action: The SMSVSAM Server address space initialization terminates. Jobs which require VSAM sharing support will fail.

Operator response: Notify the system programmer.

System programmer response: If the level is too low, install the correct PTF to this system to raise the system to a compatible level. If the level is too high, you must upgrade all other systems to a compatible level before trying to bring the system up to this level. If the level of this system is too low and you must start the system at this level, you will have to destroy the VSAMRLS lock table *lockstructurename*; issue the command VARY SMS,SMSVSAM,DESTROYLOCKSTRUCTURE.

IGW322I

Source: DFSMSsdfp

Module: IGWLN101

IGW322I DFSMS ALTER PROCESSING : THE ALTERED DFSMS LOCK STRUCTURE *lockstructurename* SIZE IS LESS THAN THE MINIMUM REQUIRED

The minimum size of the new lock structure needed:*lock_structure_size* K Bytes

Explanation: The VSAM RLS lock structure alter process, which was initiated by a SETXCF ALTER command, has determined that the new lock structure might not be large enough for the lock request process. The SETXCF request is rejected.

In the message text:

lockstructurename

The name of the DFSMS coupling facility lock structure.

lock_structure_size

The minimum size of the lock structure needed for the rebuild process.

System action: The system continues processing.

Operator response: Alter the lock table size to the original size.

System programmer response: The message indicates the minimum size needed for the process to be successful. More coupling facility space is required. Correct the situation as soon as possible by issuing another SETXCF ALTER command with the required minimum size.

Source: DFSMSsdfp

Module: IGWLN152

IGW322I DFSMS REBUILD PROCESSING HAS BEEN REJECTED: THE NEW LOCK STRUCTURE *lockstructurename* DOES NOT HAVE ENOUGH SPACE FOR THE REBUILD PROCESS
Insufficient lock table space for record entries. Large lock table size is required.

Explanation: The VSAM RLS lock structure rebuild process, which was initiated by a SETXCF REBUILD command, has determined that the new lock structure is not large enough for the rebuild to propagate all data. If this message is in response to a REBUILD START request, the rebuild is stopped. If this message is in response to a SETXCF ALTER request, the request is processed. See corresponding IXC534I message for the results of the command.

In the message text:

lockstructurename

The name of the DFSMS coupling facility lock structure

System action: The system continues processing.

Operator response: Alter the lock table size to the original size.

System programmer response: More coupling facility space is required.

Source: DFSMSsdfp

Module: IGWLN152

IGW322I SMSVSAM REBUILD PROCESSING HAS BEEN STOPPED FOR LOCK STRUCTURE *lockstructurename* BECAUSE
{CONNECTIVITY LOST TO THE NEW LOCK STRUCTURE
! CONNECTION TO THE NEW LOCK STRUCTURE FAILED
! OF AN ERROR CONNECTING TO THE NEW LOCK STRUCTURE}

Explanation: The VSAM RLS lock structure rebuild process has lost connectivity to the new lock structure.

In the message text:

lockstructurename

The name of the DFSMS coupling facility lock structure.

System action: If connectivity to the old lock structure is still available, the rebuild process should revert to using the old lock structure.

Operator response: Restore connectivity to the appropriate new lock structure.

System programmer response: Change CFRM policies to ensure that all systems running VSAM RLS always have connectivity to their target coupling facilities.

Source: DFSMSdfp

Module: IGWLNI15

Routing code: 2, 10

Descriptor code: 4

IGW323I DFSMS VSAM RLS RECEIVED REASON CODE *rc* FROM *service_name* WHEN ATTEMPTING TO *action_attempted*

Explanation: VSAM RLS received an unexpected reason code from an invoked external service which caused VSAM RLS to take recovery actions.

In the message text:

rc The reason code received from the external service.

service_name

The name of the external service invoked.

action_attempted

The VSAM RLS function running at the time of the error.

System action: The system continues processing. Take the necessary recovery actions to address the unexpected reason code. Depending on the invoked service, some VSAM RLS functions might not function as expected.

Operator response: Collect the system log and any related system dumps, and report the problem to the system programmer.

System programmer response: Check the reason code reported in the message against the called service. Correct any environmental or user-related errors; otherwise, report the problem to IBM.

Source: VSAM RLS

Routing code: 2, 10

Descriptor code: 4

IGW324I DFSMS HAS CONNECTED *dsn* TO LOCK STRUCTURE *structurename*

Explanation: DFSMS has successfully connected data set *dsn* with the lock structure specified as *structurename*.

The open caused the lock structure indicated to be connected. If the lock structure indicated is different from the lock structure for the related storage class, the data sets either had retained locks that needed recovery or the storage class was changed for the data set while it was open or had retained locks.

System action: Open processing continues.

Operator response: None.

System programmer response: None. This is an informational message.

Programmer response: None. This is an informational message.

Source: DFSMS

Module: IGWLNI20

Routing code: 2, 11

Descriptor code: 6

IGW326W * Warning *** DFSMS SMSVSAM RECORD TABLE IN *lockstructurename* IS *percent* % FULL.**

Explanation: The DFSMS address space monitor has determined that the record table in lock structure IGWLOCK00 is *percent* % full. This message will appear when ever the record table is more than 80% full.

In the message text:

percent

The current percent full of the record table in IGWLOCK00.

System programmer response: The shortage could be due to a job creating a large number of retained locks or the lock structure is too small to handle the current workload.

Source: DFSMSsdfp

Module: IGWSSSCS

Routing code: 2,10

Descriptor code:

**IGW341I VSAM RLS DIAG STATUS (V.01)
COMMAND REJECTED: VSAM RLS SERVER NOT ACTIVE**

Explanation: This message is displayed when the VSAM RLS server is not active, or not able to process the command. Users should make sure VSAM RLS is ready, and retry the command then.

System action: The system rejects the command.

Operator response: Tell the system programmer the command was issued when VSAM RLS was not active.

System programmer response: Activate VSAM RLS prior to issuing this command.

Source: VSAM RLS

Module: IGWSDDAG

Routing code: 2,10

Descriptor code: 11

**IGW341I VSAM RLS DIAG STATUS (V.01)
COMMAND REJECTED: REQUESTS TOO FREQUENT**

Explanation: This message is displayed when the last command was executed too recently. Users should wait a few seconds and try again; or if using automation, schedule the commands to be issued less frequently. The intention of this feature is to prevent frequent commands from interfering with the normal processing of registering and unregistering the resources being inspected. The maximum frequency is no less than every 14 seconds, so that a 15-second frequency will always be acceptable.

System action: The system rejects the command.

Operator response: Tell the system programmer the command was issued too frequently.

System programmer response: Wait a few seconds and try again; or if using automation, schedule the commands to be issued less frequently. The maximum frequency allowed is no less than every 14 seconds.

Source: VSAM RLS

Module: IGWRDDSP

Routing code: 2,10

Descriptor code: 11

**IGW342I VSAM RLS DIAG STATUS (V.01)
NO CONTENTION BY REGISTERED RESOURCES EXISTS**

Explanation: This message is displayed when no contention by registered resources was detected. See "VSAM RLS Hang Conditions" in *z/OS DFSMSdfp Diagnosis*.

System action: The system continues processing.

Operator response: None

System programmer response: None

Source: VSAM RLS

Module: IGWRDDSP

Routing code: 2,10

Descriptor code: 11

IGW343I VSAM RLS DIAG STATUS (V.01)*text*

Explanation: In the message, *text* is:

----RESOURCE----		----- WAITER -----			--HOLDER--		ELAPSED
TYPE	ID	JOB NAME	ASID	TASK	ASID	TASK	TIME

restype	resaddr	waitjob	wtas	waittcb@	hdas	hdtcb@	hh:mm:ss

This message is displayed when there are registered resources; the list of resources in contention is displayed. There is one line per entry.

In the message text:

restype

The type of resource in contention.

resaddr

The address of the resource in contention in hexadecimal.

waitjob

The name of the job waiting for the resource in contention.

wtas

The ASID of the job waiting for the resource in contention.

waittcb@

The address of the TCB waiting for the resource in contention.

hdas

The ASID of the job holding the resource in contention.

hdtcb@

The address of the TCB holding the resource in contention.

hh:mm:ss

The length of time the resource has been in contention.

See VSAM RLS Hang Conditions in *z/OS DFSMSdfp Diagnosis*.

System action: The system continues processing.

Operator response: Inform the system programmer about the output of the command.

System programmer response: If there appear to be many resources in contention, determine if any of the jobs holding those resources should be cancelled.

Source: VSAM RLS

Module: IGWRDDSP

IGW350I • IGW400I

Routing code: 2,10

Descriptor code: 11

IGW350I ABEND0F4 IGWDSAAC RSN=1500009C may be due to insufficient CF cache structures.

Explanation: The CF cache structure might be too small. ABND=0F4 in IGWDSAAC RSN=1500009C occurs.

System action: The system continues processing.

Source: DFSMSsdfp

Module: IDAVRR43, IDAVRR40, IDAVRRP2, IDAVRRV0

Routing code: 2,10

IGW380I I/O ERROR ON VOLUME *xxxxxx* FOR DATA SET (DATA-SET COMPONENT NAME) VOLUME IS OFFLINE, BOXED, OR NOT READY. ABND=0F4 IGWDSAAC RSN=0053 OCCURS BELOW

Explanation: An I/O error occurred because the volume is unavailable. ABND=0F4 in IGWDSAAC RSN=00000053 also occurs.

In the message text:

xxxxxx DASD volume serial number.

System action: The system continues processing.

System programmer response: Issue a VARY command to place the volume online.

Source: DFSMSsdfp

Module: IDAVREX1

Routing code: 2,10

IGW382I THIS DATA SET COMPONENT IS NOT CONNECTED: (DATA-SET COMPONENT NAME) BECAUSE VOLUME *xxxxxx* IS OFFLINE, PENDING, BOXED, OR NOT READY. ABND=0F4 IGWDSAAC RSN=0056|0057 OCCURS BELOW

Explanation: The data set component is not connected because the volume is unavailable. ABND=0F4 in IGWDSAAC RSN=00000056, or 00000057 also occurs.

In the message text:

xxxxxx DASD volume serial number.

System action: The system continues processing.

System programmer response: Enter a VARY command to place the volume online.

Source: DFSMSsdfp

Module: IGWSDRDS, IGWSDWRS

Routing code: 2,10

IGW400I ABEND OCCURRED TO CANCEL OCCURRED TO REQUEST PUT WITH OPTIONS *xxxxxxx*. THE PUT WAS FOR REC KEY *reckey*: JOB *wwwwwwww*, UASID *xxxx*, TCB *yyyyyyyy*, URPL *xxxxxxx*, DSP RPL *xxxxxxx*, FILE *dsname*
FOOTSTEPS:

Explanation: See message text.

In the message text:

reckey

The first 78 bytes of the record key or record itself.

dsname

The first 44 bytes of the data set name.

System action: The system continues processing.

Operator response: None.

System programmer response: None.

Source: DFSMSdfp

Module: IDAVRCLN

Routing code: 2, 10

Descriptor code: 4

IGW400I CANCEL OCCURRED TO REQUEST PUT WITH OPTIONS *xxxxxxx*. THE PUT WAS FOR REC
KEY *reckey*: JOB *wwwwwww*, UASID *xxxx*, TCB *yyyyyyyy*, URPL *xxxxxxx*, DSP RPL *xxxxxxx*, FILE
dsname
FOOTSTEPS:
[CA SPLIT IN PROGRESS. EXAMINE SUGGESTED]

Explanation: See message text.

In the message text:

reckey

The first 78 bytes of the record key or record itself.

dsname

The first 44 bytes of the data set name.

System action: The system continues processing.

Operator response: See message text.

System programmer response: See message text.

Source: DFSMSdfp

Module: IDAVRCLN

Routing code: 2, 10

Descriptor code: 4

IGW400I CANCEL OCCURRED TO REQUEST PUT WITH OPTIONS *xxxxxxx*. THE PUT WAS FOR REC
KEY *reckey*: JOB *wwwwwww*, UASID *xxxx*, TCB *yyyyyyyy*, URPL *xxxxxxx*, DSP RPL *xxxxxxx*, FILE
dsname **FOOTSTEPS:** [SPANNED RECORD ADD/UPDATE IN PROGRESS. MAY NEED TO UNDO
REQUEST]

Explanation: See message text.

In the message text:

reckey

The first 78 bytes of the record key or record itself.

dsname

The first 44 bytes of the data set name.

System action: The system continues processing.

Operator response: See message text.

System programmer response: See message text.

Source: DFSMSdfp

Module: IDAVRCLN

Routing code: 2, 10

Descriptor code: 4

IGW405I

IGW405I ABEND0F4 Rcyyyy Rsnzzzzzzz OCCURRED TO REQUEST PUT WITH OPTIONS xxxxxxxx. THE PUT WAS FOR REC KEY *reckey*: JOB *wwwwwww*, UASID *xxxx*, TCB *yyyyyyyy*, URPL *xxxxxxx*, DSP RPL *xxxxxxx*, FILE *dsname*
FOOTSTEPS:
[INDEX/DATA TRAP HIT. POSSIBLE DATA CORRUPTION.
PLEASE GET: DUMP, EXAMINE & LISTCAT OUTPUTS, AND PRINT OF DATA SET.]

Explanation: The VSAM RLS index or data trap was enabled and hit. See the message text.

In the message text:

reckey

The first 78 bytes of the record key or record itself.

dsname

The first 44 bytes of the data set name.

System action: The system continues processing.

Operator response: See message text.

System programmer response: See message text.

Source: DFSMSdfp

Module: IDAVRCLN

Routing code: 1

Descriptor code: 2

IGW405I ABEND OCCURRED TO ABEND0F4 Rcyyyy Rsnzzzzzzz OCCURRED TO REQUEST PUT WITH OPTIONS xxxxxxxx. THE PUT WAS FOR REC KEY *reckey*: JOB *wwwwwww*, UASID *xxxx*, TCB *yyyyyyyy*, URPL *xxxxxxx*, DSP RPL *xxxxxxx*, FILE *dsname*
FOOTSTEPS:
[A CA SPLIT WAS IN PROGRESS. NO REQUESTS ON THIS SYSTEM WILL BE ALLOWED TO ACCESS THE DATA SET. PLEASE:
1) CLOSE ALL ACBS ON THIS SYSTEM FOR THE DATA SET.
2) EXAMINE. REORGANIZE IF EXAMINE FAILS.
3) REOPEN AND RE-ACCESS.]

Explanation: See the message text.

In the message text:

reckey

The first 78 bytes of the record key or record itself.

dsname

The first 44 bytes of the data set name.

System action: The system continues processing.

Operator response: See message text.

System programmer response: See message text.

Source: DFSMSdfp

Module: IDAVRCLN

Routing code: 1

Descriptor code: 2

IGW406I RLS recovery released the shared latch

Explanation: This message informs users that the shared latch is released at the end of the recovery process.

System action: The system continues processing.

Operator response: None.

System programmer response: None.

Problem determination: None.

Source: DFSMSdfp

Module: IDAVRCLN

IGW407I INDEX CI SEARCH LOOPED MANY TIMES FOR REQUEST *reqtype* WITH OPTIONS xxxxxxxx, FOR RECORD KEY (1ST 78 BYTES) *reckey* IN FILE *dsname* LEVEL X INDEX CI# xxxxxxxx IXHRPEND=ON. FOOTSTEPS:

Explanation: See the message text.

In the message text:

reqtype

A VSAM RLS request.

reckey

The first 78 bytes of the record key or record itself.

dsname

The first 44 bytes of the data set name.

System action: The system continues processing.

Operator response: None.

System programmer response: None.

Source: DFSMSdfp

Module: IDAVRRB0

Routing code: 2, 10

Descriptor code: 4

IGW407I INDEX CI SEARCH LOOPED MANY TIMES FOR REQUEST *reqtype* WITH OPTIONS xxxxxxxx, FOR RECORD KEY (1ST 78 BYTES) *reckey* IN FILE *dsname* LEVEL X PREV INDEX CI# xxxxxxxx INVALID. FOOTSTEPS:

Explanation: See the message text.

In the message text:

reqtype

A VSAM RLS request.

reckey

The first 78 bytes of the record key or record itself.

dsname

The first 44 bytes of the data set name.

System action: The system continues processing.

Operator response: None.

System programmer response: None.

Source: DFSMSdfp

Module: IDAVRRB0

IGW408I • IGW413I

Routing code: 2, 10

Descriptor code: 4

IGW408I SMSVSAM SUCCESSFULLY TERMINATED AT END OF MEMORY

Explanation: The SMSVSAM server has successfully ended.

System action: The system continues processing.

Operator response: None

System programmer response: If the SMSVSAM server does not automatically restart and it needs to be active, use the VARY SMS command to restart it.

Problem determination: None

Source: DFSMSdfp

Module: IDAVSEOX

IGW409I SMSVSAM SERVER NOT AVAILABLE WHEN SYSTEM {IN XCF LOCAL MODE | IS PARTITIONING FROM SYSPLEX}

Explanation: The SMSVSAM Server address space functions require the system to be IPLed in sysplex mode. The SMSVSAM also requires that the system not be in partitioning stage.

System action: The SMSVSAM address space initialization terminates. Jobs which require VSAM sharing support will fail.

Operator response: Inform the system programmer.

System programmer response: Before you re-IPL the system in sysplex mode, ensure the system can join the sysplex.

Source: DFSMSdfp

Module: IDAVSTAL, IDAVQINI

Routing code: 2,10

Descriptor code:

IGW410I SMSVSAM SERVER NOT ACTIVE. RLSINIT(NO) WAS SPECIFIED.

Explanation: An attempt was made to initialize the SMSVSAM address space with the RLSINIT parameter set to NO. The RLSINIT parameter is set either in SYS1.PARMLIB member IGDSMSxx or dynamically via the SETSMS operator command.

System action: The SMSVSAM Server address space fails to initialize. Jobs that require VSAM Record Level Sharing support will fail.

Operator response: If VSAM Record Level Sharing support is required, Set the RLSINIT parameter to YES and re-initialize the SMSVSAM address space. The SMSVSAM address space can be initialized by either issuing the operator command, VARY SMS,SMSVSAM,ACTIVE, or by an IPL of the system.

Source: DFSMSdfp

Module: IDAVSTRT

IGW413I SMSVSAM DISCONNECTED FROM LOCK STRUCTURE *lockstructurename*. A NON-ZERO RETURN/REASON CODE WAS RETURNED FROM IXLDISC: RETURN CODE (IN HEX): *returncode* REASON CODE (IN HEX): *reasoncode*

Explanation: A V SMS,SMSVSAM,TEMRINATESERVER command was issued to terminate the SMSVSAM address space. SMSVSAM issued an IXLDISC to disconnect from lock structure IGWLOCK00. The non-zero return code *return-code* and reason code *reason-code* returned from IXLDISC provide problem determination information.

System action: SMSVSAM termination continues. See *z/OS MVS Programming: Sysplex Services Reference* for a full description of the return code and reason code returned by IXLDISC.

Operator response: If any data sets are opened for RLS access or there are active RLS client spaces registered with SMSVSAM, RC=4 RSN=xxxx0401 (IXLRSNCODEOWNINGRESOURCES) is returned. If all data sets are closed, all RLS client spaces are ended, and RSN=xxxx0401 is returned, collect LOGREC data and report the problem to IBM. For any other non-zero return code and reason code, report the problem to IBM.

Source: DFSMSdfp

Module: IDAVSTAI

Routing code: 2,10

Descriptor code: 4

IGW414I SMSVSAM ADDRESS SPACE IS NOW ACTIVE. ASID=<nnnn>X

Explanation: The SMSVSAM Server address space required for DFSMS CF access is now active. The address space ASID is displayed in hexadecimal format *nnnn*.

System action: The system continues processing.

Source: DFSMSdfp

Module: IDAVSTAI

Routing code: 2,10

Descriptor code:

IGW415I SMSVSAM SERVER ADDRESS SPACE HAS FAILED AND IS RESTARTING

Explanation: The SMSVSAM Server address space has terminated, and the system will now attempt to restart it. Until the restart is successful, RLS access for VSAM data sets is not available.

System action: The system is attempting to restart the address space.

Operator response: Tell the system programmer that the address space has failed.

System programmer response: Provide the IBM Support Center with SYS1.LOGREC and SYS1.DUMPnn.

Source: DFSMSdfp

Module: IDAVSINI

Routing code: 2,10

Descriptor code:

IGW416I TERMINATING ERROR DETECTED IN SMSVSAM SERVER ADDRESS SPACE. RETURN CODE (IN HEX): *return-code* REASON CODE (IN HEX): *reason-code*

Explanation: The VSAM RLS support has detected an error relating to the SMSVSAM Server address space, and is terminating the SMSVSAM Server address space. The VSAM RLS support will attempt to restart the address space. The return code *return-code* and the reason code *reason-code* provide problem determination information.

System action: The system will attempt to restart the SMSVSAM Server address space.

Operator response: Tell the system programmer that the SMSVSAM Server address space has failed.

System programmer response: Provide the IBM Support Center with SYS1.LOGREC and SYS1.DUMPnn.

Source: DFSMSdfp

Module: IDAVSTAI, IDAVSINI

Routing code: 2,10

Descriptor code:

IGW417I SMSVSAM SERVER ADDRESS SPACE FAILED DURING INITIALIZATION. RETURN CODE (IN HEX): *return-code* REASON CODE (IN HEX): *reason-code*

Explanation: During VSAM RLS support initialization processing, an error occurred, and the SMSVSAM Server address space was unable to successfully start or restart. The return code *return-code* and the reason code *reason-code* provide problem determination information.

System action: The system does not start or restart the SMSVSAM Server address space. Jobs that require VSAM sharing support will be failed.

Operator response: Issue the command VARY SMS,SMSVSAM,ACTIVE to start the SMSVSAM Server address space. If that fails, then tell the system programmer that the address space has failed.

System programmer response: Provide the IBM Support Center with SYS1.LOGREC and SYS1.DUMPnn.

Source: DFSMSdfp

Module: IDAVSTRT

Routing code: 2.10

Descriptor code:

IGW418D *aa* SMSVSAM SERVER RESTARTED *nn* TIMES-REPLY RESTART <R> OR CANCEL <C>

Explanation: The SMSVSAM Server address space has restarted itself *nn* times since:

- IPL,
- the last time this message was answered with 'R', or
- the SMSVSAM Server address space was started with the command VARY SMS,SMSVSAM.

aa is the standard MVS reply number associated with the message.

System action: The system waits for the operator to reply 'R' to restart or 'C' to cancel the SMSVSAM Server address space.

Operator response: Reply 'R' to permit the SMSVSAM Server address space to attempt another restart; or reply 'C' to cancel the automatic restart.

Issue the command VARY SMS,SMSVSAM,ACTIVE to start the SMSVSAM Server address space, if 'C' was replied to this message.

System programmer response: Provide the IBM Support Center with SYS1.LOGREC and SYS1.DUMPnn.

Source: DFSMSdfp

Module: IDAVSINI

Routing code: 1,2,10

Descriptor code:

IGW419D *aa* INVALID RESPONSE. REPLY RESTART <R> OR CANCEL <C>

Explanation: An invalid response was entered for message IGW418D. See message IGW418D explanation for additional information.

aa is the standard MVS reply number associated with the message.

System action: The system waits for the operator to reply 'R' to restart or 'C' to cancel the SMSVSAM Server address space.

Operator response: Reply 'R' to permit the SMSVSAM Server address space to attempt another restart; or reply 'C' to cancel the automatic restart.

Issue the command VARY SMS,SMSVSAM,ACTIVE to start the SMSVSAM Server address space if 'C' was replied to this message.

Source: DFSMSdfp

Module: IDAVSINI

Routing code: 1,2,10

Descriptor code:

```

IGW420I  DISPLAY SMS,SMSVSAM DISPLAY SMSVSAM - SERVER STATUS
        SYSNAME:sys01 sstat ASID: asid
        STEP:step
        ...
        SYSNAME: sys32 sstat ASID: asid
        STEP:step
        DISPLAY SMSVSAM - JOB STATUS:
        SUBSYSTEMS CONNECTED:
        numberofsubsys
           BATCH:  numberofbatch
        DISPLAY SMSVSAM - LOCK TABLE STATUS (lockstructurename) CONNECT STATUS:
        SYSNAME: sys01 conn_status
        RSN: reason_code rebldstat
        ...
        SYSNAME: sys32 conn_status
        RSN: reason_code rebldstat
        SYSTEMS WHICH MUST RESPOND TO DISCONNECT FROM PREVIOUS INSTANCE:
        wsys01 wsys02 wsys03 wsys04
        ...
        wsys29 wsys30 wsys31 wsys32
        DISPLAY SMSVSAM - CACHE FEATURE CODE LEVEL VALUES
        SYSNAME: sys01
        CACHE FEATURE CODE LEVEL = feature_level
        COMPOSITE STATUS: composite_status
        STRUCTURE STATUS: structure_status
        SMF RECORD 42 STATUS: smf_record_42_status
  
```

Explanation: The operator entered the command DISPLAY SMS,SMSVSAM [,ALL].

If the ALL parameter is not specified then the SERVER STATUS and the LOCK TABLE STATUS data will be presented for the requested system only.

If the ALL parameter is specified on a system where the SMSVSAM server is not active, then the data presented will be for the specified system only.

In the message text:

asid

The address space where the SMSVSAM server is executing.

conn_status

The current connect status of the IGWLOCK00 lock table. The valid states are listed below.

- ACTIVE
- FAILING
- DISCONNECTING
- FAILED PERSISTENT

numberofbatch

This is the number of batch jobs connected to the SMSVSAM address space. This value represents all batch jobs across the sysplex.

numberofsubsys

This is the number of subsystems connected to the SMSVSAM address space. This value represents all connections across the sysplex.

rebld_state

The current Rebuild state of the IGWLOCK00 lock table. The valid states are listed below.

- RebuildNotActive
- RebuildQuiesce

IGW420I

- RebuildConnect
- RebuildConnectCMP
- RebuildCleanup
- RebuildComplete
- RebuildStop
- RebuildStopCmp
- RebuildConnectFailure
- RebuildUserSyncPoint
- RebuildLossConnStrNew

reason-code

This is the reason code returned from XCF when the connection to the SMSVSAM lock table (IGWLOCK00) was attempted.

If the connect attempt failed with reason code xxxx0C27 then listed below is the set of systems which still must respond to a disconnect request from a previous instance.

sstat

This is the current status of the SMSVSAM server.

- AVAILABLE—The SMSVSAM server is available
- UNAVAILABLE—The SMSVSAM server is not available

step

The current step (state) that the SMSVSAM server is executing. The following is the list of possible steps.

- SmsVsamInitComplete - Indicates that initialization has completed and SMSVSAM is available.
- ASCRE_Started
- WaitForASInitDone
- Set_to_ESTAE
- Get_VRGB@
- Create_VMIB
- DSPSERV
- ALESERV
- VSM_DS_Init
- Load_Server
- PC_Setup
- Ph1_Init
- Phase1_Complete
- Ph2_Init
- Get_LX
- Init_Complete
- SMLS_Ph1_Init
- VSAM_Ph1_Init
- SHM_Ph1_Init
- SCM_Ph1_Init
- BMF_Ph1_Init
- SMLS_Ph2_Init
- VSAM_Ph2_Init
- Phase2_Complete
- Access_VMIB
- SHC_Ph2_Init
- AS_Init_Started
- Quiesce_Ph2_Init

- CMM_Ph2_Init
- SCM_Ph2_Init
- MMF_Ph2_Init
- Server_EOT
- Server_EOJ
- Server_EOM_Start
- EOM_ResourceMgr_Comp
- EOM_Restart_Start
- EOM_NoRestartAttempted
- Waiting_for_Reply_to_IGW418D

sys

The system name for the data.

wsys

This is the list of systems which still must respond to a failed connection request. A connection to the SMSVSAM lock table failed with a reason code xxxx0C27.

feature_level

This is the list of cache feature code levels. The feature code level display can be any of the following:

- A - indicates that greater than 4K Caching code is available.
- Z - indicates that advanced Caching functions are not available.

composite_status

- VOLATILE | NOT VOLATILE - Indicates the ability to maintain the data stored in the coupling facility if a power outage should occur. NOT VOLATILE means that the coupling facility has battery backup.
- FAILURE ISOLATED | NOT FAILURE ISOLATED - Indicates whether the structure is placed in a failure-independent environment. FAILURE ISOLATED means that the coupling facility is not in the same failure domain as the MVS systems that access it.

See *z/OS MVS Programming: Sysplex Services Guide* for additional information.

structure_status

Indicates whether the structure is simplex or duplexed. For improved availability and usability, structures can be duplexed so that there are more than one structure. See *z/OS MVS Programming: Sysplex Services Guide* for additional information.

smf_record_42_status

Displays information for SMF 42 record subtypes 15, 16, 17, 18, and 19. See *z/OS MVS System Management Facilities (SMF)* for additional information.

System action: Processing continues

System programmer response: Use information as needed to diagnose system problems.

Source: DFSMSdfp

Module: IGWSRTE4

Routing code: 2,10

Descriptor code:

IGW425I V SMS,SMSVSAM COMMAND REJECTED, RSN = *rsnc*

Explanation: A VARY SMS command was issued to change the state of the SMSVSAM server. The command was rejected.

In the message text:

rsnc

The reason code that indicates why the command was rejected.

System action: The system continues processing.

IGW430I • IGW451I

Operator response: None

System programmer response: See *z/OS DFSMSStvs Administration Guide* for the meaning of the reason code.

Problem determination: None

Source: DFSMSsdfp

Module: IDAVSTRT

Routing code: 2, 10

Descriptor code:

IGW430I DFSMS CF CACHE REQUEST TO QUIESCE VOLUME *volser* IS COMPLETE. VOLUME STATUS = 'CF_QUIESCED'

Explanation: The command VARY SMS,CFVOL(*volser*),QUIESCE, has processed successfully. The current volume status = 'CF_QUIESCED'. No data from this volume will be placed in any DFSMS CF CACHE STRUCTURE.

In the message text:

volser

Six-character volume identifier specified in the command VARY SMS,CFVOL(*volser*),QUIESCE.

Source: DFSMSsdfp

Routing code: 2,10

Descriptor code: 7rbl;

IGW431I IDAVQINI-IDAVQXUQ User Exit Failed to Load RC=00000004

Explanation: An optional user exit is provided to allow RLS installations to control which CICS regions should be notified for unquiescing RLS files. The information for the user exit is available via the separately purchased *DFSMS Advanced Customization Guide*.

During IPL time, if the user exit is not enabled, this message can be safely ignored.

Source: DFSMSsdfp

IGW451I DFSMS SMSVSAM COMMAND REJECTED. THE SMSVSAM SERVER ADDRESS SPACE IS NOT ACTIVE.

Explanation: The operator issued a command that can be processed only when the SMSVSAM server is active. Because the server is not active, the command cannot be processed at this time. This message can be issued if an operator command was issued that requires the address space to be available. A request to change the SMS parameters through IGDSMSxx could also result in a call to the SMSVSAM address space.

System action: The system continues processing.

Operator response: None

System programmer response: Activate the SMSVSAM server and reissue the command.

Problem determination: None

Source: DFSMSsdfp

Module: IGWSMSMS, IGWSRTE2, IGWSRTE3

Routing code: 2, 10

Descriptor code:

IGW451I **REQUEST TO UPDATE VSAM/RLS PARMLIB KEYWORD: xxxxxxxx HAS BEEN SAVED IN THE SMS CONTROL STRUCTURES. THE PARMLIB KEYWORD WILL BE PROCESSED BY VSAM/RLS WHEN THE VSAM/RLS ADDRESS SPACE IS STARTED**

Explanation: A request was issued to update VSAM/RLS parmlib. The request will be processed when the VSAM/RLS address space is started.

xxxxxxx

is the name of the SMS parmlib keyword that will change.

System action: The system continues processing.

Operator response: None

System programmer response: None.

Problem determination: None

Source: DFSMSdfp

Module: IGWSMSMS

Routing code: 2, 10

IGW452I **NO DFSMS CACHE STRUCTURES ARE {DEFINED TO STORAGE CLASS *class* | AVAILABLE TO STORAGE CLASS *class*. THIS STORAGE CLASS MAPS TO CACHE SET NAME *cache*}**

Explanation: In the message text:

class

The name of the storage class that is defined in the SMS configuration.

cache

The name of the cache set that is defined in the SMS base configuration.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSSNOM

Routing code: 2, 10

Descriptor code:

IGW452I **UNABLE TO ASSIGN SPHERE *dsn* TO CACHE STRUCTURE *cache*. THIS STRUCTURE IS {NOT AVAILABLE TO THIS SYSTEM | BEING QUIESCED}**

Explanation: In the message text:

dsn

The data set name of the VSAM sphere.

cache

The name of the cache structure.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSSNOM

IGW453I

Routing code: 2, 10

Descriptor code:

IGW453I SMSVSAM ADDRESS SPACE HAS {STOPPED THE REBUILD | SUCCESSFULLY CONNECTED TO | DISCONNECTED FROM} DFSMS *var1* STRUCTURE *var2*. {REBUILD IN PROGRESS | REBUILD STOP IN PROGRESS | CONNECTED | HAS BEEN RECONNECTED | THIS STRUCTURE WAS ALLOCATED IN A COUPLING FACILITY WHICH WAS NOT AT CF LEVEL 2. | CONNECT FOR REBUILD | ALTER IS IN PROGRESS | STRUCTURE IS QUIESCED | STRUCTURE IS QUIESCING}

Explanation: In the message text:

var1

The kind of structure.

var2

The name of the structure.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSSCN2, IGWSCN4, IGWSSDCN

Routing code: 2, 10

Descriptor code:

IGW453I SMSVSAM ADDRESS SPACE HAS SUCCESSFULLY CONNECTED TO STRUCTURE *lock*
STRUCTURE VERSION: *s* SIZE: *size* K BYTES USER CONNECTLEVEL: *level* PTF *ptf* MAXIMUM
USERS: *max* REQUESTED: *req* LOCK TABLE ENTRIES: *l req* RECORD TABLE ENTRIES: *record*
USED *used*

Explanation: In the message text:

lock

The lock structure.

s The structure version.

size

The size of the lock structure.

level

The user connect level.

ptf

The program temporary fix (PTF) value.

max

The maximum number of users.

req

The requested number of users.

l The number of lock table entries.

lreq

The requested number of lock table entries.

record

The number of record table entries.

used

The number of record table entries in use.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWLIN01, IGWLNI52, IGWLNRSI

Routing code: 2, 10

Descriptor code:

IGW453W SMSVSAM ADDRESS SPACE HAS SUCCESSFULLY CONNECTED TO DFSMS CACHE STRUCTURE *structure_name*. SMSVSAM HAS DETECTED THAT THE ALLOCATED SIZE OF THE STRUCTURE IS LESS THAN THE INITIAL SIZE SPECIFIED IN THE ACTIVE CFRM POLICY. CFRM POLICY STRUCTURE SIZE IS: *cache_requested_size*. ALLOCATED STRUCTURE SIZE IS: *cache_initial_size*.

Explanation: SMSVSAM detected an inconsistency between the CFRM policy structure size and the allocated structure size. If the allocated cache structure size is too small, then a cache full condition might occur.

In the message text:

structure_name

The name of the cache structure.

cache_requested_size

The CFRM policy structure size.

cache_initial_size

The allocated structure size.

System action: The connection is allowed and the system continues processing.

Operator response: Contact system programmer.

System programmer response: Increase the allocated structure size, or decrease the CFRM policy structure size.

Problem determination: Issue the D XCF,STR,STRNM=*structure_name* when the cache structure is connected to verify the information reported in the message.

Source: VSAM RLS

Module: IGWSSCN2

Routing code: 2,10

Descriptor code: 8

IGW453W SMSVSAM ADDRESS SPACE HAS SUCCESSFULLY CONNECTED TO DFSMS CACHE STRUCTURE *structure_name*. -- REBUILD IN PROGRESS -- SMSVSAM HAS DETECTED THAT THE ALLOCATED SIZE OF THE STRUCTURE IS LESS THAN THE INITIAL SIZE SPECIFIED IN THE ACTIVE CFRM POLICY. CFRM POLICY STRUCTURE SIZE IS: *cache_requested_size*. ALLOCATED STRUCTURE SIZE IS: *cache_initial_size*.

Explanation: SMSVSAM detected an inconsistency between the CFRM policy structure size and the allocated structure size. If the allocated cache structure size is too small, then a cache full condition might occur.

In the message text:

structure_name

The name of the cache structure.

IGW454I

cache_requested_size

The CFRM policy structure size.

cache_initial_size

The allocated structure size.

System action: The connection is allowed and the system continues processing.

Operator response: Contact system programmer.

System programmer response: Increase the allocated structure size, or decrease the CFRM policy structure size.

Problem determination: Issue the D XCFSTR,STRNM=*structure_name* when the cache structure is connected to verify the information reported in the message.

Source: VSAM RLS

Module: IGWSSCN4

Routing code: 2,10

Descriptor code: 8

IGW454I SMSVSAM ADDRESS SPACE FAILED CONNECTION REQUEST TO DFSMS *request* STRUCTURE *struct* [CONNECT FOR REBUILD] REASON FOR CONNECT FAILURE: *reason* RETURN CODE *rc*
REASON CODE: *rsnc* DIAG0 (HEX) : *diag0* DIAG1 (HEX) : *diag1* DIAG2 (HEX) : *diag2* DIAG3 (HEX) : *diag3* DIAG4 (HEX) : *diag4* DIAG5 (HEX) : *diag5* DIAG6 (HEX) : *diag6* DIAG7 (HEX) : *diag7* DIAG8 (HEX) : *diag8* DIAG9 (HEX) : *diag9*

Explanation: In the message text:

request

The type of request that was issued.

struct

The name of the cache structure.

reason

The reason for the connect failure.

rsnc

The reason code.

rc

The return code.

diag0

Diagnostic information provided to z/OS.

diag1

Diagnostic information provided to z/OS.

diag2

Diagnostic information provided to z/OS.

diag3

Diagnostic information provided to z/OS.

diag4

Diagnostic information provided to z/OS.

diag5

Diagnostic information provided to z/OS.

diag6

Diagnostic information provided to z/OS.

diag8

Diagnostic information provided to z/OS.

diag9

Diagnostic information provided to z/OS.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWLNI01, IGWLNRSI, IGWSSCN2, IGWSSCN4

Routing code: 2, 10

Descriptor code:

**IGW455I SMSVSAM ADDRESS SPACE REQUEST TO QUERY LOCK TABLE *lockstructurename* FAILED.
RETURN CODE *rc* REASON CODE *rsnc***

Explanation: In the message text:

lockstructurename

The name of the DFSMS coupling facility lock structure.

rc The return code.

rsnc

The reason code.

System action: When the lock structure is IGWLOCK00, the system continues processing. SMSVSAM address space initialization is stopped. When a secondary is being connected, SMSVSAM continues processing, but any open using that secondary lock structure will fail.

Operator response: None

System programmer response: Examine the return and reason codes provided and determine why the lock table query command failed.

Problem determination: None

Source: DFSMSdfp

Module: IGWLNI01, IGWLNI15, IGWLNRSI

Routing code: 2, 10

Descriptor code: -

IGW456I SMSVSAM ADDRESS SPACE INITIALIZATION {WAITING FOR AVAILABILITY OF LOCK TABLE *lockstructurename* | REQUEST TO QUERY LOCK TABLE (*lockstructurename*) FAILED. | IS WAITING FOR LOCK TABLE (*lockstructurename*) REBUILD TO COMPLETE. | HAS HALTED: CONNECTION TO LOCK TABLE (*lockstructurename*) PREVENTED.} RETURN CODE *rc* REASON CODE *rsnc*

Explanation: In the message text:

rc The return code.

rsnc

The reason code.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

IGW456I • IGW457I

Module: IGWLNIO1, IGWLNRSI

Routing code: 2, 10

Descriptor code: -

IGW456I SMSVSAM ADDRESS SPACE INITIALIZATION WAITING FOR AVAILABILITY OF LOCK TABLE IGWLOCK00

Explanation: The SMSVSAM address space initialization is waiting for the availability of the required lock structure (IGWLOCK00).

This message is accompanied by message IGW454I or IGW455I.

System action: SMSVSAM address space waits for availability of the lock structure.

Operator response: Contact system programmer

System programmer response: Verify that there is an active CFRM policy that defines the lock structure IGWLOCK00. Message IGW454I or IGW455I provides more information. When the lock structure becomes available, SMSVSAM will again attempt to connect to the lock structure.

Source: DFSMSdfp

Module: IGWLNIO1, IGWLNRSI

Routing code: 2,10

Descriptor code: -

IGW457I DFSMS REBUILD PROCESSING HAS BEEN INVOKED FOR *var1* STRUCTURE *struct*
PROCESSING EVENT: REBUILD {LOSS CONNECTION | STRUCTURE FAILURE | QUIESCE |
CONNECT | CONNECT FAILURE | CONNECTS COMPLETE | CLEANUP | PROCESS
COMPLETE | STOP | STOP PROCESS COMPLETE | USER SYNC POINT SET | USER SYNC
POINT CONFIRM | USER SYNC POINT CONFIRM SET | XES RECOMMENDED ACTION}

Explanation: In the message text:

var1

Text that describes which step the DFSMS coupling facility REBUILD process is currently running for the specified coupling facility structure.

struct

The name of the cache structure.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWLNIO1, IGWLNRSI, IGWSDRA1, IGWSDRA2

Routing code: 2, 10

Descriptor code: -

IGW457I DFSMS REBUILD PROCESSING HAS BEEN INVOKED FOR *lock_structure_type* STRUCTURE
lockstructurename PROCESSING EVENT: STRUCTURE TEMPORARILY UNAVAILABLE - DUPLEX
REBUILD START FOR SMSVSAM

Explanation: The VSAM RLS lock table coupling facility duplexing is in process.

In the message text:

lock_structure_type

The type of the structure, either LOCK or CACHE

lockstructurename

The name of the DFSMS coupling facility lock structure

System action: The system continues processing.

Operator response: None

System programmer response: None

Source: DFSMSdfp

Module: IGWLNI15

Routing code: 2,10

Descriptor code: -

IGW457I DFSMS REBUILD PROCESSING HAS BEEN INVOKED FOR *lock_structure_type* STRUCTURE *lockstructurename* PROCESSING EVENT: STRUCTURE STATE CHANGE - STRUCTURE STATE HAS CHANGED FROM SIMPLEX TO DUPLEX

Explanation: The VSAM RLS lock structure state has changed from simplex mode to duplex mode.

In the message text:

lock_structure_type

The type of the structure, either LOCK or CACHE

lockstructurename

The name of the DFSMS coupling facility lock structure

System action: The system continues processing.

Operator response: None

System programmer response: None

Source: DFSMSdfp

Module: IGWLNI15

Routing code: 2,10

Descriptor code: -

IGW457I DFSMS REBUILD PROCESSING HAS BEEN INVOKED FOR *lock_structure_type* STRUCTURE *lockstructurename* PROCESSING EVENT: STRUCTURE STATE CHANGE - STRUCTURE STATE HAS CHANGED FROM DUPLEX TO SIMPLEX

Explanation: The VSAM RLS lock structure state has changed from duplex mode to simplex mode.

In the message text:

lock_structure_type

The type of the structure, either LOCK or CACHE

lockstructurename

The name of the DFSMS coupling facility lock structure

System action: The system continues processing.

Operator response: None

System programmer response: None

Source: DFSMSdfp

Module: IGWLNI15

Routing code: 2,10

Descriptor code: -

IGW457I DFSMS REBUILD PROCESSING HAS BEEN INVOKED FOR *lock_structure_type* STRUCTURE *lockstructurename* PROCESSING EVENT: STRUCTURE AVAILABLE - DUPLEX REBUILD COMPLETED FOR SMSVSAM

Explanation: The VSAM RLS lock structure has become duplex.

In the message text:

lock_structure_type

The type of the structure, either LOCK or CACHE

lockstructurename

The name of the DFSMS coupling facility lock structure

System action: The system continues processing.

Operator response: None

System programmer response: None

Source: DFSMSdfp

Module: IGWLNI15

Routing code: 2,10

Descriptor code: -

IGW457I DFSMS REBUILD PROCESSING HAS BEEN INVOKED FOR *lock_structure_type* STRUCTURE *lockstructurename* PROCESSING EVENT:REBUILD STRUCTURE FAILURE. REASON OF FAILURE: SYSTEM_MANAGED DUPLEXING REBUILD

Explanation: A VSAM RLS lock structure out-of-sync problem has been detected and a lock structure failure is in progress.

In the message text:

lock_structure_type

The type of the structure, either LOCK or CACHE

lockstructurename

The name of the DFSMS coupling facility lock structure

System action: The system continues processing.

Operator response: None

System programmer response: None

Source: DFSMSdfp

Module: IGWLNI15

Routing code: 2,10

Descriptor code: -

IGW458I SMSVSAM ADDRESS SPACE LOCK TABLE (*lockstructurename*) WAITING FOR FAILURE CONFIRMATION FROM SYSTEM: *systemx*

Explanation: The DFSMS lock table connection processing is waiting for a response from the specified system.

In the message text:

lockstructurename

The name of the DFSMS coupling facility lock structure.

systemx

The name of the system that has not responded.

System action: The lock table structure processing is suspended. The SMSVSAM server cannot initialize until this condition is cleared.

Operator response: Notify the storage administrator of this condition.

Source: DFSMSdfp

Module: IGWLNI22, IGWLNRSI

Routing code: 2,10

Descriptor code: -

IGW458I SMSVSAM LOCK STRUCTURE *lockstructurename* **STATE HAS CHANGED FROM**
lock_structure_mode1 **TO** *lock_structure_mode2*

Explanation: This VSAM RLS lock structure state has changed from simplex mode to duplex mode or vice versa.

In the message text:

lockstructurename

The name of the DFSMS coupling facility lock structure

lock_structure_mode1

The previous coupling facility lock-structure mode (SIMPLEX or DUPLEX)

lock_structure_mode2

The current coupling facility lock-structure mode (SIMPLEX or DUPLEX)

System action: The system continues processing.

Operator response: None

System programmer response: None

Source: DFSMSdfp

Module: IGWLNI05

Routing code: 2,10

Descriptor code: -

IGW459I SMSVSAM ADDRESS SPACE DETECTED INCOMPATIBLE INTERNAL LOCK NAME FOR
SPHERE *spherename* **CLUSTER** *clustername* **SPHEREID** *sphereid* **CLUSTERID** *clusterid*

Explanation: An OPEN attempt was made for RLS access, against a VSAM sphere (*spherename/clustername*), in which the internal lock name for the cluster (*clusterid*) does not match the lock name for the sphere (*sphereid*) stored in IGWLOCK00. This mismatch in lock names, represents an internal logic error.

In the message text:

spherename

The name of the VSAM sphere.

clustername

The name of the VSAM cluster.

sphereid The internal lock name for the sphere.

clusterid

The internal lock name for the cluster.

System action: The VSAM OPEN for RLS is failed. See the associated IEC161I message: OPEN RC=8, ACBERFLG=209(D1).

Operator response: Take a console dump for each SMSVSAM address space in the sysplex and report the problem to your IBM service representative. Recycle the SMSVSAM address space on the system reporting the problem.

System programmer response: None

Source: DFSMSdfp

Module: IGWLNI63

Routing code: 2, 8

IGW460I • IGW464I

Descriptor code: -

IGW460I SMSVSAM VARY OFFLINE, FORCE PROCESSING COMPLETE FOR VOLUME *volser*

Explanation: The operator entered the command VARY OFFLINE,FORCE for the indicated *volser*. All data for the volume in DFSMS CF caches has been purged.

In the message text:

volser

The volume serial.

Source: DFSMSsdfp

IGW462I DFSMS CF CACHE REQUEST TO QUIESCE VOLUME(*volser*) IS ACCEPTED | DFSMS CF CACHE REQUEST TO QUIESCE VOLUME(*volser*) IS REJECTED. VOLUME(*volser*) IS ALREADY QUIESCING/QUIESCED | DFSMS CF CACHE REQUEST TO QUIESCE VOLUME(*volser*) IS COMPLETED. VOLUME(*volser*) IS NOW QUIESCED

Explanation: The operator has entered the command, VARY SMS,CFVOL(*volser*),QUIESCE. The command has been accepted by the DFSMS sysplex cache manager. The volume is now in a CF_QUIESCING state. It will transition to CF_QUIESCED when there is no VSAM RLS data residing on the volume in any DFSMS CF CACHE structure.

In the message text:

volser

Six-character volume identifier specified in the command

System action: Command is processed

Source: DFSMSsdfp

Module: IGWSRTE2

Routing code: 2,10

Descriptor code: -

IGW463I DFSMS CF CACHE REQUEST TO ENABLE VOLUME *volser* IS COMPLETED. DFSMS CF VOLUME STATUS = 'CF_ENABLED' | DFSMS CF CACHE REQUEST TO ENABLE VOLUME *volser* IS REJECTED. VOLUME *volser* IS NOT QUIESCING/QUIESCED

Explanation: The operator entered the command, VARY SMS,CFVOL(*volser*),ENABLE. The specified *volser* is now allowed to have data placed in a DFSMS CF CACHE.

In the message text:

volser

Six-character volume identifier specified in the command.

Source: DFSMSsdfp

Module: IGWSRTE2

Routing code: 2,10

Descriptor code: -

IGW464I DFSMS CF CACHE REQUEST TO QUIESCE STRUCTURE *structure_name* IS ACCEPTED --or-- DFSMS CF CACHE REQUEST TO QUIESCE STRUCTURE *structure_name* IS REJECTED. STRUCTURE *structure_name* IS ALREADY QUIESCING/QUIESCED --or-- DFSMS CF CACHE REQUEST TO QUIESCE STRUCTURE *structure_name* IS COMPLETED. STRUCTURE *structure_name* IS NOW QUIESCED. --or -- DFSMS CF CACHE REQUEST TO QUIESCE STRUCTURE *structure_name* IS REJECTED. STRUCTURE *structure_name* IS NOT DEFINED IN ACTIVE SMS CONFIGURATION.

Explanation: The operator has entered the command VARY SMS,CFCACHE(*structure_name*),QUIESCE. The specified

structure_name is now placed in a CF_QUIESCING state. The structure will transition to CF_QUIESCED when there is no VSAM RLS data residing in the structure.

In the message text:

structure_name

16-character structure identifier specified in the command

System action: Command processed

Source: DFSMSsdfp

Module: IGWSRTE2

Routing code: 2,10

Descriptor code: -

IGW464I DFSMS CF CACHE REQUEST TO QUIESCE STRUCTURE *structure_name* IS ACCEPTED. THIS STRUCTURE IS BEING QUIESCED FOR SYSTEMS THAT ARE UNABLE TO CACHE >4K DATA IN THE DFSMS CF CACHE STRUCTURE. -- or -- DFSMS CF CACHE REQUEST TO QUIESCE STRUCTURE *structure_name* IS COMPLETED. STRUCTURE *structure_name* IS NOW QUIESCED. THIS STRUCTURE IS BEING QUIESCED FOR SYSTEMS THAT ARE UNABLE TO CACHE >4K DATA IN THE DFSMS CF CACHE STRUCTURE.

Explanation: This message is issued during SMSVSAM initialization to inform you that the structure is quiesced for systems that are unable to cache >4K data in the CF cache structure.

In the message text:

structure_name

16-character structure identifier specified in the command

System action: Command processed

Source: DFSMSsdfp

Module: IGWSRTE2

Routing code: 2,10

Descriptor code: -

IGW464W DFSMS CF CACHE REQUEST TO QUIESCE STRUCTURE *structure_name* IS ACCEPTED. THIS STRUCTURE IS BEING QUIESCED QUIESCE REASON: VSAM/RLS DETECTED CF CACHE STRUCTURE IS FULL.
--or--
DFSMS CF CACHE REQUEST TO QUIESCE STRUCTURE *structure_name* IS COMPLETED. STRUCTURE *structure_name* IS NOW QUIESCED. QUIESCE REASON: VSAM/RLS DETECTED CF CACHE STRUCTURE IS FULL.

Explanation: When a Cache Full condition was reached, SMSVSAM will QUIESCE the Cache that is full and issue this message to indicate that the specified *structure_name* is now placed in a CF_QUIESCING state. The structure will transition to CF_QUIESCED when there is no VSAM RLS data residing in the structure.

In the message text:

structure_name

16-character structure identifier specified in the command

System action: Command processed

System programmer response: None required. Note that you can enable the cache from CF_QUIESCED state with VARY SMS,CFCACHE(*structure_name*),ENABLE command.

Source: DFSMSsdfp

Module: IGWSRTE2

Routing code: 2,10

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Descriptor code: -

IGW465I DFSMS CF CACHE REQUEST TO ENABLE STRUCTURE *structure_name* IS *text*

Explanation: In the message, *text* is one of the following:

- COMPLETED. DFSMS CF CACHE STRUCTURE STATUS = 'CF_ENABLED'
- REJECTED. STRUCTURE *structure_name* IS NOT QUIESCING/QUIESCED

The operator entered the command VARY SMS,CFCACHE(*structure_name*),ENABLE. The specified *structure_name* is now allowed to contain VSAM RLS data.

In the message text:

structure_name

16-character structure identifier specified in the command.

Source: DFSMSdfp

Module: IGWSRTE2

Routing code: 2,10

Descriptor code: -

IGW466I LOCK STRUCTURE *lockstructurename* IS NOT KNOWN TO SMSVSAM

Explanation: The operator request to display the lock structure specified by *lockstructurename* has completed.

System action: The system continues processing.

Operator response: Issue a command with the correct lock structure name.

System programmer response: None. This is an informational message.

Programmer response: None. This is an informational message.

Source: DFSMS

Module: IGWSRTE4

Routing code: 2,11

IGW466I LOCK STRUCTURE *lockstructurename* IS NOT CONNECTED TO SMSVSAM

Explanation: The operator issued the D SMS,CFLS command but the lock structure *lockstructurename* is not currently connected to SMSVSAM.

System action: The system continues processing.

Operator response: Specify a lock structure that is connected.

System programmer response: None. This is an informational message.

Programmer response: None. This is an informational message.

Source: DFSMS

Module: IGWSRTE4

Routing code: 2,11

IGW467I DFSMS DEADLOCK_DETECTION PARMLIB VALUE SET DURING SMSVSAM ADDRESS SPACE INITIALIZATION ON SYSTEM: *sysname*. THIS SYSTEM IS OPERATING AS THE GLOBAL DEADLOCK PROCESSOR. CURRENT VALUE: *LocalValue GlobalValue Ranking*

Explanation: The DFSMS DEADLOCK_DETECTION PARMLIB value was set. All systems in the sysplex use this value. This system is the global deadlock processor.

In the message text:

sysname

The name of the z/OS system where the PARMLIB value was set.

LocalValue

The local deadlock value (in seconds).

GlobalValue

The global deadlock value (in seconds), which is the current value.

Ranking

A ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWLNDT0

Routing code: 2, 10

Descriptor code: -

IGW467I DFSMS DEADLOCK_DETECTION PARMLIB VALUE SET DURING SMSVSAM ADDRESS SPACE INITIALIZATION ON SYSTEM: *sysname*. THIS SYSTEM IS OPERATING AS A LOCAL DEADLOCK PROCESSOR. CURRENT VALUE: *LocalValue GlobalValue Ranking*

Explanation: The DFSMS DEADLOCK_DETECTION PARMLIB value was set. All systems in the sysplex use this value. This system is a local deadlock processor.

In the message text:

sysname

The name of the z/OS system where the PARMLIB value was set.

LocalValue

The local deadlock value (in seconds).

GlobalValue

The global deadlock value (in seconds), which is the current value.

Ranking

A ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWLNDT0

Routing code: 2, 10

Descriptor code: -

IGW467I DFSMS SMF_TIME PARMLIB VALUE SET DURING SMSVSAM ADDRESS SPACE INITIALIZATION ON SYSTEM: *sysname* CURRENT VALUE: *SmfTimeValue Ranking*

Explanation: The DFSMS SMF_TIME PARMLIB value was set.

When the value of SMF_TIME is YES, the SMSVSAM system management facilities (SMF) record intervals 42-15, 42-16, 42-17, 42-18, and 42-19 are created at the same time as the Resource Measurement Facility™ (RMF™) interval.

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When the SMF_TIME value is NO, these SMF records are created in the interval specified by the CF_TIME value.

All systems in the sysplex use the SMF_TIME value.

In the message text:

sysname

The name of the z/OS system where the PARMLIB value was set.

SmfTimeValue

The SMF_TIME value.

Ranking

A ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSSIN3, IGWSESMF

Routing code: 2, 10

Descriptor code: -

IGW4671 DFSMS SMF_TIME PARMLIB VALUE CHANGED ON SYSTEM: *sysname* OLD VALUE: *SmfTimeValueOld* *RankingOld* NEW VALUE: *SmfTimeValueNew* *RankingNew*

Explanation: The SMF_TIME value changed.

A SETSMS SMF_TIME(*xxx*) or SET SMS=*xx* command changed this PARMLIB value.

When the value of SMF_TIME is YES, the SMSVSAM system management facilities (SMF) record intervals 42-15, 42-16, 42-17, 42-18, and 42-19 are created at the same time as the Resource Measurement Facility (RMF) interval. When the SMF_TIME value is NO, these SMF records are created in the interval specified by the CF_TIME value.

All systems in the sysplex use the SMF_TIME value.

In the message text:

sysname

The name of the z/OS system where the PARMLIB value was changed.

SmfTimeValueOld

The old SMF_TIME value.

RankingOld

The old ranking value, from 1 to 32, for use only by the IBM Support Center.

SmfTimeValueNew

The new SMF_TIME value.

RankingNew

The new ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSSPR2

Routing code: 2, 10

Descriptor code: -

IGW467I DFSMS CF_TIME PARMLIB SET DURING SMSVSAM ADDRESS SPACE INITIALIZATION ON SYSTEM: *systemid* CURRENT VALUE: *CfTimeValue Ranking*

Explanation: The DFSMS CF_TIME PARMLIB value was set. This value is propagated across all the systems in the sysplex.

The CF_TIME value is used only when the SMF_TIME value is set to N0. This PARMLIB value controls SMSVSAM system management facilities (SMF) record intervals 42-15, 42-16, 42-17, 42-18, and 42-19.

In the message text:

systemid

The name of the z/OS system where the PARMLIB value was set.

CfTimeValue

The CF_TIME value.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSSIN3

Routing code: 2, 10

Descriptor code: -

IGW467I DFSMS CF_TIME PARMLIB VALUE CHANGED ON SYSTEM: *systemid* OLD VALUE: *CfTimeValueOld RankingOld* NEW VALUE: *CfTimeValueNew RankingNew*

Explanation: The CF_TIME value changed. A SETSMS CF_TIME(*xxx*) or SET SMS=*xx* command changed this PARMLIB value. All systems in the sysplex use this value.

The CF_TIME value is used only if the SMF_TIME value is set to N0. This PARMLIB value controls SMSVSAM system management facilities (SMF) record intervals 42-15, 42-16, 42-17, 42-18, and 42-19.

In the message text:

systemid

The name of the z/OS system where the PARMLIB value was changed.

CfTimeValueOld

The old CF_TIME value.

RankingOld

The old ranking value, from 1 to 32, for use only by the IBM Support Center.

CfTimeValueNew

The new CF_TIME value.

RankingNew

The new ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

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Module: IGWSSPR2

Routing code: 2, 10

Descriptor code: -

IGW467I DFSMS DEADLOCK_DETECTION PARMLIB VALUE CHANGED ON SYSTEM: *sysname* **THIS SYSTEM IS OPERATING AS THE GLOBAL DEADLOCK PROCESSOR. OLD VALUE:** *LocalValueOld GlobalValueOld RankingOld* **NEW VALUE:** *LocalValueNew GlobalValueNew RankingNew*

Explanation: The DFSMS DEADLOCK_DETECTION PARMLIB value changed. A SET SMS=*xx* or SETSMS DEADLOCK_DETECTION(*xxx,yyy*) command changed this PARMLIB value. All systems in the sysplex use this value.

In the message text:

sysname

The name of the z/OS system where the PARMLIB value was changed.

LocalValueOld

The old local deadlock value.

GlobalValueOld

The old global deadlock value.

RankingOld

The old ranking value, from 1 to 32, for use only by the IBM Support Center.

LocalValueNew

The new local deadlock value.

GlobalValueNew

The new global deadlock value.

RankingNew

The new ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWLNDT0

Routing code: 2, 10

Descriptor code: -

IGW467I DFSMS DEADLOCK_DETECTION PARMLIB VALUE CHANGED ON SYSTEM: *sysname*. **THIS SYSTEM IS OPERATING AS A LOCAL DEADLOCK PROCESSOR. OLD VALUE:** *LocalValueOld GlobalValueOld RankingOld* **NEW VALUE:** *LocalValueNew GlobalValueNew RankingNew*

Explanation: THE DFSMS DEADLOCK_DETECTION PARMLIB value changed. All systems in the sysplex use this value. This system is a local deadlock processor.

A SETSMS DEADLOCK_DETECTION(*xxx,yyy*) or SET SMS=*xx* command changed this PARMLIB value.

In the message text:

sysname

The name of the z/OS system where the PARMLIB value changed.

LocalValueOld

The old local deadlock value.

GlobalValueOld

The old global deadlock value.

RankingOld

The old ranking value, from 1 to 32, for use only by the IBM Support Center.

GlobalValueNew

The new global deadlock value.

RankingNew

The new ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWLNDT0

Routing code: 2, 10

Descriptor code: -

IGW467I DFSMS RLS_MAX_POOL_SIZE PARMLIB VALUE SET DURING SMSVSAM ADDRESS SPACE INITIALIZATION ON SYSTEM: *sysname* CURRENT VALUE: *RlsPoolSizeValue*

Explanation: The RLS_MAX_POOL_SIZE PARMLIB value was set. This value is propagated across all systems in the sysplex.

In the message text:

sysname

The name of the z/OS system where the PARMLIB value was set.

RlsPoolSizeValue

The RLS_MAX_POOL_SIZE value.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSSIN3

Routing code: 2, 10

Descriptor code: -

IGW467I DFSMS RLS_MAX_POOL_SIZE PARMLIB VALUE CHANGED ON SYSTEM: *sysname* OLD VALUE: *RlsPoolSizeValueOld* *RankingOld* NEW VALUE: *RlsPoolSizeValueNew* *RankingNew*

Explanation: The RLS_MAX_POOL_SIZE PARMLIB value changed. A SET SMS=*xx* or SETSMS RLS_MAX_POOL_SIZE(*xxx*) command changed this PARMLIB value.

In the message text:

sysname

The name of the z/OS system where the PARMLIB value was changed.

RlsPoolSizeValueNew

The old RLS_POOL_SIZE value.

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RankingOld

The old ranking value, from 1 to 32, for use only by the IBM Support Center.

RlsPoolSizeValueNew

The new RLS_MAX_POOL_SIZE value.

RankingNew

The new ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSSPR2

Routing code: 2, 10

Descriptor code: -

IGW4671 DFSMS TRANSACTIONAL VSAM QTIMEOUT PARMLIB VALUE SET DURING SMSVSAM ADDRESS SPACE INITIALIZATION ON SYSTEM: *sysname* CURRENT VALUE: *TvsQTimeOutValue*
Ranking

Explanation: The DFSMSStvs QTIMEOUT PARMLIB value was set.

In the message text:

sysname

The name of the z/OS system where the PARMLIB value was set.

TvsQTimeOutValue

The QTIMEOUT value for DFSMSStvs.

Ranking

A ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSSIN3

Routing code: 2, 10

Descriptor code: -

IGW4671 DFSMS TRANSACTIONAL VSAM QTIMEOUT PARMLIB VALUE CHANGED ON SYSTEM:
sysname OLD VALUE: *TvsQTimeOutvalueOld* *RankingOld* NEW VALUE: *TvsQTimeOutValueNew*
RankingNew

Explanation: The DFSMSStvs QTIMEOUT PARMLIB value changed. A SET SMS=xx or SETSMS QTIMEOUT(xxx) command changed this PARMLIB value. All systems in the sysplex use this value.

In the message text:

sysname

The name of the z/OS system where the PARMLIB value was changed.

TvsQTimeOutValueOld

The old QTIMEOUT value for DFSMSStvs.

RankingOld

The old ranking value, from 1 to 32, for use only by the IBM Support Center.

TvsQTimeOutValueNew

The new QTIMEOUT value for DFSMStvs.

RankingNew

The new ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSSPR2

Routing code: 2, 10

Descriptor code: -

IGW467I DFSMS TRANSACTIONAL VSAM ACTIVITY KEY POINT PARMLIB VALUE SET DURING SMSVSAM ADDRESS SPACE INITIALIZATION ON SYSTEM: *systemid* CURRENT VALUE: *TvsAkpValue*

Explanation: The ACTIVITY KEY POINT PARMLIB value for DFSMStvs was set on the system *systemid*. This value might be different on other systems in the sysplex.

In the message text:

systemid

The name of the z/OS system where the PARMLIB value was set.

TvsAkpValue

The ACTIVITY KEY POINT value for DFSMStvs.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSSIN3

Routing code: 2, 10

Descriptor code: -

IGW467I DFSMS TRANSACTIONAL VSAM ACTIVITY KEY POINT PARMLIB VALUE CHANGED ON SYSTEM: *systemid* OLD VALUE: *TvsAkpValueOld* NEW VALUE: *TvsAkpValueNew*

Explanation: The DFSMStvs ACTIVITY KEY POINT PARMLIB value changed on the system *systemid*. A SETSMS AKP(*xxx*) or SET SMS=*xx* command changed this PARMLIB value. This new value is reflected only on this system.

In the message text:

systemid

The name of the z/OS system where the PARMLIB value was changed.

TvsAkpValueOld

The old ACTIVITY KEY POINT value for DFSMStvs.

TvsAkpValueNew

The new ACTIVITY KEY POINT value for DFSMStvs.

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System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSSPR2

Routing code: 2, 10

Descriptor code: -

IGW4671 DFSMS TRANSACTIONAL VSAM LOG_OF_LOGS PARMLIB VALUE SET DURING SMSVSAM ADDRESS SPACE INITIALIZATION ON SYSTEM: *systemid* LOG_OF_LOGS LOGSTREAM NAME: *TvsLogOfLogsValue* CURRENT VALUE: *TvsLogOfLogsNewRequestedState*

Explanation: The DFSMStvs LOG_OF_LOGS PARMLIB value was set on the system *systemid*. This value is reflected only on this system.

In the message text:

systemid

The name of the z/OS system where the PARMLIB value was set.

TvsLogOfLogsValue

The name of the log stream for the DFSMStvs log of logs.

TvsLogOfLogsNewRequestedState

The new requested state value for the DFSMStvs log of logs.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSSIN3

Routing code: 2, 10

Descriptor code: -

IGW4671 DFSMS LOG_OF_LOGS PARMLIB VALUE CHANGED ON SYSTEM: *systemid* OLD LOG_OF_LOGS LOGSTREAM NAME: *TvsLogOfLogsValueOld* OLD VALUE: *TvsLogOfLogsOldRequestedState RankingOld* NEW LOG_OF_LOGS LOGSTREAM NAME: *TvsLogOfLogsValueNew* NEW VALUE: *TvsLogOfLogsNewRequestedState RankingNew*

Explanation: The DFSMStvs LOG_OF_LOGS PARMLIB value changed. A SET SMS=xx command changed this PARMLIB value. This new value is reflected only on this system.

In the message text:

systemid

The name of the z/OS system where the PARMLIB value was changed.

TvsLogOfLogsValueOld

The old name of the log stream for the DFSMStvs log of logs.

TvsLogOfLogsOldRequestedState

The old requested state value for the DFSMStvs log of logs.

RankingOld

The old ranking value, from 1 to 32, for use only by the IBM Support Center.

TvsLogOfLogsNewRequestedState

The new requested state value for the DFSMStvs log of logs.

RankingNew

The new ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSSPR2

Routing code: 2, 10

Descriptor code: -

IGW467I DFSMS TVSNAM PARMLIB VALUE SET DURING SMSVSAM ADDRESS SPACE
INITIALIZATION ON SYSTEM: *systemid* TVSNAM: *TvsNameValue* CURRENT VALUE:
TvsNameValue Ranking

Explanation: The DFSMS TVSNAM PARMLIB value is now set.

In the message text:

systemid

The name of the z/OS system where the PARMLIB value was set.

TvsNameValue

The name of a DFSMStvs instance.

Ranking

A ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSSPR2, IGWSSIN3

Routing code: 2, 10

Descriptor code: -

IGW467I DFSMS TVSNAM PARMLIB VALUE CHANGED ON SYSTEM: *systemid* OLD TVSNAM:
TvsNameValueOld NEW TVSNAM: *TvsNameValueNew*

Explanation: The DFSMS TVSNAM PARMLIB changed. A SET SMS=*xx* command changed this PARMLIB value.

In the message text:

systemid

The name of the z/OS system where the PARMLIB value was changed.

TvsNameValueOld

The old name of the DFSMStvs instance.

TvsNameValueNew

The new name of the DFSMStvs instance.

System action: The system continues processing.

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Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSSPR2

Routing code: 2, 10

Descriptor code: -

IGW4671 DFSMS TRANSACTIONAL VSAM TVS_START_TYPE PARMLIB VALUE SET DURING SMSVSAM ADDRESS SPACE INITIALIZATION ON SYSTEM: *systemid* TVSNAME VALUE: *TvsNameValue* CURRENT VALUE: *TvsStartTypeValue* Ranking

Explanation: The DFSMStvs TVS_START_TYPE PARMLIB value is now set.

In the message text:

systemid

The name of the z/OS system where the PARMLIB value was set.

TvsNameValue

The name of the DFSMStvs instance.

TvsStartTypeValue

The TVS_START_TYPE value.

Ranking

A ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSSIN3

Routing code: 2, 10

Descriptor code: -

IGW4671 DFSMS TRANSACTIONAL VSAM TVS_START_TYPE PARMLIB VALUE CHANGED ON SYSTEM: *systemid* TVSNAME VALUE: *TvsNameValue* OLD VALUE: *TvsStartTypeValueOld* NEW VALUE: *TvsStartTypeValueNew*

Explanation: The DFSMStvs TVS_START_TYPE PARMLIB value changed. A SET SMS=*xx* command changed this PARMLIB value.

In the message text:

systemid

The name of the z/OS system where the PARMLIB value was changed.

TvsNameValue

The name of the DFSMStvs instance.

TvsStartTypeValueOld

The old TVS_START_TYPE value.

TvsStartTypeValueNew

The new TVS_START_TYPE value.

System action: The system continues processing.

Operator response: None
System programmer response: None
Problem determination: None
Source: DFSMSdfp
Module: IGWSSPR2
Routing code: 2, 10
Descriptor code: -

IGW467I DFSMS TRANSACTIONAL VSAM UNDO LOG PARMLIB VALUE IS SET DURING SMSVSAM ADDRESS SPACE INITIALIZATION ON SYSTEM: *systemid* UNDO LOGSTREAM NAME: *TvsUndoLogValue* **CURRENT VALUE:** *TvsUndoLogNewRequestedState* *Ranking*

Explanation: The DFSMStvs UNDO LOG PARMLIB value is now set.

In the message text:

systemid

The name of the z/OS system where the PARMLIB value was set.

TvsUndoLogValue

The name of the DFSMStvs undo log stream.

TvsUndoLogNewRequestedState

The new request-state value of the DFSMStvs undo log.

Ranking

A ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None
System programmer response: None
Problem determination: None
Source: DFSMSdfp
Module: IGWSSPR2, IGWSSIN3
Routing code: 2, 10
Descriptor code: -

IGW467I DFSMS UNDO LOG PARMLIB VALUE CHANGED ON SYSTEM: *systemid* **OLD UNDO LOGSTREAM NAME:** *TvsUndoLogValueOld* **OLD VALUE:** *TvsUndoLogOldRequestedState* *RankingOld* **NEW UNDO LOGSTREAM NAME:** *TvsUndoLogValueNew* **NEW VALUE:** *TvsUndoLogNewRequestedState* *RankingNew*

Explanation: The DFSMS UNDO LOG PARMLIB value changed. A SET SMS=xx command changed this PARMLIB value.

In the message text:

systemid

The name of the z/OS system where the PARMLIB value is being changed.

TvsUndoLogValueOld

The old UNDO LOGSTREAM value for DFSMStvs.

TvsUndoLogOldRequestedState

The old UNDO LOG request-state value for DFSMStvs.

RankingOld

The old ranking value, from 1 to 32, for use only by the IBM Support Center.

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TvsUndoLogValueNew

The new UNDO LOGSTREAM value for DFSMStvs.

TvsUndoLogNewRequestedState

The new UNDO LOG request-state value for DFSMStvs.

RankingNew

The new ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSSPR2

Routing code: 2, 10

Descriptor code: -

IGW4671 DFSMS TRANSACTIONAL VSAM SHUNT LOG PARMLIB VALUE SET DURING SMSVSAM ADDRESS SPACE INITIALIZATION ON SYSTEM: *systemid* SHUNT LOGSTREAM NAME: *TvsShuntLogValue* CURRENT VALUE: *TvsShuntLogNewRequestedState* Ranking

Explanation: The DFSMStvs SHUNT LOG PARMLIB value is now set.

In the message text:

systemid

The name of the z/OS system where the PARMLIB value was set.

TvsShuntLogValue

The SHUNT LOG value for DFSMStvs.

Ranking

A ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSSPR2, IGWSSIN3

Routing code: 2, 10

Descriptor code: -

IGW4671 DFSMS SHUNT LOG PARMLIB VALUE CHANGED ON SYSTEM: *systemid* OLD SHUNT LOGSTREAM NAME: *TvsShuntLogValueOld* OLD VALUE: *TvsShuntLogOldRequestedState* RankingOld NEW SHUNT LOGSTREAM NAME: *TvsShuntLogValueNew* NEW VALUE: *TvsShuntLogNewRequestedState* RankingNew

Explanation: The DFSMStvs SHUNT LOG PARMLIB value is changed. A SET SMS=xx command changed this PARMLIB value.

In the message text:

systemid

The name of the z/OS system where the PARMLIB value was changed.

TvsShuntLogValueOld

The old SHUNT LOGSTREAM value for DFSMStvs.

TvsShuntLogOldRequestedState

The old SHUNT LOG request-state value for DFSMStvs.

RankingOld

The old ranking value, from 1 to 32, for use only by the IBM Support Center.

TvsShuntLogValueNew

The new SHUNT LOGSTREAM value for DFSMStvs.

TvsShuntLogNewRequestedState

The new SHUNT LOG request state value for DFSMStvs.

RankingNew

The new ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSSPR2

Routing code: 2, 10

Descriptor code: -

IGW467I DFSMS TRANSACTIONAL VSAM RLSTMOUT PARMLIB VALUE SET DURING SMSVSAM ADDRESS SPACE INITIALIZATION ON SYSTEM: *systemid* CURRENT VALUE: *TvsRlsTmOutValue*
Ranking

Explanation: The DFSMStvs RLSTMOUT PARMLIB value is now set.

In the message text:

systemid

The name of the z/OS system where the PARMLIB value was set.

TvsRlsTmOutValue

The RLSTMOUT value for DFSMStvs.

Ranking

A ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSSIN3

Routing code: 2, 10

Descriptor code: -

IGW4671

IGW4671 DFSMS TRANSACTIONAL VSAM RLSTMOUT PARMLIB VALUE CHANGED ON SYSTEM:
systemid **OLD VALUE:** *TvsRlsTmOutValueOld RankingOld* **NEW VALUE:** *TvsRlsTmOutValueNew RankingNew*

Explanation: The DFSMSStvs RLSTMOUT PARMLIB value changed. A SET SMS=xx or SETSMS RLSTMOUT(xxx) command changed this PARMLIB value. All systems in the sysplex use this value.

In the message text:

systemid

The name of the z/OS system where the PARMLIB value was changed.

TvsRlsTmOutValueOld

The old RLSTMOUT value for DFSMSStvs.

RankingOld

The old ranking value, from 1 to 32, for use only by the IBM Support Center.

TvsRlsTmOutValueNew

The new RLSTMOUT value for DFSMSStvs.

RankingNew

The new ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSSPR2

Routing code: 2, 10

Descriptor code: -

IGW4671 DFSMS TRANSACTIONAL VSAM MAXLOCKS PARMLIB VALUE SET DURING SMSVSAM ADDRESS SPACE INITIALIZATION ON SYSTEM: *systemid* **CURRENT VALUE:**
TvsMaxLocksMaximumValue TvsMaxLocksIncrementValue

Explanation: The DFSMSStvs MAXLOCKS PARMLIB value is now set.

In the message text:

systemid

The name of the z/OS system where the PARMLIB value was set.

TvsMaxLocksMaximumValue

The MAXLOCKS maximum value for DFSMSStvs.

TvsMaxLocksIncrementValue

The MAXLOCKS increment value for DFSMSStvs.

Ranking

A ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSSIN3

Routing code: 2, 10

Descriptor code: -

IGW467I DFSMS TRANSACTIONAL VSAM MAXLOCKS PARMLIB VALUE CHANGED ON SYSTEM:
systemid **OLD VALUE:** *TvsMaxLocksMaximumValueOld TvsMaxLocksIncrementValueOld RankingOld* **NEW**
VALUE: *TvsMaxLocksMaximumValueNew TvsMaxLocksIncrementValueNew RankingNew*

Explanation: The DFSMStvs MAXLOCKS PARMLIB value changed. A SET SMS=*xx* or SETSMS MAXLOCKS(*xxx,yyy*) command changed this PARMLIB value. All systems in the sysplex use this value.

In the message text:

systemid

The name of the z/OS system where the PARMLIB value was changed.

TvsMaxLocksMaximumValueOld

The old MAXLOCKS maximum value for DFSMStvs.

TvsMaxLocksIncrementValueOld

The old MAXLOCKS increment value for DFSMStvs.

RankingOld

The old ranking value, from 1 to 32, for use only by the IBM Support Center.

TvsMaxLocksMaximumValueNew

The new MAXLOCKS maximum value for DFSMStvs.

TvsMaxLocksIncrementValueNew

The new MAXLOCKS increment value for DFSMStvs.

RankingNew

The new ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSSPR2

Routing code: 2, 10

Descriptor code: -

IGW467I DFSMS TVSNAM PARMLIB VALIDATION DETECTED AN ERROR DURING SMSVSAM ADDRESS SPACE INITIALIZATION ON SYSTEM: *systemid*. **TVSNAM:** *TvsNameValue* **IS CURRENTLY ACTIVE ON ANOTHER SYSTEM IN THE SYSPLEX. THIS TRANSACTIONAL VSAM INSTANCE WILL NOT BE INITIALIZED.**

Explanation: The DFSMS TVSNAM PARMLIB value is invalid.

In the message text:

systemid

The name of the z/OS system where the PARMLIB value error was detected.

TvsNameValue

The name of the DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

IGW4671

Module: IGWSSIN3

Routing code: 2, 10

Descriptor code: None

IGW4671 DFSMS ATTEMPTED TO START TRANSACTIONAL VSAM INSTANCE: *TvsNameValueNew* DURING SMSVSAM PARMLIB PROCESSING ON SYSTEM: *systemid*. PROCESSING WAS HALTED BECAUSE TVSNAMES: *TvsNameValueOld* IS NOT QUIESCED/DISABLED. THIS TRANSACTIONAL VSAM INSTANCE WILL NOT BE INITIALIZED.

Explanation: An active DFSMStvs instance is currently running on this system.

In the message text:

TvsNameValueNew

The name of the new DFSMStvs instance.

systemid

The name of the z/OS system where the PARMLIB processing halted.

TvsNameValueOld

The name of the old DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSRTE2

Routing code: 2, 10

Descriptor code: -

IGW4671 DFSMS FORWARD RECOVERY LOG PARMLIB VALUE SET DURING TRANSACTIONAL VSAM OPEN PROCESSING ON SYSTEM: *systemid* FORWARD RECOVERY LOGSTREAM NAME: *TvsFrLogValue* CURRENT VALUE: *TvsFrLogRequestedState*

Explanation: The DFSMS FORWARD RECOVERY LOG PARMLIB value is now set.

In the message text:

systemid

The name of the z/OS system where the PARMLIB value was set.

TvsFrLogValue

The name of the forward recovery log stream for DFSMStvs.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSSPR2

Routing code: 2, 10

Descriptor code: -

IGW467I DFSMS FORWARD RECOVERY LOG PARMLIB VALUE CHANGED ON SYSTEM: *systemid*
FORWARD RECOVERY LOGSTREAM NAME: *TvsFrLogValue* **OLD VALUE:**
TvsFrLogOldRequestedState RankingOld **NEW VALUE:** *TvsFrLogNewRequestedState RankingNew*

Explanation: The DFSMS forward recovery log PARMLIB value is changed.

In the message text:

systemid

The name of the z/OS system where the PARMLIB value was changed.

TvsFrLogValue

The name of the forward recovery log stream for DFSMStvs.

TvsFrLogOldRequestedState

The old forward-recovery request state for DFSMStvs.

RankingOld

The old ranking value, from 1 to 32, for use only by the IBM Support Center.

TvsFrLogNewRequestedState

The new forward-recovery request state for DFSMStvs.

RankingNew

The new ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdftp

Module: IGWSSPR2

Routing code: 2, 10

Descriptor code: -

IGW467I DFSMS DEADLOCK_DETECTION PARMLIB VALUE ON SYSTEM: *systemid* **THIS SYSTEM IS**
OPERATING AS THE GLOBAL DEADLOCK PROCESSOR. CURRENT VALUE: *DeadLockLocalValue*
DeadLockGlobalValue Ranking

Explanation: The DFSMS DEADLOCK_DETECTION PARMLIB value is set on this system. These values are used across all systems in the sysplex. This system is the global deadlock processor. A SET SMS=xx or SETSMS DEADLOCK_DETECTION(*xxx,yyy*) command changed this PARMLIB value.

In the message text:

systemid

The name of the z/OS system where the PARMLIB value was set.

DeadLockLocalValue

The local deadlock value.

Global deadlock value.

A value from 1 to 32.

Ranking

A ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

IGW4671

Source: DFSMSsdfp

Module: IGWSSPR2

Routing code: 2,10

Descriptor code: -

IGW4671 DFSMS DEADLOCK_DETECTION PARMLIB VALUE ON SYSTEM: *systemid*. **THIS SYSTEM IS OPERATING AS A LOCAL DEADLOCK PROCESSOR. CURRENT VALUE:** *DeadLockLocalValue*
DeadLockGlobalValue *Ranking*

Explanation: The DFSMS DEADLOCK_DETECTION PARMLIB is set on this system. These values are used across all systems in the sysplex. This system is the local deadlock processor. A SET SMS=*xx* or SETSMS DEADLOCK_DETECTION(*xxx,yyy*) command was issued, but this PARMLIB keyword was not changed.

In the message text:

systemid

The name of the z/OS system where the PARMLIB value is set.

DeadLockLocalValue

The local deadlock value.

DeadLockGlobalValue

The global deadlock value.

Ranking

A ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSSPR2

Routing code: 2, 10

Descriptor code: -

IGW4671 DFSMS SMF_TIME PARMLIB VALUE ON SYSTEM: *systemid* **CURRENT VALUE:** *SmfTimeValue*
Ranking

Explanation: The DFSMS SMF_TIME PARMLIB value is set on this system. The SET SMS=*xx* or SETSMS SMF_TIME(*yyy*) command was entered and this PARMLIB keyword was not changed.

In the message text:

systemid

The name of the z/OS system where the PARMLIB value is set.

SmfTimeValue

The SMF_TIME value.

Ranking

A ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSSPR2

Routing code: 2, 10

Descriptor code: None

IGW467I DFSMS CF_TIME PARMLIB VALUE ON SYSTEM: *systemid* **CURRENT VALUE:** *CfTimeValue* *Ranking*

Explanation: The DFSMS CF_TIME PARMLIB value is set on this system. The SET SMS=xx or SETSMS CF_TIME(yyy) command was entered and this PARMLIB keyword was not changed.

In the message text:

systemid

The name of the z/OS system where the PARMLIB value is set.

CfTimeValue

The CF_TIME value.

Ranking

A ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSSPR2

Routing code: 2, 10

Descriptor code: -

IGW467I DFSMS TRANSACTIONAL VSAM MAXLOCKS PARMLIB VALUE ON SYSTEM: *systemid*
CURRENT VALUE: *TvsMaxLocksMaximumValue* *TvsMaxLocksIncrementValue* *Ranking*

Explanation: The DFSMS MAXLOCKS PARMLIB value is set on this system. The SET SMS=xx or SETSMS MAXLOCKS(yyy,yyy) command was entered and this PARMLIB keyword was not changed.

In the message text:

systemid

The name of the z/OS system where the PARMLIB value is set.

TvsMaxLocksMaximumValue

The maximum MAXLOCKS value for DFSMSStvs.

TvsMaxLocksIncrementValue

The increment for the DFSMSStvs MAXLOCKS value.

Ranking

A ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSSPR2

Routing code: 2, 10

Descriptor code: -

IGW4671

IGW4671 DFSMS TRANSACTIONAL VSAM RLSTMOUT PARMLIB VALUE ON SYSTEM: *systemid*
CURRENT VALUE: *TvsRlsTmOutValue Ranking*

Explanation: The DFSMSStvs RLSTMOUT PARMLIB value is set on this system. The SET SMS=*xx* or SETSMS RLSTMOUT(*yyy*) command was entered and this PARMLIB keyword was not changed.

In the message text:

systemid

The name of the z/OS system where the PARMLIB value is set.

TvsRlsTmOutValue

The RLSTMOUT value for DFSMSStvs.

Ranking

A ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSSPR2

Routing code: 2, 10

Descriptor code: -

IGW4671 DFSMS TRANSACTIONAL VSAM QTIMEOUT PARMLIB VALUE ON SYSTEM: *systemid*
CURRENT VALUE: *TvsQTimeOutValue Ranking*

Explanation: The DFSMSStvs QTIMEOUT PARMLIB value is set on this system. The SET SMS=*xx* or SETSMS QTIMEOUT(*yyy*) command was entered and this PARMLIB keyword was not changed.

In the message text:

systemid

The name of the z/OS system where the PARMLIB value is set.

TvsQTimeOutValue

The QTIMEOUT value for DFSMSStvs.

Ranking

A ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSSPR2

Routing code: 2, 10

Descriptor code: -

IGW4671 DFSMS RLS_MAX_POOL_SIZE PARMLIB VALUE ON SYSTEM: *systemid* **CURRENT VALUE:**
RlsMaxPoolSize Ranking

Explanation: The DFSMS RLS_MAX_POOL_SIZE PARMLIB value is set on this system. The SET SMS=*xx* or SETSMS RLS_MAX_POOL_SIZE(*yyy*) command was entered and this PARMLIB keyword was not changed.

In the message text:

systemid

The name of the z/OS system where the PARMLIB value is set.

RlsMaxPoolSize

The RLS_MAX_POOL_SIZE value.

Ranking

A ranking value, from 1 to 32, for use only by the IBM Support Center.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSSPR2

Routing code: 2, 10

Descriptor code: -

IGW467I DFSMS VSAM RLS PARMLIB VALIDATION DETECTED AN ERROR DURING SMS COMMAND PROCESSING ON SYSTEM: *system_name*. VALUE *value* SPECIFIED FOR PARMLIB KEYWORD *parmlib_keyword* IS NOT VALID. CURRENT VALUE OF *parmlib_keyword* IS: *current_parmlib_keyword_value* *current_parm_ranking*

Explanation: The RLS_MaxCfFeatureLevel PARMLIB value specified in the SETSMS or SET SMS=xx command was incorrect. The current value of the keyword is displayed.

In the message text:

system_name

The name of the MVS system where the parameter value changed

value The value specified when the command was entered

parmlib_keyword

The PARMLIB keyword in the SETSMS or SET SMS=xx command

current_parmlib_keyword_value

The current value of this PARMLIB keyword

current_parm_ranking

The current system ranking for this PARMLIB keyword value, a ranking that only the IBM Support Center uses

System action: The system continues processing.

Operator response: None

System programmer response: None

Source: DFSMSdfp

Module: IGWSPRME

Routing code: 2,10

Descriptor code: -

IGW467I DFSMS RLS_MaxCfFeatureLevel PARMLIB VALUE ON SYSTEM: *system_name* CURRENT VALUE: *parm_value* *parm_ranking*

Explanation: The operator entered the SETSMS RLS_MaxCfFeatureLevel(xxx) command. The current value of the keyword is displayed.

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In the message text:

system_name

The name of the MVS system where the parameter value changed

parm_value

The current parameter value

parm_ranking

The current system ranking for this parameter value, a ranking that only the IBM Support Center uses

System action: The system continues processing.

Operator response: None

System programmer response: None

Source: DFSMSdfp

Module: IGWSPRME

Routing code: 2,10

Descriptor code: -

IGW4671 DFSMS RLS_MaxCfFeatureLevel PARMLIB VALUE SET DURING SMSVSAM ADDRESS SPACE
INITIALIZATION ON SYSTEM: *system_name* CURRENT VALUE: *parm_value* *parm_ranking*

Explanation: The RLS_MaxCfFeatureLevel PARMLIB value is set during SMSVSAM address-space initialization. The current value of the keyword is displayed.

In the message text:

system_name

The name of the MVS system where the parameter value changed

parm_value

The current parameter value

parm_ranking

The current system ranking for this parameter value, a ranking that only the IBM Support Center uses

System action: The system continues processing.

Operator response: None

System programmer response: None

Source: DFSMSdfp

Module: IGWSSIN3

Routing code: 2,10

Descriptor code: -

IGW4671 DFSMS RLS_MaxCfFeatureLevel PARMLIB VALUE CHANGED ON SYSTEM: *system_name* OLD
VALUE: *old_parm_value* *old_parm_ranking* NEW VALUE: *new_parm_value* *new_parm_ranking*

Explanation: The RLS_MaxCfFeatureLevel PARMLIB value has changed. The current and old values of the keyword are displayed.

In the message text:

system_name

The name of the MVS system where the parameter value changed

old_parm_value

The previous parameter value

old_parm_ranking

The previous system ranking for this parameter value, a ranking that only the IBM Support Center uses

new_parm_value

The current parameter value

new_parm_ranking

The current system ranking for this parameter value, a ranking that only the IBM Support Center uses

System action: The system continues processing.

Operator response: None

System programmer response: None

Source: DFSMSdfp

Module: IGWSPRME

Routing code: 2,10

Descriptor code: -

IGW467I DFSMS RLSFIXEDPOOLSIZE PARMLIB VALUE SET DURING SMSVSAM ADDRESS SPACE INITIALIZATION ON SYSTEM: *system-name* CURRENT VALUE: *parm-value* *parm-ranking*

Explanation: The RlsFixedPoolSize parameter was set during the initialization of the SMSVSAM address space.

In the message text:

system-name

System on which the SMSVSAM address space was initialized

parm-value

Current value of the RlsFixedPoolSize parameter

parm-ranking

System ranking for the parameter value (this value is used by IBM Support).

System action: Processing continues.

Operator response: None.

Source:

IGW467I DFSMS RLSABOVETHEBARMAXPOOLSIZE PARMLIB VALUE SET DURING SMSVSAM ADDRESS SPACE INITIALIZATION ON SYSTEM: *system-name* CURRENT VALUE: *parm-value* *parm-ranking*

Explanation: The RlsAboveTheBarMaxPoolSize parameter was set during the initialization of the SMSVSAM address space.

In the message text:

system-name

System on which the SMSVSAM address space was initialized

parm-value

Current value of the RlsFixedPoolSize parameter

parm-ranking

System ranking for the parameter value (this value is used by IBM Support).

System action: Processing continues.

Operator response: None.

Source:

IGW467I

IGW467I DFSMS RLSFIXEDPOOLSIZE PARMLIB VALUE CHANGED ON SYSTEM: *system-name* OLD VALUE: *old-value old-ranking* NEW VALUE: *new-value new-ranking*

Explanation: The RlsFixedPoolSize parameter value was changed.

In the message text:

system-name

System on which the RlsFixedPoolSize parameter value was changed

old-value

Previous value of the RlsFixedPoolSize parameter value

old-ranking

Previous system ranking for this parameter value (this value is used by IBM Support).

new-value

New value of the RlsFixedPoolSize parameter value

new-ranking

New system ranking for this parameter value (this value is used by IBM Support).

System action: Processing continues.

Operator response: None.

Source:

IGW467I DFSMS RLSABOVETHEBARMAXPOOLSIZE PARMLIB VALUE CHANGED ON SYSTEM: *system-name* OLD VALUE: *old-value old-ranking* NEW VALUE: *new-value new-ranking*

Explanation: The RlsAboveTheBarMaxPoolSize parameter value is changed.

In the message text:

system-name

System on which the RlsAboveTheBarMaxPoolSize parameter value was changed

old-value

Previous value of the RlsAboveTheBarMaxPoolSize parameter value

old-ranking

Previous system ranking for the parameter value (this value is used by IBM Support).

new-value

New value of the RlsAboveTheBarMaxPoolSize parameter value

new-ranking

New system ranking for the parameter value (this value is used by IBM Support).

System action: Processing continues.

Operator response: None.

Source:

IGW467I DFSMS RLSFIXEDPOOLSIZE PARMLIB VALUE CHANGED ON SYSTEM: *system-name* CURRENT VALUE: *parm-value parm-ranking*

Explanation: The operator changed the RlsFixedPoolSize value through the SETSMS command.

In the message text:

system-name

System on which the RlsFixedPoolSize parameter value was changed

parm-value

Current value of the RlsFixedPoolSize parameter

parm-ranking

System ranking for the parameter value (this value is used by IBM Support).

System action: Processing continues.

Operator response: None.

Source:

IGW467I DFSMS RLSABOVETHEBARMAXPOOLSIZ PARMLIB VALUE CHANGED ON SYSTEM:
system-name **CURRENT VALUE:** *parm-value* *parm-ranking*

Explanation: The operator changed the RlsAboveTheBarMaxPoolSize value through the SETSMS command.

In the message text:

system-name

System on which the RlsAboveTheBarMaxPoolSize parameter value was changed

parm-value

Current value of the RlsAboveTheBarMaxPoolSize parameter

parm-ranking

Current system ranking for the parameter value (this value is used by IBM Support).

System action: Processing continues.

Operator response: None.

Source:

**IGW467I DFSMS CA_RECLAIM PARMLIB VALUE SET DURING SMSVSAM ADDRESS SPACE
 INITIALIZATION ON SYSTEM:** *system-name* **CURRENT VALUE:** *parm-value*

Explanation: The CA_Reclaim parameter was set during the initialization of the SMSVSAM address space.

In the message text:

system-name

System on which the SMSVSAM address space was initialized.

parm-value

Current value of the CA_Reclaim parameter.

System action: Processing continues.

Operator response: None.

Source: DFSMSsdfp

Module: IGWSMSMS

Routing code: 2, 10

Descriptor code: -

IGW467I DFSMS CA_RECLAIM PARMLIB VALUE CHANGED ON SYSTEM: *system-name* **OLD VALUE:**
old-value **NEW VALUE:** *new-value*

Explanation: The CA_Reclaim parameter value is changed.

In the message text:

system-name

System on which the CA_Reclaim parameter value was changed.

old-value

Previous value of the CA_Reclaim parameter value.

new-value

New value of the CA_Reclaim parameter value.

System action: Processing continues.

Operator response: None.

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Source: DFSMSdfp

Module: IGWSMSMS

Routing code: 2, 10

Descriptor code: -

IGW467I DFSMS CA_RECLAIM PARMLIB VALUE ON SYSTEM: *system-name* CURRENT VALUE: *parm-value*

Explanation: The operator did not change the CA_Reclaim setting in PARMLIB.

In the message text:

system-name

System that has the CA_Reclaim parameter setting in PARMLIB.

parm-value

Current setting of the CA_Reclaim parameter.

System action: Processing continues.

Operator response: None.

Source: DFSMSdfp

Module: IGWSMSMS

Routing code: 2, 10

Descriptor code: -

IGW467W ***WARNING*** DFSMS PARMLIB VALUE WILL FIX XX% OF REAL STORAGE ON SYSTEM:
system-name REQUESTED VALUE: *req_value* AVAILABLE REAL STORAGE: *storage*

Explanation: During SMSVSAM address space initialization, the system compared the available real storage with the value specified in the active IGDSMSxx parmlib member. The requested value was more than 80% of the available real storage.

In the message text:

system-name

System on which the SMSVSAM address space was initialized

req-value

Amount of real storage specified in the active IGDSMSxx member.

storage Amount of real storage available to the system.

System action: Processing continues.

Operator response: None.

Source:

IGW468I DFSMS STATISTICS TASK FOR CACHE STRUCTURE: *struct* IS RUNNING ON SYSTEM: *systemid*

Explanation: The task that gathers statistics for cache structures is currently running on the specified system. This statistics task runs only on one system in the sysplex.

In the message text:

struct

The name of the cache structure.

systemid

The name of the system on which the statistics task is running.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSSSCS

Routing code: 2, 10

Descriptor code: -

IGW469I NO SUITABLE COUPLING FACILITY NUMSYSTEMS: *numsys* STRUCTURESIZE: *size* LOCKENTRIES: *entries* for *lockstructurename*

Explanation: In the message text:

numsys

The number of systems.

size

The size of the structure.

entries

The number of lock table entries.

System action: The system continues processing.

Operator response: None

System programmer response: Determine why there is no other suitable facility. Examine the console log to determine why the connection to the IGWLOCK00 structure failed. (Message IGW454I describes why the connection attempt failed.)

Problem determination: None

Source: DFSMSdfp

Module: IGWLNI01, IGWLNI52

IGW470I SMSVSAM TERMINATION SCHEDULED REBUILD *lockstructurename*, NO SUITABLE FACILITY AVAILABLE LOST CONNECTIVITY TO ORIGINAL STRUCTURE.

Explanation: The structure needs to be rebuilt because connectivity to the original structure was lost.

In the message text:

lockstructurename

The name of the DFSMS coupling facility lock structure.

System action: The system continues processing.

Operator response: None

System programmer response: Determine why there is no other suitable facility. Examine the console log to determine why the connection to the *lockstructurename* structure failed.

Problem determination: None

Source: DFSMSdfp

Module: IGWLNI52

IGW470I SMSVSAM TERMINATION SCHEDULED REBUILD *lockstructurename*, NO SUITABLE FACILITY AVAILABLE ORIGINAL STRUCTURE FAILED.

Explanation: The structure needs to be rebuilt because the original structure failed.

In the message text:

lockstructurename

The name of the DFSMS coupling facility lock structure.

IGW471I

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWLN152

IGW471I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM INSTANCE *TvsName* IS ACCEPTED. QUIESCE REASON: VARY SMS TRANSACTIONAL VSAM OPERATOR COMMAND

Explanation: The operator issued a VARY SMS command to quiesce the DFSMStvs instance *TvsName*.

In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW471I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM INSTANCE *TvsNameRequested* IS REJECTED. TRANSACTIONAL VSAM INSTANCE *TvsNameQuiesced* IS ALREADY QUIESCING/QUIESCED

Explanation: The requested DFSMStvs instance is already quiescing or has been quiesced.

In the message text:

TvsNameRequested

The name of the requested DFSMStvs instance.

TvsNameQuiesced

The name of the DFSMStvs instance that is quiescing or has been quiesced.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW471I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM INSTANCE *TvsNameRequested* IS REJECTED. TRANSACTIONAL VSAM INSTANCE *TvsNameDisabled* IS ALREADY DISABLING/DISABLED

Explanation: The requested DFSMStvs instance is already disabling or has been disabled.

In the message text:

TvsNameRequested

The name of the requested DFSMStvs instance.

TvsNameDisabled

The name of the DFSMStvs instance that is disabling or has been disabled.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSVTV2, IGWSVTV3

IGW471I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM INSTANCE *TvsName* COMPLETED. TRANSACTIONAL VSAM INSTANCE *TvsName* IS NOW QUIESCED

Explanation: The DFSMStvs instance *TvsName* is now quiesced, as VSAM record-level sharing (RLS) requested.

In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSSPR2, IGWSVTV3

IGW471I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS ACCEPTED. DISABLE REASON: VARY SMS TRANSACTIONAL VSAM OPERATOR COMMAND

Explanation: The operator issued a VARY SMS request to disable the DFSMStvs instance *TvsName*, and the request was accepted.

In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSVTV2, IGWSVTV3

IGW471I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS REJECTED. TRANSACTIONAL VSAM INSTANCE *TvsName* IS ALREADY DISABLING/DISABLED

Explanation: A request to disable the DFSMStvs instance *TvsName* was rejected because this instance is already disabling or disabled.

In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

IGW471I

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW471I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS REJECTED. TRANSACTIONAL VSAM INSTANCE *TvsName* IS ALREADY QUIESCED

Explanation: A request to disable the DFSMStvs instance *TvsName* was rejected because this instance is already quiesced.

In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW471I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS COMPLETED. TRANSACTIONAL VSAM INSTANCE *TvsName* IS NOW DISABLED.

Explanation: The DFSMStvs instance *TvsName* has successfully transitioned from the DISABLING state into the DISABLED state.

In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSSPR2

IGW471I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM INSTANCE *TvsName* IS REJECTED. TRANSACTIONAL VSAM INSTANCE *TvsName* IS NOT DEFINED IN THE SYSPLEX.

Explanation: A request to quiesce the DFSMStvs instance *TvsName* was rejected because this instance is not defined in the sysplex.

In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV3

IGW471I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS REJECTED. TRANSACTIONAL VSAM INSTANCE *TvsName* IS NOT DEFINED IN THE SYSPLEX.

Explanation: A request to disable the DFSMStvs instance *TvsName* was rejected because this instance is not defined in the sysplex.

In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

IGW471I DFSMS VSAM RLS COMMAND PROCESSOR ON SYSTEM: *systemid* IS WAITING FOR A RESPONSE FROM TRANSACTIONAL VSAM: *TvsName* COMMAND REQUESTED: *CommandRequested* TRANSACTIONAL VSAM: *TvsName*

Explanation: The VSAM record-level sharing (RLS) command processor is waiting for a response from DFSMStvs.

In the message text:

systemid

The name of the z/OS system where the command was issued.

TvsName

The name of a DFSMStvs instance.

CommandRequested

The requested command.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3, IGWSSPR2

IGW471I DFSMS VSAM RLS COMMAND PROCESSOR ON SYSTEM: *systemid* HAS BEEN POSTED BY TRANSACTIONAL VSAM: *TvsName* COMMAND REQUESTED: *CommandRequested* TRANSACTIONAL VSAM: *TvsName*

Explanation: A DFSMStvs instance posted a command request to the VSAM record-level sharing (RLS) command processor.

In the message text:

systemid

The name of the z/OS system where the command was issued.

IGW471I

TvsName

The name of a DFSMStvs instance.

CommandRequested

The command requested.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSETVE, IGWSQTVE, IGWSVTV2, IGWSVTV3

IGW471I DFSMS VSAM RLS COMMAND PROCESSOR ON SYSTEM: *systemid* HAS CALLED THE DFSMS COMMAND COMPLETE PROCESSOR COMMAND REQUESTED: *CommandRequested* TRANSACTIONAL VSAM: *TvsName*

Explanation: The DFSMS COMMAND COMPLETE processor is called.

In the message text:

systemid

The name of the z/OS system where the command was issued.

CommandRequested

The command requested.

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSETVE, IGWSQTVE

IGW471I DFSMS VSAM RLS REQUESTED TO DISABLE TRANSACTIONAL VSAM INSTANCE: *TvsName* IS ACCEPTED. DISABLE REASON: TRANSACTIONAL VSAM DETECTED RRS UNAVAILABLE

Explanation: A request to disable the DFSMStvs instance *TvsName* was accepted because resource recovery services (RRS) is unavailable.

In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW471I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS ACCEPTED. DISABLE REASON: OPERATOR REPLY TO TRANSACTIONAL VSAM WTOR

Explanation: A request to disable the DFSMStvs instance *TvsName* was accepted because the operator replied to the DFSMStvs WTOR (write to operator with reply).

In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW471I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS REJECTED. TRANSACTIONAL VSAM IS NOT ACTIVE ON THIS SYSTEM

Explanation: The DFSMStvs instance *TvsName* cannot be disabled because DFSMStvs is not active.

In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

IGW471I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM INSTANCE *TvsName* IS REJECTED. TRANSACTIONAL VSAM IS NOT ACTIVE ON THIS SYSTEM.

Explanation: The DFSMStvs instance *TvsName* cannot be quiesced because DFSMStvs is not active.

In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

IGW471I

IGW471I DFSMS RLS REQUEST TO QUIESCE PEER RECOVERY PROCESSING FOR TRANSACTIONAL VSAM INSTANCE *TvsName* COMPLETED. TRANSACTIONAL VSAM INSTANCE *TvsName* IS NOW QUIESCED FOR PEER RECOVERY PROCESSING. TRANSACTIONAL VSAM LOGSTREAM *UndoLogStreamName* IS NOW QUIESCED FOR PEER RECOVERY PROCESSING. TRANSACTIONAL VSAM LOGSTREAM: *ShuntLogStreamName* IS NOW QUIESCED FOR PEER RECOVERY PROCESSING.

Explanation: The DFSMSStvs instance *TvsName*, undo log stream *UndoLogStreamName*, and shunt log stream *ShuntLogStreamName* are quiesced for peer recovery processing.

In the message text:

TvsName

The name of a DFSMSStvs instance.

UndoLogStreamName

The name of the undo log stream.

ShuntLogStreamName

The name of the shunt log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSVTV2

IGW471I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM INSTANCE *TvsName* IS REJECTED. TRANSACTIONAL VSAM INSTANCE *TvsName* IS ALREADY DISABLING/DISABLED DUE TO A MVS/RRS FAILURE. A PREVIOUS OPERATOR INITIATED VARY COMMAND IS PENDING.

Explanation: A request to quiesce the DFSMSStvs instance *TvsName* was rejected because of a resource recovery services (RRS) failure.

In the message text:

TvsName

The name of a DFSMSStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSVTV2, IGWSVTV3

IGW471I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM INSTANCE *TvsName* IS QUEUED TRANSACTIONAL VSAM INSTANCE *TvsName* IS DISABLING DUE TO AN RRS FAILURE. TRANSACTIONAL VSAM MUST COMPLETE THE DISABLE REQUEST BEFORE THE QUIESCE COMMAND WILL BE EXECUTED. QUIESCE REASON: OPERATOR QUIESCE COMMAND BEFORE RRS FAILURE

Explanation: A quiesce request failed because the DFSMSStvs instance *TvsName* is disabling. The request is queued.

In the message text:

TvsName

The name of a DFSMSStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW471I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM INSTANCE *TvsName* IS QUEUED TRANSACTIONAL VSAM INSTANCE *TvsName* IS DISABLING DUE TO AN RRS FAILURE. TRANSACTIONAL VSAM MUST COMPLETE THE DISABLE REQUEST BEFORE THE QUIESCE COMMAND WILL BE EXECUTED. QUIESCE REASON: OPERATOR QUIESCE COMMAND AFTER RRS FAILURE.

Explanation: A quiesce request failed because the DFSMStvs instance *TvsName* is disabling. The request is queued.

In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW471I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM INSTANCE *TvsName* IS QUEUED TRANSACTIONAL VSAM INSTANCE *TvsName* IS DISABLED DUE TO AN RRS FAILURE. TRANSACTIONAL VSAM WILL COMPLETE THE QUIESCE REQUEST WHEN RRS BECOMES AVAILABLE QUIESCE REASON: OPERATOR QUIESCE COMMAND AFTER RRS FAILURE.

Explanation: A quiesce request is queued until resource recovery services (RRS) becomes available.

In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW471I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM INSTANCE *TvsName* IS ACCEPTED TRANSACTIONAL VSAM LOGGER PREVIOUSLY DETECTED AN I/O ERROR *** TRANSACTIONAL VSAM COLD START IS REQUIRED *** QUIESCE REASON: VARY SMS TRANSACTIONAL VSAM OPERATOR COMMAND

Explanation: The operator entered a VARY SMS command to quiesce the DFSMStvs instance *TvsName*, and the quiesce request was accepted. A cold start of DFSMStvs is required because the logger detected an I/O error.

In the message text:

IGW471I

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: After the cold start, any data sets for which recovery was owed are most likely left in a damaged state and need to be recovered manually. If the data sets are forward recoverable, then their forward recovery logs might also be damaged. IBM recommends that you perform the following steps:

1. Manually recover the data sets, without using forward recovery.
2. Take backups of the manually recovered data sets and of any other data sets that use the forward recovery log.
3. Delete and redefine the forward recovery log.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW471I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS ACCEPTED TRANSACTIONAL VSAM LOGGER PREVIOUSLY DETECTED AN I/O ERROR *** TRANSACTIONAL VSAM COLD START IS REQUIRED *** QUIESCE REASON: VARY SMS TRANSACTIONAL OPERATOR COMMAND.

Explanation: The operator entered a VARY SMS command to disable the DFSMStvs instance *TvsName*, and the disable request was accepted. A cold start of DFSMStvs is required because the logger detected an I/O error.

In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: After the cold start, any data sets for which recovery was owed are most likely left in a damaged state and need to be recovered manually. If the data sets are forward recoverable, then their forward recovery logs might also be damaged. IBM recommends that you perform the following steps:

1. Manually recover the data sets, without using forward recovery.
2. Take backups of the manually recovered data sets and of any other data sets that use the forward recovery log.
3. Delete and redefine the forward recovery log.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW471I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS ACCEPTED TRANSACTIONAL VSAM LOGGER PREVIOUSLY DETECTED AN I/O ERROR *** TRANSACTIONAL VSAM COLD START IS REQUIRED *** DISABLE REASON: TRANSACTIONAL VSAM DETECTED RRS IS UNAVAILABLE

Explanation: A request to disable the DFSMStvs instance *TvsName* was accepted because the logger detected an I/O error and resource recovery services (RRS) is unavailable.

In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: After the cold start, any data sets for which recovery was owed are most likely left

in a damaged state and need to be recovered manually. If the data sets are forward recoverable, then their forward recovery logs might also be damaged. IBM recommends that you perform the following steps:

1. Manually recover the data sets, without using forward recovery.
2. Take backups of the manually recovered data sets and of any other data sets that use the forward recovery log.
3. Delete and redefine the forward recovery log.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW471I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM INSTANCE *TvsName* IS ACCEPTED TRANSACTIONAL VSAM LOGGER DETECTED AN I/O ERROR *** TRANSACTIONAL VSAM COLD START IS REQUIRED *** OPERATOR HAD PREVIOUSLY ISSUED A QUIESCE COMMAND QUIESCE REASON: TRANSACTIONAL VSAM LOGGER DETECTED AN I/O ERROR

Explanation: A request to quiesce the DFSMStvs instance *TvsName* was accepted because the logger detected an I/O error. A cold start of DFSMStvs is required.

In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: After the cold start, any data sets for which recovery was owed are most likely left in a damaged state and need to be recovered manually. If the data sets are forward recoverable, then their forward recovery logs might also be damaged. IBM recommends that you perform the following steps:

1. Manually recover the data sets, without using forward recovery.
2. Take backups of the manually recovered data sets and of any other data sets that use the forward recovery log.
3. Delete and redefine the forward recovery log.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW471I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS ACCEPTED TRANSACTIONAL VSAM LOGGER DETECTED AN I/O ERROR *** TRANSACTIONAL VSAM COLD START IS REQUIRED *** OPERATOR HAD PREVIOUSLY ISSUED A DISABLE COMMAND DISABLE REASON: TRANSACTIONAL VSAM LOGGER DETECTED AN I/O ERROR

Explanation: A request to disable the DFSMStvs instance *TvsName* was accepted because the logger detected an I/O error. A cold start of DFSMStvs is required.

In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: After the cold start, any data sets for which recovery was owed are most likely left in a damaged state and need to be recovered manually. If the data sets are forward recoverable, then their forward recovery logs might also be damaged. IBM recommends that you perform the following steps:

1. Manually recover the data sets, without using forward recovery.
2. Take backups of the manually recovered data sets and of any other data sets that use the forward recovery log.

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3. Delete and redefine the forward recovery log.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW471I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS REJECTED. TRANSACTIONAL VSAM INSTANCE *TvsName* IS ALREADY DISABLING/DISABLED. DISABLE REASON: TRANSACTIONAL VSAM DETECTED RRS IS UNAVAILABLE.

Explanation: A request to disable the DFSMStvs instance *TvsName* was rejected because this instance is already disabling or disabled. Resource recovery services (RRS) is unavailable.

In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW471I DFSMS VSAM RLS REQUEST TO PERFORM PEER RECOVERY FOR TRANSACTIONAL VSAM INSTANCE *TvsName* IS REJECTED: TRANSACTIONAL VSAM IS NOT ACTIVE ON THIS SYSTEM.

Explanation: A request to perform peer recovery for the DFSMStvs instance *TvsName* was rejected because DFSMStvs is not active on the system.

In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

IGW471I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS REJECTED. TRANSACTIONAL VSAM INSTANCE *TvsName* IS ALREADY DISABLING/DISABLED. DISABLE REASON: TRANSACTIONAL VSAM DETECTED LOGGER ENVIRONMENTAL ERROR.

Explanation: A request to disable the DFSMStvs instance *TvsName* was rejected because this instance is already disabled or disabling. DFSMStvs detected a logger environmental error.

In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: Examine the console log for any system logger errors. Then correct the problem with the system logger, and DFSMStvs will restart.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW471I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS ACCEPTED TRANSACTIONAL VSAM LOGGER PREVIOUSLY DETECTED AN I/O ERROR *** TRANSACTIONAL VSAM COLD START IS REQUIRED *** DISABLE REASON: TRANSACTIONAL VSAM DETECTED LOGGER ENVIRONMENTAL ERROR

Explanation: A request to disable the DFSMStvs instance *TvsName* was accepted because the logger detected an I/O error and DFSMStvs detected a logger environmental error. A cold start of DFSMStvs is required.

In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: After the cold start, any data sets for which recovery was owed are most likely left in a damaged state and need to be recovered manually. If the data sets are forward recoverable, then their forward recovery logs might also be damaged. IBM recommends that you perform the following steps:

1. Manually recover the data sets, without using forward recovery.
2. Take backups of the manually recovered data sets and of any other data sets that use the forward recovery log.
3. Delete and redefine the forward recovery log.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW471I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS ACCEPTED. DISABLE REASON: TRANSACTIONAL VSAM DETECTED SYSTEM LOGGER ENVIRONMENTAL ERROR.

Explanation: A request to disable the DFSMStvs instance *TvsName* was accepted because DFSMStvs detected a logger environmental error.

In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: Examine the console log for any system logger errors. Then correct the problem with the system logger, and DFSMStvs will restart.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW471I

IGW471I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS ACCEPTED TRANSACTIONAL VSAM LOGGER PREVIOUSLY DETECTED AN ENVIRONMENTAL ERROR. DISABLE REASON: TRANSACTIONAL VSAM DETECTED RRS IS UNAVAILABLE.

Explanation: A request to disable the DFSMStvs instance *TvsName* was accepted because DFSMStvs detected a logger environmental error and resource recovery services (RRS) is unavailable.

In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: Examine the console log for any RRS messages. Then correct the problem with RRS.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW471I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS ACCEPTED TRANSACTIONAL VSAM LOGGER PREVIOUSLY DETECTED AN ENVIRONMENTAL ERROR AND THE OPERATOR HAD PREVIOUSLY ISSUED A DISABLE COMMAND. DISABLE REASON: TRANSACTIONAL VSAM DETECTED RRS IS UNAVAILABLE.

Explanation: A request to disable the DFSMStvs instance *TvsName* is accepted because the logger detected an environmental error and resource recovery services (RRS) is unavailable.

In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: Examine the console log for any RRS messages. Then correct the problem with RRS.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW471I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS ACCEPTED. TRANSACTIONAL VSAM LOGGER PREVIOUSLY DETECTED A SYSTEM LOGGER ENVIRONMENTAL ERROR. *** TRANSACTIONAL VSAM COLD START IS REQUIRED *** DISABLE REASON: TRANSACTIONAL VSAM DETECTED AN I/O ERROR

Explanation: A request to disable the DFSMStvs instance *TvsName* is accepted. The DFSMStvs logger detected a system logger environmental error.

In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: After the cold start, any data sets for which recovery was owed are most likely left in a damaged state and need to be recovered manually. If the data sets are forward recoverable, then their forward recovery logs might also be damaged. IBM recommends that you manually recover the data sets (without using

forward recovery), take backups of them and of any other data sets that use the forward recovery log, and then delete and redefine the forward recovery log.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2

IGW471I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS ACCEPTED TRANSACTIONAL VSAM LOGGER PREVIOUSLY DETECTED A SYSTEM LOGGER ENVIRONMENTAL ERROR AND THE OPERATOR HAD PREVIOUSLY ISSUED A DISABLE COMMAND. *** TRANSACTIONAL VSAM COLD START IS REQUIRED *** DISABLE REASON: TRANSACTIONAL VSAM LOGGER DETECTED AN I/O ERROR

Explanation: In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: After the cold start, any data sets for which recovery was owed are most likely left in a damaged state and need to be recovered manually. If the data sets are forward recoverable, then their forward recovery logs might also be damaged. IBM recommends that you manually recover the data sets (without using forward recovery), take backups of them and of any other data sets that use the forward recovery log, and then delete and redefine the forward recovery log.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW472I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS COMPLETED. TRANSACTIONAL VSAM INSTANCE *TvsName* IS NOW ENABLED. TRANSACTIONAL VSAM LOGSTREAM *UndoLogStreamName* IS NOW ENABLED. TRANSACTIONAL VSAM LOGSTREAM *ShuntLogStreamName* IS NOW ENABLED. TRANSACTIONAL VSAM INSTANCE *TvsName* WILL NOW ACCEPT NEW WORK.

Explanation: In the message text:

TvsName

The name of a DFSMStvs instance.

UndoLogStreamName

The undo log stream name.

ShuntLogStreamName

The shunt log stream name.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSSPR2, IGWSCSTC

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IGW472I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS REJECTED. TRANSACTIONAL VSAM INSTANCE *TvsName* IS ALREADY ENABLED/ENABLING.

Explanation: In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW472I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS REJECTED. TRANSACTIONAL VSAM INSTANCE *TvsName* IS NOT DEFINED IN THE SYSPLEX.

Explanation: In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW472I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM INSTANCE *TvsName* ACCEPTED. ENABLE REASON: VARY SMS TRANSACTIONAL VSAM OPERATOR COMMAND.

Explanation: In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW472I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM INSTANCE *TvsName* ACCEPTED. ENABLE REASON: COLD START COMPLETED AFTER I/O ERROR.

Explanation: In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: After the cold start, any data sets for which recovery was owed are most likely left in a damaged state and need to be recovered manually. If the data sets are forward recoverable, then their forward recovery logs might also be damaged. IBM recommends that you manually recover the data sets (without using forward recovery), take backups of them and of any other data sets that use the forward recovery log, and then delete and redefine the forward recovery log.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3, IGWSCSTC

IGW472I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM INSTANCE *TvsName*
ACCEPTED. ENABLE REASON: TRANSACTIONAL VSAM DETECTED RRS IS AVAILABLE.

Explanation: In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW472I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS
REJECTED: TRANSACTIONAL VSAM IS NOT ACTIVE ON THIS SYSTEM.

Explanation: In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

IGW472I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS
REJECTED: TRANSACTIONAL VSAM MUST COLD START DUE TO I/O ERROR ON
LOGSTREAM

Explanation: In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: After the cold start, any data sets for which recovery was owed are most likely left in a damaged state and need to be recovered manually. If the data sets are forward recoverable, then their forward recovery logs might also be damaged. IBM recommends that you manually recover the data sets (without using forward recovery), take backups of them and of any other data sets that use the forward recovery log, and then delete and redefine the forward recovery log.

IGW472I

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

IGW472I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS REJECTED: TRANSACTIONAL VSAM INSTANCE *TvsName* IS DISABLING DUE TO AN RRS FAILURE. TRANSACTIONAL VSAM MUST COMPLETE THE DISABLE REQUEST BEFORE THE ENABLE COMMAND WILL BE ACCEPTED. ENABLE REASON: VARY SMS TRANSACTIONAL VSAM OPERATOR COMMAND.

Explanation: In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW472I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS QUEUED TRANSACTIONAL VSAM INSTANCE *TvsName* IS DISABLING DUE TO AN RRS FAILURE. TRANSACTIONAL VSAM MUST COMPLETE THE DISABLE REQUEST BEFORE THE ENABLE COMMAND WILL BE EXECUTED. ENABLE REASON: TRANSACTIONAL VSAM DETECTED RRS IS AVAILABLE.

Explanation: In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW472I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS QUEUED: TRANSACTIONAL VSAM INSTANCE *TvsName* IS QUIESCING DUE TO AN INVALID SYSTEM LOGGER CONNECT TOKEN. TRANSACTIONAL VSAM MUST COMPLETE THE QUIESCE REQUEST BEFORE THE ENABLE COMMAND WILL BE EXECUTED. ENABLE REASON: TRANSACTIONAL VSAM INITIATED ENABLE

Explanation: In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW472I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS REJECTED. TRANSACTIONAL VSAM INSTANCE *TvsName* IS QUIESCING/QUIESCED DUE TO A SYSTEM LOGGER FAILURE. TRANSACTIONAL VSAM WILL BE ENABLED WHEN THE SYSTEM LOGGER BECOMES AVAILABLE TO THE SYSTEM.

Explanation: In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW472I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS QUEUED TRANSACTIONAL VSAM INSTANCE *TvsName* IS QUIESCING DUE TO THE SYSTEM LOGGER IS INITIALIZING TRANSACTIONAL VSAM MUST COMPLETE THE QUIESCE REQUEST BEFORE THE ENABLE COMMAND WILL BE EXECUTED. ENABLE REASON: TRANSACTIONAL VSAM INITIATED ENABLE.

Explanation: In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: Examine the console log for any system logger errors. Then correct the problem with the system logger, and DFSMStvs will restart.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW472I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS QUEUED: TRANSACTIONAL VSAM INSTANCE *TvsName* IS QUIESCING/QUIESCED. TRANSACTIONAL VSAM MUST COMPLETE THE QUIESCE REQUEST BEFORE THE ENABLE COMMAND WILL BE EXECUTED. ENABLE REASON: TRANSACTIONAL VSAM INITIATED ENABLE DUE TO SYSTEM LOGGER ENF EVENT: SYSTEM LOGGER AVAILABLE.

Explanation: In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

IGW472I

Module: IGWSVTV2, IGWSVTV3

IGW472I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS QUEUED: TRANSACTIONAL VSAM INSTANCE IS QUIESCING/QUIESCED. TRANSACTIONAL VSAM MUST COMPLETE THE QUIESCE REQUEST BEFORE THE ENABLE COMMAND
ENABLE REASON: TRANSACTIONAL VSAM INITIATED ENABLE DUE TO SYSTEM LOGGER
ENF EVENT: CF RESOURCE CHANGE.

Explanation: In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW472I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS QUEUED TRANSACTIONAL VSAM INSTANCE *TvsName* IS QUIESCING DUE TO A SYSTEM
LOGGER I/O ERROR. TRANSACTIONAL VSAM MUST COMPLETE THE QUIESCE REQUEST
BEFORE THE ENABLE COMMAND WILL BE EXECUTED. ENABLE REASON: VARY SMS
TRANSACTIONAL VSAM OPERATOR COMMAND.

Explanation: In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW472I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS REJECTED: TRANSACTIONAL VSAM INSTANCE *TvsName* IS QUIESCING DUE TO A SYSTEM
LOGGER I/O ERROR. TRANSACTIONAL VSAM MUST COMPLETE THE QUIESCE REQUEST
BEFORE THE ENABLE COMMAND WILL BE ACCEPTED. ENABLE REASON: VARY SMS
TRANSACTIONAL VSAM OPERATOR COMMAND.

Explanation: In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW472I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS REJECTED. AN ENABLE COMMAND IS ALREADY QUEUED. TRANSACTIONAL VSAM INSTANCE *TvsName* IS QUIESCING DUE TO A SYSTEM LOGGER I/O ERROR. TRANSACTIONAL VSAM MUST COMPLETE THE QUIESCE REQUEST BEFORE THE QUEUED ENABLE COMMAND WILL BE PROCESSED. ENABLE REASON: VARY SMS TRANSACTIONAL VSAM OPERATOR COMMAND.

Explanation: In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW472I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS REJECTED: TRANSACTIONAL VSAM MUST COLD START DUE TO I/O ERROR ON LOGSTREAM. ENABLE REASON: TRANSACTIONAL VSAM DETECTED RRS IS AVAILABLE.

Explanation: In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: After the cold start, any data sets for which recovery was owed are most likely left in a damaged state and need to be recovered manually. If the data sets are forward recoverable, then their forward recovery logs might also be damaged. IBM recommends that you manually recover the data sets (without using forward recovery), take backups of them and of any other data sets that use the forward recovery log, and then delete and redefine the forward recovery log.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW472I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS REJECTED. AN ENABLE COMMAND IS ALREADY QUEUED. TRANSACTIONAL VSAM INSTANCE *TvsName* IS DISABLING DUE TO A SYSTEM LOGGER I/O ERROR. TRANSACTIONAL VSAM MUST COMPLETE THE DISABLE REQUEST BEFORE THE QUEUED ENABLE COMMAND WILL BE PROCESSED. ENABLE REASON: VARY SMS TRANSACTIONAL VSAM OPERATOR COMMAND.

Explanation: In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

IGW472I

Module: IGWSVTV2, IGWSVTV3

IGW472I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS ACCEPTED: TRANSACTIONAL VSAM LOGGER HAD DETECTED AN ENVIRONMENTAL ERROR AND THE OPERATOR HAS ISSUED A DISABLE COMMAND. THE DISABLE PROCESS MUST COMPLETE. ENABLE REASON: TRANSACTIONAL VSAM DETECTED RRS IS AVAILABLE.

Explanation: In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW472I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS REJECTED: TRANSACTIONAL VSAM LOGGER HAD AN ENVIRONMENTAL ERROR. THE DISABLE PROCESS MUST COMPLETE. ENABLE REASON: TRANSACTIONAL VSAM DETECTED RRS IS AVAILABLE.

Explanation: In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW472I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS QUEUED: TRANSACTIONAL VSAM INSTANCE *TvsName* IS DISABLING DUE TO A SYSTEM LOGGER ENVIRONMENTAL ERROR. TRANSACTIONAL VSAM MUST COMPLETE THE DISABLE REQUEST BEFORE THE ENABLE COMMAND WILL BE EXECUTED. ENABLE REASON: VARY SMS TRANSACTIONAL VSAM OPERATOR COMMAND.

Explanation: In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW472I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS QUEUED. TRANSACTIONAL VSAM INSTANCE *TvsName* IS DISABLING DUE TO A SYSTEM LOGGER ENVIRONMENTAL ERROR AND A SYSTEM LOGGER I/O ERROR. TRANSACTIONAL VSAM MUST COMPLETE THE DISABLE REQUEST BEFORE THE ENABLE COMMAND WILL BE EXECUTED. ENABLE REASON: VARY SMS TRANSACTIONAL VSAM OPERATOR COMMAND.

Explanation: In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW472I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS REJECTED. TRANSACTIONAL VSAM INSTANCE *TvsName* IS DISABLING DUE TO A SYSTEM LOGGER ENVIRONMENTAL ERROR. TRANSACTIONAL VSAM MUST COMPLETE THE DISABLE REQUEST BEFORE THE ENABLE COMMAND WILL BE EXECUTED. ENABLE REASON: VARY SMS TRANSACTIONAL VSAM OPERATOR COMMAND.

Explanation: In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW472I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM INSTANCE *TvsName* IS ACCEPTED: TRANSACTIONAL VSAM LOGGER HAD DETECTED AN ENVIRONMENTAL ERROR AND THE OPERATOR HAS ISSUED A DISABLE COMMAND. THE DISABLE PROCESS MUST COMPLETE ENABLE REASON: VARY SMS TRANSACTIONAL VSAM OPERATOR COMMAND

Explanation: In the message text:

TvsName

The name of a DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW473I

IGW473I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM LOGSTREAM
LogStreamName IS ACCEPTED. QUIESCE REASON: VARY SMS TRANSACTIONAL VSAM
OPERATOR COMMAND.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSVTVS, IGWSVTV2, IGWSVTV3

IGW473I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM LOGSTREAM
LogStreamName IS REJECTED. TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS
ALREADY QUIESCING/QUIESCED.

Explanation: The request to quiesce the DFSMStvs log stream *LogStreamName* failed because the log stream is already quiescing or has already been quiesced.

In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSVTVS, IGWSVTV2, IGWSVTV3

IGW473I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM LOGSTREAM
LogStreamName IS REJECTED. TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS
ALREADY DISABLED/DISABLING

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSVTVS, IGWSVTV2, IGWSVTV3

IGW473I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM LOGSTREAM
LogStreamName COMPLETED. TRANSACTIONAL VSAM INSTANCE *TvsName* IS NOW
 QUIESCED. TRANSACTIONAL VSAM LOGSTREAM *UndoLogStreamName* IS NOW QUIESCED.
 TRANSACTIONAL VSAM LOGSTREAM *ShuntLogStreamName* IS NOW QUIESCED.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

TvsName

The name of the DFSMStvs instance.

UndoLogStreamName

The name of the DFSMStvs undo log stream.

ShuntLogStreamName

The name of the DFSMStvs shunt log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

IGW473I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM LOGSTREAM
LogStreamName COMPLETED TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS NOW
 QUIESCED.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSSPR2, IGWSVTVS

IGW473I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM LOGSTREAM
LogStreamName IS ACCEPTED.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSVTVS, IGWSVTV2, IGWSVTV3

IGW473I

IGW473I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM LOGSTREAM
LogStreamName IS REJECTED. TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS
DISABLED.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSVTVS, IGWSVTV2, IGWSVTV3

IGW473I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM LOGSTREAM
LogStreamName IS REJECTED. TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* ALREADY
QUIESCED.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSVTVS, IGWSVTV2, IGWSVTV3

IGW473I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM LOGSTREAM
LogStreamName IS COMPLETED. TRANSACTIONAL VSAM INSTANCE *TvsName* IS NOW
DISABLED. TRANSACTIONAL VSAM LOGSTREAM *UndoLogStreamName* IS NOW DISABLED.
TRANSACTIONAL VSAM LOGSTREAM *ShuntLogStreamName* IS NOW DISABLED.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

TvsName

The name of the DFSMStvs instance.

UndoLogStreamName

The name of the DFSMStvs undo log stream.

ShuntLogStreamName

The name of the DFSMStvs shunt log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSSPR2

IGW473I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM LOGSTREAM
LogStreamName **IS COMPLETED. TRANSACTIONAL VSAM LOGSTREAM** *LogStreamName* **IS NOW DISABLED.**

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSSPR2, IGWSVTVS, IGWSVTV2

IGW473I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM LOGSTREAM
LogStreamName **IS REJECTED. TRANSACTIONAL VSAM LOGSTREAM** *LogStreamName* **IS NOT DEFINED IN THE SYSPLEX.**

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: Correct the name of the log stream and reissue the command.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS, IGWSVTV2, IGWSVTV3

IGW473I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM LOGSTREAM
LogStreamName **IS REJECTED. TRANSACTIONAL VSAM LOGSTREAM** *LogStreamName* **IS NOT DEFINED IN THE SYSPLEX.**

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: Correct the name of the log stream and reissue the command.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS, IGWSVTV2, IGWSVTV3

IGW473I DFSMS VSAM RLS COMMAND PROCESSOR ON SYSTEM: *systemid* IS WAITING FOR A RESPONSE FROM TRANSACTIONAL VSAM: *TvsName* COMMAND REQUESTED: *CommandRequestedState* LOGSTREAM: *LogStreamName*

Explanation: In the message text:

systemid

The name of the z/OS system where the command was issued.

IGW473I

TvsName

The name of the DFSMStvs instance.

CommandRequestState

The command that was issued.

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSCFRL, IGWSVTV2, IGWSVTV3, IGWSSPR2

IGW473I DFSMS VSAM RLS COMMAND PROCESSOR ON SYSTEM: *systemid* HAS BEEN POSTED BY TRANSACTIONAL VSAM *TvsName* COMMAND REQUESTED: *CommandRequestedState*
LOGSTREAM: *LogStreamName*

Explanation: In the message text:

systemid

The name of the z/OS system where the command was issued.

TvsName

The name of the DFSMStvs instance.

CommandRequestedState

The command that was issued.

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSELGE, IGWSQLGE

IGW473I DFSMS VSAM RLS COMMAND PROCESSOR ON SYSTEM: *systemid* HAS CALLED THE DFSMS COMMAND COMPLETE PROCESSOR COMMAND REQUESTED: *CommandRequestedState*
LOGSTREAM: *LogStreamName*

Explanation: In the message text:

systemid

The name of the z/OS system where the command was issued.

CommandRequestedState

The command that was issued.

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSELGE, IGWSQLGE

IGW473I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM LOGSTREAM
LogStreamName **IS ACCEPTED QUIESCE REASON: TRANSACTIONAL VSAM LOGGER**
DETECTED AN I/O ERROR.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: Examine the console log to determine why the system logger is surfacing I/O errors to determine the source of the problem, and correct it.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS, IGWSVTV2, IGWSVTV3

IGW473I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM LOGSTREAM
LogStreamName **IS ACCEPTED QUIESCE REASON: TRANSACTIONAL VSAM LOGGER**
DETECTED AN I/O ERROR * TRANSACTIONAL VSAM COLD START IS REQUIRED *****

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: After the cold start, any data sets for which recovery was owed are most likely left in a damaged state and need to be recovered manually. If the data sets are forward recoverable, then their forward recovery logs might also be damaged. IBM recommends that you manually recover the data sets (without using forward recovery), take backups of them and of any other data sets that use the forward recovery log, and then delete and redefine the forward recovery log.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW473I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM LOGSTREAM
LogStreamName **IS REJECTED. TRANSACTIONAL VSAM IS NOT ACTIVE ON THIS SYSTEM.**

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

IGW473I

Module: IGWSVTVS

IGW473I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM LOGSTREAM
LogStreamName IS REJECTED. TRANSACTIONAL VSAM IS NOT ACTIVE ON THIS SYSTEM.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

IGW473I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM LOGSTREAM
LogStreamName IS ACCEPTED. QUIESCE REASON: SYSTEM LOGGER NOT AVAILABLE FOR IPL.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: Examine the console log for any system logger errors. Then correct the problem with the system logger, and DFSMStvs will restart.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW473I VSAM RLS TRANSACTIONAL VSAM INSTANCE *TvsName* IS NOT AVAILABLE FOR THIS IPL.
QUIESCE REASON: SYSTEM LOGGER NOT AVAILABLE FOR IPL.

Explanation: In the message text:

TvsName

The name of the DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: Examine the console log for any system logger errors. Then correct the problem with the system logger, and DFSMStvs will restart.

Problem determination: None

Source: DFSMSdfp

Module: IGWSSIN3, IGWSSPR2, IGWSVTV2, IGWSVTV3

IGW473I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM LOGSTREAM
LogStreamName IS ACCEPTED QUIESCE REASON: SYSTEM LOGGER INVALID CONNECT
TOKEN

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS, IGWSVTV2, IGWSVTV3

IGW473I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM LOGSTREAM
LogStreamName IS ACCEPTED QUIESCE REASON: SYSTEM LOGGER NOT ACTIVE.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: Examine the console log for any system logger errors. Then correct the problem with the system logger, and DFSMStvs will restart.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW473I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM LOGSTREAM
LogStreamName IS ACCEPTED. QUIESCE REASON: SYSTEM LOGGER IS INITIALIZING.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTV2, IGWSVTV3

IGW473I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM LOGSTREAM
LogStreamName IS ACCEPTED QUIESCE REASON: LOG STREAM NOT AVAILABLE TO SYSTEM
 LOGGER.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: Examine the console log for any log stream errors. Then correct the problem with the log stream, and DFSMStvs will restart.

IGW473I

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS, IGWSVTV2, IGWSVTV3

IGW473I DFSMS VSAM RLS COMMAND PROCESSOR ON SYSTEM: *systemid* IS WAITING FOR A RESPONSE FROM TRANSACTIONAL VSAM *TvsName* COMMAND REQUESTED: DISCONNECT FROM LOGSTREAM *LogStreamName*

Explanation: In the message text:

systemid

The name of the z/OS system where the command was issued.

TvsName

The name of the DFSMStvs instance.

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSSPR2, IGWSVTV2, IGWSVTV3

IGW473I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS REJECTED. TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS DISABLING. TRANSACTIONAL VSAM LOGGER PREVIOUSLY DETECTED AN ENVIRONMENTAL ERROR QUIESCE REASON: TRANSACTIONAL VSAM LOGGER DETECTED AN I/O ERROR.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

IGW473I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS ACCEPTED. TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS DISABLING. TRANSACTIONAL VSAM LOGGER PREVIOUSLY DETECTED AN ENVIRONMENTAL ERROR DISABLE REASON: VARY SMS TRANSACTIONAL VSAM OPERATOR COMMAND.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: Examine the console log for any log stream errors. Then correct the problem with the log stream, and DFSMStvs will restart.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

IGW473I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS ACCEPTED. TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS DISABLING. TRANSACTIONAL VSAM LOGGER PREVIOUSLY DETECTED AN ENVIRONMENTAL ERROR FOR THIS LOGSTREAM AND A SYSTEM LOGGER I/O ERROR. DISABLE REASON: VARY SMS TRANSACTIONAL VSAM OPERATOR COMMAND.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: Examine the console log to determine why the system logger is surfacing I/O errors to determine the source of the problem, and correct it.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

IGW473I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS ACCEPTED. TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS DISABLING. THE OPERATOR HAS ISSUED A DISABLE VARY COMMAND DISABLE REASON: TRANSACTIONAL VSAM DETECTED LOGGER ENVIRONMENTAL ERROR.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: Examine the console log for any system logger errors. Then correct the problem with the system logger, and DFSMStvs will restart.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

IGW473I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS ACCEPTED. TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS DISABLING. TRANSACTIONAL VSAM LOGGER PREVIOUSLY DETECTED AN I/O ERROR AND THE OPERATOR HAS ISSUED A DISABLE VARY COMMAND. DISABLE REASON: TRANSACTIONAL VSAM DETECTED LOGGER ENVIRONMENTAL ERROR.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

IGW473I

System programmer response: Examine the console log to determine why the system logger is surfacing I/O errors to determine the source of the problem, and correct it.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

IGW473I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS REJECTED. TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS DISABLING. TRANSACTIONAL VSAM LOGGER PREVIOUSLY DETECTED AN ENVIRONMENTAL ERROR AND THE OPERATOR HAS ISSUED A DISABLE VARY COMMAND. DISABLE REASON: VARY SMS TRANSACTIONAL VSAM OPERATOR COMMAND.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: Examine the console log for any system logger errors. Then correct the problem with the system logger, and DFSMStvs will restart.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

IGW473I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS REJECTED. TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS DISABLING. TRANSACTIONAL VSAM LOGGER PREVIOUSLY DETECTED AN ENVIRONMENTAL ERROR FOR THIS LOGSTREAM AND A SYSTEM LOGGER I/O ERROR AND THE OPERATOR HAS ISSUED A DISABLE VARY COMMAND. DISABLE REASON: VARY SMS TRANSACTIONAL VSAM OPERATOR COMMAND.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: Examine the console log for any system logger errors. Then correct the problem with the system logger, and DFSMStvs will restart.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

IGW473I DFSMS VSAM RLS REQUEST TO DISABLE TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS REJECTED. TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS DISABLING. TRANSACTIONAL VSAM LOGGER PREVIOUSLY DETECTED A SYSTEM LOGGER I/O ERROR AND THE OPERATOR HAS ISSUED A DISABLE VARY COMMAND. DISABLE REASON: VARY SMS TRANSACTIONAL VSAM OPERATOR COMMAND.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: Examine the console log to determine why the system logger is surfacing I/O errors to determine the source of the problem, and correct it.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

IGW473I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM LOGSTREAM
LogStreamName IS ACCEPTED. TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS
 QUIESCING. THE OPERATOR HAS PREVIOUSLY ISSUED A QUIESCE VARY COMMAND.
 QUIESCE REASON: TRANSACTIONAL VSAM LOGGER DETECTED AN I/O ERROR.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: Examine the console log to determine why the system logger is surfacing I/O errors to determine the source of the problem, and correct it.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

IGW473I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM LOGSTREAM
LogStreamName IS ACCEPTED. TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS
 QUIESCING. TRANSACTIONAL VSAM LOGGER PREVIOUSLY DETECTED AN I/O ERROR
 QUIESCE REASON: VARY SMS TRANSACTIONAL VSAM OPERATOR COMMAND.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: Examine the console log to determine why the system logger is surfacing I/O errors to determine the source of the problem, and correct it.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

IGW473I DFSMS VSAM RLS REQUEST TO QUIESCE TRANSACTIONAL VSAM LOGSTREAM
LogStreamName IS ACCEPTED. TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS
 DISABLING. THE OPERATOR HAS ISSUED A DISABLE VARY COMMAND. QUIESCE REASON:
 TRANSACTIONAL VSAM LOGGER DETECTED AN I/O ERROR.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

IGW474I

Operator response: None

System programmer response: Examine the console log to determine why the system logger is surfacing I/O errors to determine the source of the problem, and correct it.

Problem determination: None

Source: DFSMSsdfp

Module: IGWSVTVS

IGW474I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS COMPLETED. TRANSACTIONAL VSAM INSTANCE *TvsName* IS NOW ENABLED. TRANSACTIONAL VSAM LOGSTREAM *UndoLogStreamName* IS NOW ENABLED. TRANSACTIONAL VSAM LOGSTREAM *ShuntLogStreamName* IS NOW ENABLED. TRANSACTIONAL VSAM *TvsName* WILL NOW ACCEPT NEW WORK.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

TvsName

The name of the DFSMStvs instance.

UndoLogStreamName

The name of the undo log stream.

ShuntLogStreamName

The name of the shunt log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSSPR2

IGW474I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS REJECTED. TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS DISABLING. TRANSACTIONAL VSAM LOGGER PREVIOUSLY DETECTED AN ENVIRONMENTAL ERROR FOR THIS LOGSTREAM. TRANSACTIONAL VSAM MUST COMPLETE THE DISABLE REQUEST BEFORE THE ENABLE COMMAND WILL BE ACCEPTED. ENABLE REASON: VARY SMS TRANSACTIONAL VSAM OPERATOR COMMAND.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSVTVS

IGW474I DFSMS VSAM RLS REQUEST ENABLE TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS REJECTED. TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS NOT QUIESCING/QUIESCED/DISABLED/ DISABLING.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: Examine the console log for any log stream errors. Then correct the problem with the log stream, and DFSMStvs will restart.

Problem determination: None

Source: DFSMSsdfp

Module: IGWSVTVS, IGWSVTV2, IGWSVTV3

IGW474I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS COMPLETED. TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS NOW ENABLED.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSSPR2, IGWSVTVS

IGW474I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS REJECTED. TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS NOT DEFINED IN THE SYSPLEX.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSVTVS, IGWSVTV2, IGWSVTV3

IGW474I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS ACCEPTED.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

IGW474I

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS, IGWSVTV2, IGWSVTV3

IGW474I DFSMS VSAM RLS IS CONNECTING TO TRANSACTIONAL VSAM LOGSTREAM
LogStreamName **SYSTEM NAME:** *systemid* **TRANSACTIONAL VSAM INSTANCE NAME:** *TvsName*

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

systemid

The name of the z/OS system where the DFSMStvs log stream resides.

TvsName

The name of the DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSELGR

IGW474I DFSMS VSAM RLS IS DISCONNECTING FROM TRANSACTIONAL VSAM LOGSTREAM
LogStreamName **SYSTEM NAME:** *systemid* **TRANSACTIONAL VSAM INSTANCE NAME:** *TvsName*

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

systemid

The name of the z/OS system where the DFSMStvs log stream resides.

TvsName

The name of the DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSDFRL, IGWSPEND, IGWSELGR

IGW474I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM LOGSTREAM
LogStreamName **IS REJECTED. TRANSACTIONAL VSAM IS NOT ACTIVE ON THIS SYSTEM.**

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdftp

Module: IGWSVTVS

IGW474I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS NOTED. TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS DISABLING. TRANSACTIONAL VSAM LOGGER PREVIOUSLY DETECTED AN ENVIRONMENTAL ERROR FOR THIS LOGSTREAM AND THE OPERATOR HAS ISSUED A DISABLE VARY COMMAND. TRANSACTIONAL VSAM MUST COMPLETE THE DISABLE REQUEST BEFORE THE ENABLE COMMAND WILL BE ACCEPTED. ENABLE REASON: VARY SMS TRANSACTIONAL VSAM OPERATOR COMMAND.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdftp

Module: IGWSVTVS

IGW474I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS REJECTED. TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS DISABLING. TRANSACTIONAL VSAM LOGGER PREVIOUSLY DETECTED AN ENVIRONMENTAL ERROR FOR THIS LOGSTREAM AND A SYSTEM LOGGER I/O ERROR. TRANSACTIONAL VSAM MUST COMPLETE THE DISABLE REQUEST BEFORE THE ENABLE COMMAND WILL BE ACCEPTED. ENABLE REASON: VARY SMS TRANSACTIONAL VSAM OPERATOR COMMAND.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdftp

Module: IGWSVTVS

IGW474I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS NOTED. TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS DISABLING. TRANSACTIONAL VSAM LOGGER PREVIOUSLY DETECTED AN ENVIRONMENTAL ERROR FOR THIS LOGSTREAM AND A SYSTEM LOGGER I/O ERROR AND THE OPERATOR HAS ISSUED A DISABLE VARY COMMAND. TRANSACTIONAL VSAM MUST COMPLETE THE DISABLE REQUEST BEFORE THE ENABLE COMMAND WILL BE ACCEPTED. ENABLE REASON: VARY SMS TRANSACTIONAL VSAM OPERATOR COMMAND.

IGW474I

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

IGW474I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS REJECTED. TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS QUIESCING. TRANSACTIONAL VSAM LOGGER PREVIOUSLY DETECTED AN I/O ERROR FOR THIS LOGSTREAM. TRANSACTIONAL VSAM MUST COMPLETE THE QUIESCE REQUEST BEFORE THE ENABLE COMMAND WILL BE ACCEPTED. ENABLE REASON: VARY SMS TRANSACTIONAL VSAM OPERATOR COMMAND.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

IGW474I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS NOTED. TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS DISABLING. TRANSACTIONAL VSAM LOGGER PREVIOUSLY DETECTED A SYSTEM LOGGER I/O ERROR AND THE OPERATOR HAS ISSUED A DISABLE VARY COMMAND. TRANSACTIONAL VSAM MUST COMPLETE THE DISABLE REQUEST BEFORE THE ENABLE COMMAND WILL BE ACCEPTED. ENABLE REASON: VARY SMS TRANSACTIONAL VSAM OPERATOR COMMAND.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

IGW474I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS REJECTED. TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS DISABLING. TRANSACTIONAL VSAM LOGGER PREVIOUSLY DETECTED A SYSTEM LOGGER I/O ERROR. TRANSACTIONAL VSAM MUST COMPLETE THE DISABLE REQUEST BEFORE THE ENABLE COMMAND WILL BE ACCEPTED. ENABLE REASON: VARY SMS TRANSACTIONAL VSAM OPERATOR COMMAND.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

IGW474I DFSMS VSAM RLS REQUEST TO ENABLE TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS NOTED. TRANSACTIONAL VSAM LOGSTREAM *LogStreamName* IS QUIESCING. TRANSACTIONAL VSAM LOGGER PREVIOUSLY DETECTED A SYSTEM LOGGER I/O ERROR AND THE OPERATOR HAS ISSUED A QUIESCE VARY COMMAND. TRANSACTIONAL VSAM MUST COMPLETE THE QUIESCE REQUEST BEFORE THE ENABLE COMMAND WILL BE ACCEPTED. ENABLE REASON: VARY SMS TRANSACTIONAL VSAM OPERATOR COMMAND.

Explanation: In the message text:

LogStreamName

The name of the DFSMStvs log stream.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

IGW475I DFSMS VSAM RLS REQUEST TO INITIALIZE TRANSACTIONAL VSAM ON SYSTEM: *systemid* IS WAITING FOR TRANSACTIONAL VSAM PEER RECOVERY WORK TO COMPLETE. TRANSACTIONAL VSAM INSTANCE NAME: *tvname* PEER RECOVERY IS RUNNING ON SYSTEM: *systemid*

Explanation: A request to initialize a DFSMStvs log stream has been made. The request is waiting for peer recovery work to complete on another system.

In the message text:

systemid

The name of a z/OS system.

tvname

The name of the DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

IGW476I

Problem determination: None

Source: DFSMSdfp

Module: IGWSSIN3, IGWSSPR2, IGWSSPR3

IGW476I DFSMS LOCK STRUCTURE REQUEST TO QUIESCE LOCK STRUCTURE IS REJECTED.
STRUCTURE *lockstructurename* IS ALREADY QUIESCING OR QUIESCED.

Explanation: The operator request to quiesce lock structure specified by *lockstructurename* was rejected. The specified lock structure is already being quiesced or has been quiesced.

System action: The system continues processing.

Operator response: Verify the correct lock structure name that is being quiesced.

System programmer response: None. This is an informational message. The lock structure cannot be fully quiesced until all data sets using the lock structure have been closed.

Programmer response: None. This is an informational message.

Source: DFSMS

Module: IGWSRTE5

Routing code: 2,11

IGW476I DFSMS LOCK STRUCTURE REQUEST TO QUIESCE LOCK STRUCTURE IS REJECTED.
STRUCTURE *lockstructurename* IS NOT KNOWN TO SMSVSAM.

Explanation: The operator request to enable lock structure specified by *lockstructurename* was rejected due to the lock structure not being previously accessed by SMSVSAM.

System action: The system continues processing.

Operator response: Specify the correct lock structure name.

System programmer response: None. This is an informational message.

Programmer response: None. This is an informational message.

Source: DFSMS

Module: IGWSRTE5

Routing code: 2,11

IGW476I DFSMS LOCK STRUCTURE REQUEST TO ENABLE STRUCTURE IGWLOCK00 IS REJECTED.
STRUCTURE IGWLOCK00 CANNOT BE QUIESCED.

Explanation: The operator request to quiesce lock structure IGWLOCK00 was rejected. IGWLOCK00 cannot be quiesced.

System action: The system continues processing.

Operator response: Specify a lock structure other than IGWLOCK00.

System programmer response: None. This is an informational message.

Programmer response: None. This is an informational message.

Source: DFSMS

Module: IGWSRTE5

Routing code: 2,11

IGW476I DFSMS REQUEST TO QUIESCE LOCK STRUCTURE *lockstructurename* ACCEPTED. STATUS IS QUIESCING

Explanation: The operator requested that lock structure *lockstructurename* be quiesced. There are data sets currently accessing the lock structure.

System action: The system continues processing. The status of the lock structure transitions to QUIESCED when the last data set that accesses the lock structure releases the lock structure.

Operator response: None. This is an informational message.

System programmer response: None. This is an informational message.

Programmer response: None. This is an informational message.

Source: DFSMS

Module: IGWSRTE5

Routing code: 2,11

IGW476I DFSMS REQUEST TO QUIESCE LOCK STRUCTURE *lockstructurename* ACCEPTED. STATUS IS QUIESCED

Explanation: The operator requested that lock structure *lockstructurename* be quiesced. The lock structure was placed in QUIESCED status. There were no data sets accessing the lock structure.

System action: The system continues processing.

Operator response: None. This is an informational message.

System programmer response: None. This is an informational message.

Programmer response: None. This is an informational message.

Source: DFSMS

Module: IGWSRTE5

Routing code: 2,11

IGW477I DFSMS LOCK STRUCTURE REQUEST TO ENABLE STRUCTURE *lockstructurename* IS COMPLETED. DFSMS LOCK STRUCTURE STATUS = ENABLED

Explanation: The operator request to enable the lock structure specified by *lockstructurename* has completed.

System action: The system continues processing.

Operator response: None.

System programmer response: None. This is an informational message.

Programmer response: None. This is an informational message.

Source: DFSMS

Module: IGWSRTE5

Routing code: 2,11

IGW477I DFSMS LOCK STRUCTURE REQUEST TO ENABLE STRUCTURE *lockstructurename* IS REJECTED. STRUCTURE *lockstructurename* IS NOT KNOWN TO SMSVSAM

Explanation: The operator request to enable lock structure specified by *lockstructurename* was rejected due to the lock structure not being previously accessed by SMSVSAM.

System action: The system continues processing.

Operator response: Specify the correct lock structure name.

System programmer response: None. This is an informational message.

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Programmer response: None. This is an informational message.

Source: DFSMS

Module: IGWSRTE5

Routing code: 2,11

IGW477I DFSMS LOCK STRUCTURE REQUEST TO ENABLE STRUCTURE IGWLOCK00 IS REJECTED.
STRUCTURE IGWLOCK00 IS ALWAYS ENABLED

Explanation: The operator request to quiesce lock structure IGWLOCK00 was rejected. IGWLOCK00 cannot be quiesced.

System action: The system continues processing.

Operator response: Specify a lock structure other than IGWLOCK00.

System programmer response: None. This is an informational message.

Programmer response: None. This is an informational message.

Source: DFSMS

Module: IGWSRTE5

Routing code: 2,11

IGW478A CONNECTION TO LOCK STRUCTURE *lockstructurename* FAILED DUE TO INSUFFICIENT RACF
AUTHORITY. REPLY RESTART OR CANCEL

Explanation: While SMSVSAM was in initialization, it could not connect to *lockstructurename* due to insufficient RACF® authority.

System action: SMSVSAM initialization suspends while waiting for a response.

Operator response: Reply RESTART or R to restart SMSVSAM, or CANCEL or C to terminate SMSVSAM without restarting it. If an incorrect reply is detected, IGW419D will be displayed to prompt for a correct reply.

System programmer response: SMSVSAM needs ALTER permission to *lockstructurename* in RACF. See what level authority SMSVSAM has to *lockstructurename* in RACF and make any necessary changes. See *z/OS MVS Setting Up a Sysplex* for more information.

Programmer response: None.

Source: DFSMS

Module: IGWLNI01

Routing code: 2, 10

IGW500I DFSMS CACHE CONNECT PROTOCOL HAS DETECTED THAT SYSTEM *system_name* IS
ALREADY CONNECTED TO THE DFSMS CACHE STRUCTURE *cache_structure_name* USING RLS
MAX FEATURE LEVEL = Z. DFSMS DATACLAS VALUE SPECIFIED IN KEYWORD
RLSCFCACHE WILL NOT BE USED

Explanation: This system has detected that another system in the sysplex has connected to DFSMS cache structure *cache_structure_name* using a different connection protocol level. With this mix of protocol levels, the SMS data class value RLSCFCACHE will not be honored.

Feature Protocol Level
Meaning

Feature Level = Z

Original state of DFSMS cache connection code. No feature-level processing is performed.

Feature Level = A

Feature-level processing is performed. If all systems in the sysplex are at this level, RLSCFCACHE values are honored.

In the message text:

system_name

The name of the system that has just connected to the DFSMS cache structure.

cache_structure_name

The name of the DFSMS coupling facility cache structure.

System action: The system continues processing.

Operator response: None

System programmer response: None

Source: DFSMSsdfp

Module: IGWSSCN2

IGW500I DFSMS CACHE CONNECT PROTOCOL HAS DETECTED THAT SYSTEM *system_name1* IS ALREADY CONNECTED TO THE DFSMS CACHE STRUCTURE *cache_structure_name* USING RLS MAX FEATURE LEVEL = A. SYSTEM *system_name2* IS CONNECTING WITH FEATURE LEVEL = Z. DFSMS DATACLAS VALUE SPECIFIED IN KEYWORD RLSCFCACHE WILL BE USED. DFSMS CF CACHE STRUCTURES WILL APPEAR QUIESCED FROM SYSTEM *system_name1*

Explanation: This system has detected that another system in the sysplex has connected to DFSMS cache structure *cache_structure_name* using a different connection-protocol level. With this mix of protocol levels, the SMS data class value RLSCFCACHE will be honored.

**Feature Protocol Level
Meaning**

Feature Level = Z

Original state of DFSMS cache connection code. No feature-level processing is performed.

Feature Level = A

Feature-level processing is performed. If all systems in the sysplex are at this level, RLSCFCACHE values are honored.

In the message text:

system_name1

The name of the system already connected to the DFSMS cache structure.

cache_structure_name

The name of the DFSMS coupling facility cache structure.

system_name2

The name of the system that is connecting to the DFSMS cache structure with a different connection-protocol level.

System action: The system continues processing.

Operator response: None

System programmer response: None

Source: DFSMSsdfp

Module: IGWSSCN2

IGW500I DFSMS CACHE CONNECT PROTOCOL HAS DETECTED THAT SYSTEM *system_name* IS USING RLS MAX FEATURE LEVEL = Z. DFSMS DATACLAS VALUE SPECIFIED IN KEYWORD RLSCFCACHE WILL NOT BE USED FOR DFSMS VSAMRLS SPHERES ASSIGNED TO DFSMS CACHE STRUCTURE *cache_structure_name*.

Explanation: This system has detected that another system in the sysplex has connected to DFSMS cache structure *cache_structure_name* using a different connection protocol level. With this mix of protocol levels, the SMS data class value RLSCFCACHE will not be honored.

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Feature Protocol Level Meaning

Feature Level = Z

Original state of DFSMS cache connection code. No feature level-processing is performed.

Feature Level = A

Feature-level processing is performed. If all systems in the sysplex are at this level, RLSCFCACHE values are honored.

In the message text:

system_name

The name of the system that has just connected to the DFSMS cache structure.

cache_structure_name

The name of the DFSMS coupling facility cache structure.

System action: The system continues processing.

Operator response: None

System programmer response: None

Source: DFSMSdfp

Module: IGWSSCN2

IGW500I DFSMS CACHE CONNECTION PROTOCOL HAS DETECTED THAT SYSTEM *system_name* IS ALREADY CONNECTED TO THE DFSMS CACHE STRUCTURE *cache_structure_name* USING RLS MAX FEATURE LEVEL = A. DFSMS DATACLAS VALUE SPECIFIED IN KEYWORD RLSCFCACHE WILL BE USED.

Explanation: This system has detected that another system in the sysplex has connected to DFSMS cache structure *cache_structure_name* using a different connection protocol level. With this mix of protocol levels, the SMS data class value RLSCFCACHE will be honored.

Feature Protocol Level Meaning

Feature Level = Z

Original state of DFSMS cache connection code. No feature-level processing is performed.

Feature Level = A

Feature-level processing is performed. If all systems in the sysplex are at this level, RLSCFCACHE values are honored.

In the message text:

system_name

The name of the system that has just connected to the DFSMS cache structure.

cache_structure_name

The name of the DFSMS coupling facility cache structure.

System action: The system continues processing.

Operator response: None

System programmer response: None

Source: DFSMSdfp

Module: IGWSSCN2

IGW500I DFSMS CACHE CONNECT PROTOCOL HAS DETECTED THAT SYSTEM *system_name* IS USING RLS MAX FEATURE LEVEL = A. DFSMS DATACLAS VALUE SPECIFIED IN KEYWORD RLSCFCACHE WILL BE USED FOR DFSMS VSAMRLS SPHERES ASSIGNED TO DFSMS CACHE STRUCTURE *cache_structure_name*.

Explanation: This system has detected that *system_name* in the sysplex has connected to DFSMS cache structure *cache_structure_name* using RLS MAX FEATURE LEVEL = A. The SMS data class value RLSCFCACHE will be honored.

Feature Protocol Level
Meaning

Feature Level = Z

Original state of DFSMS cache connection code. No feature-level processing is performed.

Feature Level = A

Feature-level processing is performed. If all systems in the sysplex are at this level, RLSCFCACHE values are honored.

In the message text:

system_name

The name of the system that has just connected to the DFSMS cache structure.

cache_structure_name

The name of the DFSMS coupling facility cache structure.

System action: The system continues processing.

Operator response: None

System programmer response: None

Source: DFSMSdfp

Module: IGWSSCN2

IGW500I DFSMS CACHE CONNECT PROTOCOL HAS DETECTED THAT SYSTEM *system_name1* ATTEMPTED TO CHANGE RLS_MAXCFFEATURELEVEL TO 'A'. SYSTEM *system_name2* CAN NOT TOLERATE GREATER THAN 4K CF CACHING. ALTER REQUEST IS REJECTED.

Explanation: An attempt was made to change the SMS PARMLIB keyword Rls_MaxCfFeatureLevel by the SET SMS or SETSMS command. The request was rejected because at least one system in the sysplex cannot perform greater than 4K coupling facility caching.

Feature Protocol Level
Meaning

Feature Level = Z

Original state of DFSMS cache connection code. No feature-level processing is performed.

Feature Level = A

Feature-level processing is performed. If all systems in the sysplex are at this level, RLSCFCACHE values are honored.

In the message text:

system_name1

The name of the system where the SETSMS or SET SMS command was entered.

system_name2

The name of the system that is unable to perform greater than 4K coupling facility caching because the system does not have the code level required to perform greater than 4K caching.

System action: The system continues processing.

Operator response: None

System programmer response: Issue the D SMS,SMSVSAM,ALL command to get a list of all the systems in the

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sysplex and the current feature level that is available on each system.

Source: DFSMSdfp

Module: IGWSSPR2

IGW500I DFSMS CACHE CONNECT PROTOCOL HAS DETECTED THAT RLS_MAXCFFEATURELEVEL IS NOW SET TO 'A'. GREATER THAN 4K CF CACHING IS ACTIVATED.

Explanation: A change to the SMS PARMLIB keyword Rls_MaxCfFeatureLevel was completed by the SET SMS or SETSMS command. DFSMS greater than 4K caching will be in effect for all new VSAM spheres that are opened using VSAM RLS protocols. Feature-level processing is performed. The SMS data class RLSCFCACHE values will be honored.

Feature Protocol Level
Meaning

Feature Level = Z

Original state of DFSMS cache connection code. No feature-level processing is performed.

Feature Level = A

Feature-level processing is performed. If all systems in the sysplex are at this level, RLSCFCACHE values are honored.

System action: The system continues processing.

Operator response: None

System programmer response: Issue the D SMS,SMSVSAM,ALL command to get a list of all the systems in the sysplex and the current feature level that is available on each system.

Source: DFSMSdfp

Module: IGWSSPR2

IGW500I DFSMS CACHE CONNECT PROTOCOL HAS DETECTED THAT RLS_MAXCFFEATURELEVEL IS NOW SET TO 'Z'. GREATER THAN 4K CACHING IS NOT ACTIVE FOR ANY NEW VSAM SPHERES THAT ARE OPENED USING VSAM RLS PROTOCOLS. EXISTING VSAM OPENS USING VSAM RLS PROTOCOLS WILL NOT CACHE DATA GREATER THAN 4K.

Explanation: A change to the SMS PARMLIB keyword Rls_MaxCfFeatureLevel was completed by the SET SMS or SETSMS command. All VSAM spheres using RLS protocols will not cache data that is greater than 4K into the coupling facility.

Feature Protocol Level
Meaning

Feature Level = Z

Original state of DFSMS cache connection code. No feature-level processing is performed.

Feature Level = A

Feature-level processing is performed. If all systems in the sysplex are at this level, RLSCFCACHE values are honored.

System action: The system continues processing.

Operator response: None

System programmer response: Issue the D SMS,SMSVSAM,ALL command to get a list of all the systems in the sysplex and the current feature level that is available on each system.

Source: DFSMSdfp

Module: IGWSSPR2

IGW500I DFSMS CACHE CHARACTERISTICS FOR VSAM COMPONENT NAME: *vsam-name* DFSMS CF CACHE STRUCTURE NAME: *cf-cache-name* CI SIZE: *ci-size* CF CACHING SIZE: *cf-caching-size* DFSMS DATACLASS NAME: *dataclass-name* DFSMS RLSCFCACHE DATACLASS KEYWORD VALUE: *RlsCfCache-value* DFSMS RLSABOVETHEBAR DATACLASS KEYWORD VALUE: *Rls-dataclass-value*

Explanation: The VSAM component is open on this system. The caching characteristics for this component are displayed.

In the message text:

vsam-name

Name of the VSAM component.

cf-cache-name

Name of the DFSMS cache structure which contains this component.

ci-size Control interval size of the VSAM component.

ch-caching-size

Size of data that is cached in the DFSMS coupling facility structure.

dataclass-name

DFSMS data class name associated with VSAM component.

RlsCfCache-value

Value of the DFSMS RLSCFCACHE keyword associated with the specified VSAM component.

Rls-dataclass-value

Value of the DFSMS RlsAboveTheBar keyword associated with the specified VSAM component.

System action: Processing continues.

Operator response: None

Source: DFSMSdfp

IGW500I DFSMS CACHE CONNECT PROTOCOL HAS DETECTED THAT SYSTEM *system_name* ISSUED A SETSMS" OR "SET SMS=" COMMAND ATTEMPTING TO CHANGE RLS_MAXCFFEATURELEVEL TO "Z". THERE ARE VSAM SPHERES ASSIGNED TO CACHES STRUCTURES. THE REQUEST IS REJECTED.

Explanation: An attempt was made to change the SMS PARMLIB keyword RLS_MAXCFFEATURELEVEL by the SET SMS or SETSMS command. The request was rejected because there are VSAM spheres assigned to cache structures.

Feature Protocol Level

Meaning

Feature Level = Z

Original state of DFSMS cache connection code. No feature-level processing is performed.

Feature Level = A

Feature-level processing is performed. If all systems in the sysplex are at this level, RLSCFCACHE values are honored.

In the message text:

system_name

The name of the system where the SET SMS or SETSMS command is entered.

System action: The system continues processing.

Operator response: None

System programmer response: Issue the D SMS,CFCACHE(*) command to identify which cache structures currently have VSAM spheres assigned to them. Close those spheres and reissue the command.

Source: DFSMSdfp

Module: IGWSSPR2

IGW500I DFSMS CACHE OPEN PERFORMANCE MONITOR DETECTED THAT SYSTEM *system_name* REQUIRED *Number_of_re-reads* RE-READS OF THE SCM SPECIAL CACHE PAGE TO GET CACHE BALANCING INFORMATION DFSMS CACHE STRUCTURE NAME: *cache_structure_name*

Explanation: Five or more attempts were needed to update a special cache page that contains access rate statistics of this cache structure. It's because that other systems were trying to update the same cache page concurrently.

In the message text:

system_name

The name of the system that is connected to the DFSMS cache structure.

Number_of_re-reads

The number of attempts required to update the special cache page.

cache_structure_name

The name of the DFSMS coupling facility cache structure.

System action: The system continues processing.

Operator response: Report this message to the System Programmer.

System programmer response: This message is for diagnostic purposes. It indicates that RLS opens might be delayed because of contention on the RLS cache. An excessive number of RLS opens for a particular cache, occurring at the same time, might produce the message. If you find delays in RLS OPEN in conjunction with this message, report the problem to IBM.

Source: DFSMSdfp

Module: IGWSSSCS

IGW501E DFSMS VARY CACHE PROTOCOL HAS DETECTED THAT ANOTHER SYSTEM IN THE SYSPLEX WHICH IS USING CONNECT LEVEL = Z, HAS ATTEMPTED TO VARY CACHE STRUCTURE *cache_structure_name* ENABLED. THE VARY ATTEMPT WILL NOT BE ALLOWED TO COMPLETE. THERE ARE ACTIVE SYSTEMS IN THE SYSPLEX WHICH ARE RUNNING WITH FEATURE LEVEL = A.

Explanation: This system detected that another system in the sysplex issued a V SMS,CFCACHE(XXXX),ENABLE command. The other system, where the command was entered, is at feature level = Z. The VARY ENABLE command will not be allowed to complete. The detecting system in the sysplex is at CONNECT LEVEL = A. This system is honoring the RLSCFCACHE values specified in the SMS data class constructs.

Feature Protocol Level
Meaning

Feature Level = Z

Original state of DFSMS cache connection code. No feature-level processing is performed.

Feature Level = A

Feature-level processing is performed. If all systems in the sysplex are at this level, RLSCFCACHE values are honored.

In the message text:

cache_structure_name

The name of the DFSMS coupling facility cache structure

System action: The system continues processing.

Operator response: None

System programmer response: Add the necessary maintenance to the system connecting to the DFSMS coupling facility cache structure.

Source: DFSMSdfp

Module: IGWSSCN2

IGW518I SMSVSAM COMMAND TO ENABLE A VSAM SPHERE IS REJECTED. QUIESCE EVENT ACTIVE IN THE SYSPLEX FOR SPECIFIED NAME: *dsn*

Explanation: The operator entered the command VARY SMS,SMSVSAM,SPHERE(*dsn*),ENABLE. A quiesce event is currently active in the sysplex. The requested VSAM sphere cannot be enabled for record-level sharing (RLS) access. The SMSVSAM command to enable a VSAM sphere is rejected.

In the message text:

dsn

A data set name.

System action: The command is rejected, and the system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSRTE2

Routing code: 2,10

Descriptor code: -

IGW518I SMSVSAM COMMAND TO QUIESCE A VSAM SPHERE IS REJECTED. QUIESCE EVENT ACTIVE IN THE SYSPLEX. FOR SPECIFIED NAME: *dsn*

Explanation: The SMSVSAM command to quiesce a VSAM sphere is rejected.

In the message text:

dsn

A data set name.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSRTE2

Routing code: 2,10

Descriptor code: -

IGW518I SMSVSAM COMMAND TO QUIESCE A VSAM SPHERE IS STOPPED. AN ENABLE EVENT WAS REQUESTED FOR SPECIFIED NAME: *dsn*

Explanation: The SMSVSAM command to quiesce a VSAM sphere is stopped because an enable event was requested.

In the message text:

dsn

A data set name.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

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Source: DFSMSdfp

Module: IGWSRTE2

Routing code: 2,10

Descriptor code: -

IGW518I SMSVSAM COMMAND TO QUIESCE A VSAM SPHERE IS REJECTED. SPECIFIED SPHERE NAME: *dsn* IS IN USE BY TRANSACTIONAL VSAM.

Explanation: The SMSVSAM command to quiesce a VSAM sphere is rejected because it is in use by DFSMStvs.

In the message text:

dsn

A data set name.

System action: The system continues processing.

Operator response: None

System programmer response: Determine what jobs are currently using DFSMStvs and either cancel them or allow them to complete before reissuing the command.

Problem determination: None

Source: DFSMSdfp

Module: IGWSRTE2

Routing code: 2,10

Descriptor code: -

IGW518I SMSVSAM COMMAND TO QUIESCE A VSAM SPHERE IS REJECTED. SPECIFIED SPHERE NAME: *dsn* IS ALREADY QUIESCED.

Explanation: The SMSVSAM command to quiesce a VSAM sphere is rejected because it is already quiesced.

In the message text:

dsn

A data set name.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSRTE2

Routing code: 2,10

Descriptor code: -

IGW518I SMSVSAM COMMAND TO QUIESCE A VSAM SPHERE IS REJECTED. SPECIFIED SPHERE NAME: *dsn* ACB IS STILL OPEN.

Explanation: The SMSVSAM command to quiesce a VSAM sphere is rejected because the ACB is still open.

In the message text:

dsn

A data set name.

System action: The system continues processing.

Operator response: None
System programmer response: None
Problem determination: None
Source: DFSMSdfp
Module: IGWSRTE2
Routing code: 2,10
Descriptor code: -

IGW518I SMSVSAM COMMAND TO QUIESCE A VSAM SPHERE IS REJECTED. SPECIFIED SPHERE NAME: *dsn* PARAMETER AREA SPECIFIED AN INVALID REQUEST TYPE.

Explanation: The SMSVSAM command to quiesce a VSAM sphere is rejected because the input parameter passed an invalid quiesce request type.

In the message text:

dsn

A data set name.

System action: The system continues processing.

Operator response: None
System programmer response: None
Problem determination: None
Source: DFSMSdfp
Module: IGWSRTE2
Routing code: 2,10
Descriptor code: -

IGW518I SMSVSAM COMMAND TO QUIESCE A VSAM SPHERE DID NOT COMPLETE SUCCESSFULLY FOR SPECIFIED SPHERE NAME: *dsn* THE REQUEST WAS CANCELLED

Explanation: The SMSVSAM command to quiesce a VSAM sphere did not complete. The quiesce request was canceled.

In the message text:

dsn

A data set name.

System action: The system continues processing.

Operator response: None
System programmer response: When DFSMStvs is active, this might be because jobs are using it. Determine what jobs are currently using DFSMStvs and either cancel them or allow them to complete before reissuing the command.
Problem determination: None
Source: DFSMSdfp
Module: IGWSRTE2
Routing code: 2,10
Descriptor code: -

IGW518I

IGW518I SMSVSAM COMMAND TO QUIESCE A VSAM SPHERE IS REJECTED. SPECIFIED SPHERE NAME: *dsn* REQUESTED DATA SET IS MIGRATED.

Explanation: The SMSVSAM command to quiesce a VSAM sphere is rejected because the requested data set was migrated from DASD.

In the message text:

dsn

A data set name.

System action: The system continues processing.

Operator response: None

System programmer response: Recall the data set and reissue the command.

Problem determination: None

Source: DFSMSdfp

Module: IGWSRTE2

Routing code: 2,10

Descriptor code: -

IGW518I SMSVSAM COMMAND TO QUIESCE A VSAM SPHERE IS REJECTED. SPECIFIED SPHERE NAME: *dsn* CATALOG LOCATE COMMAND FAILED.

Explanation: The SMSVAM command to quiesce a VSAM sphere was rejected because the CATALOG LOCATE command failed.

In the message text:

dsn

A data set name.

System action: The system continues processing.

Operator response: None

System programmer response: Examine the job log and console log for any messages that indicate why the CATALOG LOCATE command might have failed, and correct the problem.

Problem determination: None

Source: DFSMSdfp

Module: IGWSRTE2

Routing code: 2,10

Descriptor code: -

IGW518I SMSVSAM COMMAND TO QUIESCE A VSAM SPHERE IS REJECTED. SPECIFIED SPHERE NAME: *dsn* NOT AN SMS MANAGED DATA SET.

Explanation: The SMSVSAM command to quiesce a VSAM sphere is rejected because the requested data set is not managed by SMS.

In the message text:

dsn

A data set name.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp
Module: IGWSRTE2
Routing code: 2,10
Descriptor code: -

IGW518I SMSVSAM COMMAND TO QUIESCE A VSAM SPHERE IS REJECTED. SPECIFIED SPHERE NAME: *dsn* DFSMS VSAM RLS INTERNAL SEQUENCE ERROR DETECTED

Explanation: The SMSVSAM command to quiesce a VSAM sphere is rejected because DFSMS detected an internal sequence error when processing the quiesce request.

In the message text:

dsn

A data set name.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSRTE2

Routing code: 2,10

Descriptor code: -

IGW519I SMSVSAM COMMAND TO ENABLE A VSAM SPHERE IS REJECTED. SPECIFIED NAME: *dsn* IS NOT THE NAME OF A VSAM SPHERE.

Explanation: The operator entered the command VARY SMS,SMSVSAM,SPHERE(*dsn*),ENABLE. The requested VSAM name (*dsn*) is not the name of a VSAM sphere. The SMSVSAM command to enable a VSAM sphere is rejected because the command specified an incorrect VSAM sphere name.

In the message text:

dsn

A data set name.

System action: The command is rejected, and the system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSRTE2

Routing code: 2,10

Descriptor code: -

IGW519I SMSVSAM COMMAND TO QUIESCE A VSAM SPHERE IS REJECTED. SPECIFIED NAME: *dsn* IS NOT THE NAME OF A VSAM SPHERE.

Explanation: The SMSVSAM command to quiesce a VSAM sphere is rejected because the command specified an incorrect VSAM sphere name.

In the message text:

IGW521I

dsn

A data set name.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Routing code: 2,10

Descriptor code: -

IGW521I SMSVSAM COMMAND TO ENABLE A VSAM SPHERE IS REJECTED. SPECIFIED VSAM SPHERE NAME: *dsn* IS NOT FOUND IN THE CATALOG.

Explanation: The operator entered the command VARY SMS,SMSVSAM,SPHERE(*dsn*),ENABLE. The requested VSAM sphere name (*dsn*) was not found in the catalog. The SMSVSAM command to enable a VSAM sphere is rejected because the sphere name is not found in the catalog.

In the message text:

dsn

A data set name.

System action: The command is rejected, and the system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSRTE2

Routing code: 2, 10

Descriptor code: -

IGW521I SMSVSAM COMMAND TO QUIESCE A VSAM SPHERE IS REJECTED. SPECIFIED VSAM SPHERE NAME: *dsn* IS NOT FOUND IN THE CATALOG.

Explanation: The SMSVSAM command to quiesce a VSAM sphere is rejected because it is not found in the catalog.

In the message text:

dsn

A data set name.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSRTE2

Routing code: 2, 10

Descriptor code: -

IGW522I SMSVSAM ENABLE REQUEST FOR SPHERE *dsn* IS COMPLETED.

Explanation: The operator entered the VARY SMS,SMSVSAM,SPHERE(*dsn*),ENABLE command, specifying a VSAM sphere that was quiesced for VSAM record-level sharing (RLS) access. This command has reset the quiesce state for the VSAM sphere. The specified sphere is now available for VSAM RLS access. The SMSVSAM enable request for sphere is completed.

In the message text:

dsn

A data set name.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSRTE2

Routing code: 2, 10

Descriptor code: -

IGW522I SMSVSAM QUIESCE REQUEST FOR SPHERE *dsn* IS COMPLETED.

Explanation: The SMSVSAM quiesce request for sphere is completed.

In the message text:

dsn

A data set name.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSRTE2

Routing code: 2, 10

Descriptor code: -

IGW523A *xx* SMSVSAM FALLBACK HAS BEEN REQUESTED. REPLY 'CANCEL' TO ABORT, 'FALLBACKSMSVSAMYES' TO PROCEED.

Explanation: The operator has entered the command VARY SMS,SMSVSAM,FALLBACK. This command is used to completely fall back from VSAM RLS processing. This is the final step in the VSAM RLS fallback procedure, documented in *z/OS DFSMSdfp Storage Administration*.

In the message text:

xx Standard MVS reply number associated with the message. This is required when responding to this message (e.g., R *xx*,CANCEL).

System action: The system waits for the operator response.

Operator response: If you issued this command in error, reply CANCEL.

Expected responses are:

CANCEL

The FALLBACK command will be aborted.

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FALLBACKSMSVSAMYES

VSAM RLS fallback processing will begin.

Attention: Do not enter this response unless directed to do so by the storage administrator. All previous steps for fallback must have completed successfully.

Source: DFSMSdfp

Module: IGWSMSMS

IGW524I SMSVSAM FALLBACK PROCESSING IS NOW COMPLETE.

Explanation: The system has successfully fallen back from VSAM record-level sharing (RLS) services.

System action: The system continues processing, but VSAM RLS processing is not available.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSMSMS

IGW525I SMSVSAM FALLBACK COMMAND REJECTED. RETURN CODE *rc* REASON CODE: *rsnc* CALLED SERVICE RETURN CODE *rc2* CALLED SERVICE REASON CODE *rsnc2*

Explanation: The system attempted to fall back from VSAM record-level sharing (RLS) services but was unsuccessful.

In the message text:

rc The return code.

rsnc
The reason code.

rc2
The called service return code.

rsnc2
The called service reason code.

System action: The system continues processing.

Operator response: None

System programmer response: See *z/OS DFSMSdfs Administration Guide* for the meaning of the return and reason codes.

Problem determination: None

Source: DFSMSdfp

Module: IGWSMSMS

IGW526A *xx* SMSVSAM DELETE LOCK STRUCTURE REQUESTED. REPLY 'CANCEL' TO ABORT, 'FORCEDELETELOCKSTRUCTURESMSVSAMYES' TO PROCEED

Explanation: The operator entered VARY SMS,SMSVSAM,FORCEDELETELOCKSTRUCTURE. This command deletes all connections to the SMSVSAM lock structure and then deletes the lock structure.

In the message text:

xx Standard MVS reply number associated with the message. This is required when responding to this message (e.g., R *xx*,CANCEL).

System action: The system waits for the operator response.

Operator response: If you issued this command in error, reply CANCEL.

Expected responses are:

CANCEL**FORCEDELETELOCKSTRUCTURESMSVSAMYES**

The FORCEDELETELOCKSTRUCTURE command will be aborted.

Attention: Do not enter this response unless directed to do so by the storage administrator.

The SMSVSAM lock structure force delete processing will begin. This requires that the SMSVSAM address space is not active on any system in the sysplex.

To shut down the SMSVSAM address space on all systems in the sysplex, enter ROUTE *ALL,VARY SMS,SMSVSAM,TERMINATESERVER.

Source: DFSMSdfp

Module: IGWSMSMS

IGW526A SMSVSAM DELETE LOCK STRUCTURE REQUESTED. REPLY 'CANCEL' OR 'FORCEDELETELOCKSTRUCTURESMSVSAMYES' TO DELETE IGWLOCK00

Explanation: The operator entered VARY SMS,SMSVSAM,FORCEDELETELOCKSTRUCTURE. This command deletes all connections to the SMSVSAM lock structure and then deletes the lock structure.

System action: The system waits for the operator response.

Operator response: If you issued this command in error, reply CANCEL.

Expected responses are:

CANCEL

The FORCEDELETELOCKSTRUCTURE command is aborted.

FORCEDELETELOCKSTRUCTURESMSVSAMYES

Attention: Do not enter this response unless directed to do so by the storage administrator.

The force delete processing of the SMSVSAM lock structure begins. This requires that the SMSVSAM address space is not active on any system in the sysplex.

To shut down the SMSVSAM address space on all systems in the sysplex, enter ROUTE *ALL,VARY SMS,SMSVSAM,TERMINATESERVER.

System programmer response: None. This is an informational message.

Programmer response: None. This is an informational message.

Source: DFSMS

Module: IGWSRTE5

Routing code: 2,11

Descriptor code: 6

IGW527I SMSVSAM FORCE DELETE LOCK STRUCTURE PROCESSING IS NOW COMPLETE.

Explanation: The operator issued a command to force a deletion of the VSAM record-level sharing (RLS) lock structure. That command completed successfully, and the SMSVSAM lock structure is no longer allocated.

System action: The system continues processing, but VSAM RLS processing is not available until a new lock structure is defined. In addition, lost locks recovery must be completed for any data sets that had retained locks at the time the locks structure was deleted.

Operator response: None

System programmer response: Redefine the lock structure and reenables VSAM RLS processing.

Problem determination: None

Source: DFSMSdfp

Module: IGWSMSMS

IGW528I

IGW528I SMSVSAM FORCE DELETE LOCK STRUCTURE COMMAND REJECTED. RETURN CODE *rc*
REASON CODE: *rsnc* CALLED SERVICE RETURN CODE *rc2* CALLED SERVICE REASON CODE
rsnc2

Explanation: The operator issued a command to force a deletion of the VSAM record-level sharing (RLS) lock structure. That command did not complete successfully and was rejected for the indicated reason.

In the message text:

rc The return code.

rsnc
The reason code.

rc2
The called service return code.

rsnc2
The called service reason code.

System action: The system continues processing.

Operator response: None

System programmer response: See *z/OS DFSMSdfs Administration Guide* for the meaning of the return and reason codes.

Problem determination: None

Source: DFSMSdfp

Module: IGWSMSMS

IGW528I SMSVSAM FORCE DELETE LOCK STRUCTURE COMMAND REJECTED: REASON CODE (hex) *rc*

Explanation: The operator entered a VARY SMS,SMSVSAM,FORCEDELETELOCKSTRUCTURE command. The command was rejected because a duplexing rebuild was in progress for the structure.

In the message text:

rc The reason code from XES after the IXLFORCE request.

System action: The command is rejected.

Operator response: Wait until the duplexing process completes, and then retry the command.

System programmer response: Do not issue the command while a duplexing rebuild is still in progress.

Source: DFSMSdfp

Module: IGWSMSMS

IGW528I SMSVSAM FORCE DELETE LOCK STRUCTURE COMMAND PENDING: REASON CODE (hex) *rc*

Explanation: The operator entered a VARY SMS,SMSVSAM,FORCEDELETELOCKSTRUCTURE or VARY SMS,SMSVSAM,FALLBACK command. The command was accepted, but IXLFORCE returned a reason code indicating that the actual deletion of the LOCK STRUCTURE is pending and will be completed at a later time.

In the message text:

rc The reason code from XES after the IXLFORCE request.

System action: The command is accepted. The structure will be deleted at a later time.

Operator response: Verify that the structure is actually deleted before attempting any actions that depend on the deletion.

System programmer response: Verify that the structure is actually deleted before attempting any actions that depend on the deletion.

Source: DFSMSdfp

Module: IGWSMSMS

IGW530I DFSMS CF STRUCTURES *text*

Explanation: In the message, *text* is:

```
DFSMS CF CACHE STRUCTURE TO SYSTEM CONNECTIVITY
SYSTEM          ==>00000000011111111122222222333
IDENTIFIER      ==>12345678901234567890123456789012

cfstructure 1   sssssssssssssssssssssssssssssss
                :
cfstructure n   sssssssssssssssssssssssssssssss

SYSTEM 1 = sysname SYSTEM 2 = sysname SYSTEM 3 = sysname
SYSTEM 4 = sysname SYSTEM 5 = sysname SYSTEM 6 = sysname
...
SYSTEM 31 = sysname SYSTEM 32 = sysname

DFSMS CF CACHE STRUCTURE STATUS:
cfstructure 1   = structurestatus
...
cfstructure n   = structurestatus
```

The operator entered the command DISPLAY SMS,CFCACHE(*) or DISPLAY SMS,CFCACHE(*cfstructure*). If *cfstructure* is specified, then only information about the specified structure will be returned. DFSMS CF CACHE STRUCTURE NAME and SYSTEM connectivity information is displayed.

A horizontal list of all SYSTEMs defined in the SYSPLEX are compared with a vertical list of all DFSMS CF CACHE structures known. If more than 32 SYSTEMs exist, additional SYSTEM lists are displayed.

In the message text:

```
cfstructure
Names of the DFSMS CF Cache structures in the SYSPLEX

s The status of the DFSMS CF CACHE STRUCTURE with respect to the MVS systems defined in the SYSPLEX. s
  can be:

.      No active connection to the MVS system.
+      Active connection to the MVS system.
```

structurestatus

The following DFSMS CF CACHE STATES are valid:

CF_ENABLED

Normal state.

CF_QUIESING

No new connections are allowed. No new VSAM RLS opens will place data in this DFSMS CF CACHE.

CF_QUIESED

This structure does not have any VSAM RLS data.

REBUILDING

This DFSMS CF CACHE structure is currently being rebuilt. New connections may have to wait until the rebuild process is completed.

sysname

MVS system name. The SYSTEM names correspond to the SYSTEM names defined in the CVT.

System action: Command accepted

Operator response: None

System programmer response: None

Source: DFSMSdfp

IGW531I

Module: IGWSDISP

Routing code: 2,10

Descriptor code: 5,8,9

IGW531I DISPLAY DFSMS CF STRUCTURES

Explanation:

VOLUME = *valid*

DFP VOLUME CF STATUS: *volume_cf_status*

**VOLUME *valid* IS NOT BOUND TO ANY
DFSMS CF CACHE STRUCTURE**

cfstructure1 = *structurestatus*

...

*cfstructure*n** = *structurestatus*

The operator entered the DISPLAY SMS,CFVOL(*valid*) command. All the DFSMS CF CACHE STRUCTURES which contain data for the specified *valid* are displayed.

If the volume specified does not have affiliation to ANY DFSMS CF CACHE structure then the line 'VOLUME *valid* IS NOT BOUND TO ANY DFSMS CF CACHE STRUCTURE' is presented, otherwise, a list of the current DFSMS CF CACHE STRUCTURES and their states are displayed.

Variables in the message text and their meaning are described below.

In the message text:

cfstructure

Names of the DFSMS CF CACHE STRUCTURES in the SYSPLEX which have data for the specified volume.

structurestatus

The current state of the DFSMS CF CACHE STRUCTURE.

CF_ENABLED.

Normal state. The DFSMS CF CACHE structure is operating under normal conditions.

REBUILDING

This state indicates that the structure is currently being rebuilt. New connections to the structure may have to wait until the rebuild operation is completed.

CF_QUIESING

No new VSAM RLS opens are allowed to place data in this structure.

valid

Specified volume identifier

volume_cf_status

- CF_ENABLED
- CF_QUIESING
- CF_QUIESED

System action: Command accepted, system continues to run.

Source: DFSMSdfp

Module: IGWSDISP

Routing code: 2,10

Descriptor code: 5,8,9

IGW540I *text*

Explanation: This message is generated when the D SMS,SMSVSAM,QUIESCE operator command is entered. This command will display the status of *all* VSAM spheres that are opened for VSAM/RLS processing and are being QUIESCED.

This command reports information *only* on the command where the command is being entered.

If the SMSVSAM server address space is not active, message IGW451I is returned.

This message has 5 variations.

Variation 1 is displayed when the SMSVSAM address space has partially completed initialization, but the code to handle QUIESCE has not been completely initialized:

```
IGW540I hh.mm.ss DISPLAY SMS,SMSVSAM,QUIESCE
DISPLAY SMSVSAM QUIESCE SPHERE IS REJECTED.
QUIESCE INITIALIZATION HAS NOT COMPLETED.
```

Variation 2 is displayed when there is not quiesce activity currently active on the system where the quiesce command was entered:

```
IGW540I hh.mm.ss DISPLAY SMS,SMSVSAM,QUIESCE
DISPLAY SMSVSAM QUIESCE SPHERE IS REJECTED.
NO QUIESCE EVENTS ARE ACTIVE ON THIS SYSTEM.
```

Variation 3 is displayed when the command is not able to get the correct quiesce serialization:

```
IGW540I hh.mm.ss DISPLAY SMS,SMSVSAM,QUIESCE
DISPLAY SMSVSAM QUIESCE SPHERE IS REJECTED.
UNABLE TO OBTAIN REQUIRED QUIESCE SERIALIZATION.
```

Variation 4 is displayed when there are quiesce events active:

```
IGW540I hh.mm.ss DISPLAY SMS,SMSVSAM,QUIESCE
SPHERE NAME: yyyyyyyy.yyyyyyyy.yyyyyyyy
SYSTEM NAME: ssssssss START TIME: hh.mm.ss TOTAL ELAPSE TIME: hh.mm.ss
```

```
PARTICIPATING SUB-SYSTEM STATUS: SCHEDULED: COMPLETED: ELAPSE:
SUB-SYSTEM NAME: aaaaaaaa hh.ss.mm hh.ss.mm hh.ss.mm
SUB-SYSTEM NAME: aaaaaaaa hh.ss.mm hh.ss.mm hh.ss.mm
```

```
SPHERE NAME: yyyyyyyy.yyyyyyyy.yyyyyyyy
SYSTEM NAME: SYSTEM1 START TIME: hh.mm.ss TOTAL ELAPSE TIME: hh.mm.ss
```

```
PARTICIPATING SUB-SYSTEM STATUS: SCHEDULED: COMPLETED: ELAPSE:
SUB-SYSTEM NAME: aaaaaaaa hh.ss.mm hh.ss.mm hh.ss.mm
SUB-SYSTEM NAME: aaaaaaaa hh.ss.mm hh.ss.mm hh.ss.mm
```

In the message text:

hh.mm.ss

The time in hours (00-23), in minutes (00-59), and seconds (00-59).

sssssss The MVS system name.

yyyyyyyy

The sphere name.

aaaaaaa

The sub-system name that is processing the quiesce request.

START TIME is the time that system *sssssss* started processing the quiesce sphere event for sphere *yyyyyyyy.yyyyyyyy.yyyyyyyy.yyyyyyyy*.

TOTAL ELAPSE TIME is the total time that has elapsed since system *sssssss* started processing the quiesce sphere event for sphere *yyyyyyyy.yyyyyyyy.yyyyyyyy.yyyyyyyy*.

SCHEDULED is the time that the quiesce event was started on this system for sub-system *aaaaaaa*.

IGW570I • IGW571I

| **COMPLETED** is the time that sub-system *aaaaaaaa* completed the quiesce event. If the sub-system has not completed
| the quiesce event, the **COMPLETED** field will show *--.--.--*).

ELAPSE is the time interval that sub-system *aaaaaaaa* required to complete the quiesce request.

If more than 200 lines of display information is generated from the command, then the following two lines will be placed at the bottom of the display to indicate that more information is available for display:

```
***** MORE QUIESCE SPHERE DATA *****  
***** RESPOND TO IGW540A MESSAGE *****
```

Variation 5 is the action message that is presented when there is still more data available to the display; this is a **WTOR**:

```
*67 IGW540A SMSVSAM DISPLAY QUIESCE HAS REACHED WTOR MAXIMUM.  
REPLY 'CONTINUE' TO PROCEED, OR 'END' TO STOP DISPLAY.
```

If the operator responds 'CONTINUE', then 200 more lines of the display will be presented. If the operator responds 'END', then the command will be completed and no more action is required.

The IGW540A message is *only* presented when the bottom of the display contains the **MORE QUIESCE SPHERE DATA** lines.

System action: Processing continues.

Operator response: Present the output to the system programmer to determine if an excessive amount of time has elapsed since the quiesce sphere event has started.

System programmer response: Reply 'CONTINUE' to allow the display command to present the next 200 lines of output, or 'END' to have the display command to end.

Source: IGWSTMSG

IGW570I **SMSVSAM ADDRESS SPACE HAS DETECTED A VARY OFFLINE, FORCE COMMAND FOR VOLUME *volser*. SMSVSAM PURGE PROCESSING HAS BEEN INITIATED.**

Explanation: A volume was varied offline using the force option. All SMSVSAM knowledge of this volume will be purged from this system.

Message IGW571I will be presented when the purge process is completed.

In the message text:

```
volser  
Six-character volume identifier
```

System action: The system continues to operate.

Source: DFSMSdfp

Module: IGWMSG, IGWSRTE2

Routing code: 2,10

Descriptor code: -

IGW571I **SMSVSAM PURGE PROCESSING HAS BEEN COMPLETED FOR VOLUME *volser*. ALL KNOWLEDGE OF THIS VOLUME HAS BEEN REMOVED FROM THE SMSVSAM ADDRESS SPACE ON SYSTEM: *system*.**

Explanation: The operator has varied the volume offline using the FORCE option. This volume has no data in any SMSVSAM CACHE structures.

In the message text:

```
volser  
Six-character volume identifier
```

system

The eight-character system name.

System action: System continues to process.

Operator response: Notify the system programmer of the condition.

Source: DFSMSdfp

Module: IGWSGMSG, IGWSRTE2

Routing code: 2,10

Descriptor code: -

```
IGW572I  {REQUEST TO TERMINATE SMSVSAM ADDRESS SPACE IS REJECTED:
          SMSVSAM SERVER IS WAITING  REPLY TO IGW418D MESSAGE
          --or--
          REQUEST TO TERMINATE SMSVSAM ADDRESS SPACE IS REJECTED:
          SMSVSAM SERVER IS NOT ACTIVE
          --or--
          REQUEST TO TERMINATE SMSVSAM ADDRESS SPACE IS REJECTED:
          SERVER TERMINATION IS IN PROGRESS
          --or--
          REQUEST TO TERMINATE SMSVSAM ADDRESS SPACE IS ACCEPTED:
          SMSVSAM SERVER TERMINATION SCHEDULED}
```

Explanation: The operator has issued the command VARY SMS,SMSVSAM,TERMINATESERVER. This forces a shutdown of the SMSVSAM server and prevents it from restarting automatically.

System action: The system continues processing.

Operator response: Notify the system programmer if termination is unsuccessful.

Source: DFSMSdfp

Module: IGWSMSMS

```
IGW580I  UNEXPECTED ERROR DURING SMSVSAM PROCESSING.
          MODULE WHICH DETECTEDTHE ERROR: errmodnm.
          RETURN CODE (HEX)=return-code
          REASON CODE (HEX)=reason-code
          CALLED MODULE INFORMATON: callernm
          RETURN CODE (HEX)=return-code
          REASON CODE (HEX)=reason-code
```

Explanation: An unexpected error occurred during DFSMS SMSVSAM processing. The variables in the message text and their meanings follow:

In the message text:

errmodnm

The name of the module that was called when the error occurred.

return-code

The return code returned from *errmodnm*

reason-code

The reason code returned from *errmodnm*

callernm

The name of the module that detected this error.

System action: The system terminates the request.

Programmer response: Use the message and text and SYS1.LOGREC and SYS1.DUMPn for information about the error that occurred. Refer to the *z/OS DFSMSdfp Diagnosis* for an explanation of the reason code and return code.

Source: DFSMSdfp

IGW581I • IGW583I

Module: IGWMBCLD, IGWMCCAC, IGWMCCOM, IGWMCLD2, IGWMC OCD, IGWMCODS, IGWMCOLD, IGWMCOLP, IGWMCSPH, IGWMDCAC, IGWMDICD, IGWMDIDS, IGWMDSPH, IGWMIMMF, IGWMINSC, IGWMM64S, IGWMOACB, IGWMOBCD, IGWMONDS, IGWMOND2, IGWMO64S, IGWMPRME, IGWMPRMP, IGWMPROP, IGWMREQE, IGWMREQP, IGWMRSPE, IGWMRTE3, IGWMTEST, IGWMUPCD, IGWMUSWT, IGWMWREL, IGWSCFTM, IGWSCFTX, IGWSDISP, IGWSESMF, IGWSESMS, IGWSEVEX, IGWSGMSG, IGWSOBPD, IGWSRBLD, IGWSRBL2, IGWSRDPD, IGWSRTE2, IGWSRTE3, IGWSRTE4, IGWSSCAN, IGWSSCN1, IGWSSCN2, IGWSSCN3, IGWSSCN4, IGWSSDCN, IGWSSICS, IGWSSINT, IGWSSIN2, IGWSSNOM, IGWSSPRM, IGWSSPR2, IGWSSSCS, IGWSTRBD, IGWSTRB2, IGWSXREQ, IGWSXRQP, IGWSXRSP

Routing code: 2,10

Descriptor code: -

IGW581I TRANSACTIONAL VSAM WAS UNABLE TO REGISTER FOR AUTOMATIC RESTART. RETURN CODE (HEX) *rc* REASON CODE (HEX) *rsnc* CALLED SERVICE RETURN CODE *rc2* CALLED SERVICE REASON CODE *rcsn2*

Explanation: During DFSMStvs initialization, DFSMStvs attempted to register with automatic restart manager (ARM) for automatic restart in the event of a system failure. The registration attempt was unsuccessful.

In the message text:

rc The IXCARM register return code.

rsnc

The IXCARM register reason code.

System action: The system continues processing.

Operator response: None

System programmer response: See the information about the IXCARM macro in *z/OS MVS Programming: Sysplex Services Reference* for the meaning of the return and reason codes.

Problem determination: None

Source: DFSMSdfp

Module: IGWSMSMS

IGW582I TRANSACTIONAL VSAM SUCCESSFULLY REGISTERED FOR AUTOMATIC RESTART.

Explanation: During DFSMStvs initialization, DFSMStvs successfully registered with automatic restart manager (ARM) for automatic restart in the event of a system failure.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSMSMS

IGW583I THE FUNCTION TO MONITOR RECORD TABLE HAS BEEN LOST. STATISTICS GATHERING FOR CF LOCK STRUCTURE HAS STOPPED DUE TO AN INTERNAL RLS ERROR.

Explanation: Due to the prior ABEND in SMSVSAM address space, this system is unable to monitor the record table and gather statistics for CF lock structure until the next instance of SMSVSAM is active.

System action: System continues processing. Contact the IBM Support Center to report the previous ABEND.

System programmer response: Recycle SMSVSAM server to resume previous functionality.

Source: DFSMSdfp

Module: IGWSSSCS

IGW583I THE FUNCTION TO MONITOR CACHE VOLUME QUIESCE STATE HAS BEEN LOST. CACHE VOLUME WILL NOT BE ABLE TO GO FROM CF_QUIESCING TO CF_QUIESCED DUE TO AN INTERNAL RLS ERROR.

Explanation: Due to the prior ABEND in SMSVSAM address space, this system is unable to determine when a cache or a volume is fully quiesced until the next instance of SMSVSAM is active.

System action: System continues processing. Contact the IBM Support Center to report the previous ABEND.

System programmer response: Recycle SMSVSAM server to resume previous functionality.

Source: DFSMSdfp

Module: IGWSSSCS

IGW583I THE FUNCTION TO ADJUST CF DIRECTORY TO ELEMENT RATIO HAS BEEN LOST. UPDATE FOR CF D/E RATIO HAS STOPPED DUE TO AN INTERNAL RLS ERROR. CACHE STRUCTURE NAME: *cache structure name*.

Explanation: Due to the prior ABEND in SMSVSAM address space, this system is unable to adjust the CF directory to element ratio in the CACHE STRUCTURE NAME *cache structure name* nor update the CF D/E ratio until the next instance of SMSVSAM is active.

In the message text:

cache structure name

The name of the DFSMS coupling facility cache structure.

System action: System continues processing. Contact the IBM Support Center to report the previous ABEND.

System programmer response: Recycle SMSVSAM server to resume previous functionality.

Source: DFSMSdfp

Module: IGWSRDPD

IGW583I THE FUNCTION TO HANDLE CF_TIME EVENT HAS BEEN LOST. UNABLE TO USE CF_TIMER TO INVOKE SMF42 GATHERING DUE TO AN INTERNAL RLS ERROR.

Explanation: Due to the prior ABEND in SMSVSAM address space, this system is unable to gather SMF42 records when SMF_TIME is NO until the next instance of SMSVSAM is active.

System action: System continues processing. Contact the IBM Support Center to report the previous ABEND.

System programmer response: Recycle SMSVSAM server to resume previous functionality.

Source: DFSMSdfp

Module: IGWSCFTM

IGW583I UNABLE TO PROCESS CHANGES MADE FROM SMS CONFIGURATION DUE TO AN INTERNAL RLS ERROR.

Explanation: Due to the prior ABEND in SMSVSAM address space, this system is unable to process changes made from the SMS configuration.

System action: System continues processing. Contact the IBM Support Center to report the previous ABEND.

System programmer response: If problem persists, recycle SMSVSAM server to resume previous functionality.

Source: DFSMSdfp

Module: IGWSESMS

IGW583I

IGW583I UNABLE TO HANDLE LOGGER EVENT DUE TO AN INTERNAL RLS ERROR.

Explanation: Due to the prior ABEND in SMSVSAM address space, this system is unable to handle the logger event.

System action: System will continue processing. Contact the IBM Support Center to report the previous ABEND.

System programmer response: If problem persists, recycle SMSVSAM server to resume previous functionality.

Source: DFSMSdfp

Module: IGWSELGR

IGW583I THE FUNCTION TO GATHER CF CACHE STATISTICS HAS BEEN LOST. CACHE SELECTION FOR SPHERE ASSIGNMENT MAY NOT BE OPTIMAL DUE TO AN INTERNAL RLS ERROR. CACHE STRUCTURE NAME: *cache structure name*.

Explanation: Due to the prior ABEND in SMSVSAM address space, this system is unable to gather CF cache statistics in the CACHE STRUCTURE NAME *cache structure name*. The cache selection for sphere assignment might not be optimal until the next instance of SMSVSAM is active.

In the message text:

cache structure name

The name of the DFSMS coupling facility cache structure.

System action: System continues processing. Contact the IBM Support Center to report the previous ABEND.

System programmer response: Recycle SMSVSAM server to resume previous functionality.

Source: DFSMSdfp

Module: IGWSSSCS

IGW583I UNABLE TO RECONNECT ANY DFSMS CF CACHES THAT HAVE BEEN PREVIOUSLY DISCONNECTED DUE TO AN INTERNAL RLS ERROR.

Explanation: An unexpected error occurred while connecting a DFSMS CF cache.

System action: System continues processing.

System programmer response: If problem persists, recycle SMSVSAM server to resume previous functionality.

Source: DFSMSdfp

Module: IGWSSCAN

IGW583I UNABLE TO COMPLETE CONNECTION TO DFSMS CACHE STRUCTURE DUE TO AN INTERNAL RLS ERROR. CONNECTION IS ABNORMALLY ENDED FOR CACHE STRUCTURE NAME: *cache structure name*, CACHE SET NAME: *cache set name*, STORAGE CLASS: *storage class*, SPHERE NAME: *sphere name*.

Explanation: An unexpected error occurred while connecting the sphere SPHERE NAME to the CACHE STRUCTURE NAME *cache structure name*. The sphere SPHERE NAME fails to open.

In the message text:

cache structure name

The name of the DFSMS coupling facility cache structure.

cache set name

The name of the cache set.

storage class

The name of the storage class.

sphere name

The name of the sphere.

System action: System continues processing.

System programmer response: If problem persists, recycle SMSVSAM server to resume previous functionality.

Source: DFSMSDfp

Module: IGWSSNOM

IGW583I UNABLE TO INITIALIZE DFSMS CF CACHE SET *cache set* DUE TO AN INTERNAL RLS ERROR.

Explanation: An unexpected error occurred while initializing the DFSMS CF CACHE SET *cache set*.

In the message text:

cache set

The name of the cache set.

System action: System continues processing.

System programmer response: If problem persists, recycle SMSVSAM server to resume previous functionality.

Source: DFSMSDfp

Module: IGWSSICS

IGW600E ADD SHARE CONTROL DATA SET FAILED, *shcdsname* DOES NOT EXIST

Explanation: The operator issued the command VARY SMS,SHCDS(*shcdsname*),NEW[SPARE]. The data set specified does not exist.

System action: The command VARY SMS,SHCDS(*shcdsname*),NEW[SPARE] is failed.

The data set *dataset* does not exist.

Operator response: Respecify the command with the correct data set name.

System programmer response: Create a new sharing control data set *shcdsname* if necessary.

Source: DFSMSDfp

Module: IGWXSC41

Routing code: 2,10

Descriptor code: -

IGW601E ADD SHARE CONTROL DATA SET FAILED, UNABLE TO ALLOCATE *shcdsname*

Explanation: SMSVSAM could not use the share control data set because it could not be allocated or the volume where the share control data set resides is not available. This message is issued in response to either:

- SMSVSAM was initializing and failed to add a previously defined share control data set, or
- The operator issued the VARY SMS,SHCDS(*shcdsname*),NEW[SPARE] command

System action: Message IGW601E might be accompanied by additional messages such as security authorization messages, allocation messages, catalog messages, and messages prefixed with "IGW6".

- If SMSVSAM was initializing, the IGW601E message might be accompanied by message IGW627E, which indicates that SMSVSAM initialization terminated.
- If in response to the VARY SMS,SHCDS(*shcdsname*),NEW[SPARE] command, the SHCDS was not added.

Operator response: Examine all messages relating to the share control data set or its volume. Refer to "System Action" for messages that might accompany this message. Determine why the share control data set is not available or why the volume where the share control data set is located is not available. For example, the volume where the share control data set resides is currently offline, the security authorization for the share control data set is not correctly defined, or an error occurred while cataloging the share control data set. Fix the problem and then restart SMSVSAM or re-issue the VARY command.

System programmer response: Create a new sharing control data set, *shcdsname*, if necessary. Correct security authorization or catalog problems.

Source: DFSMSDfp

IGW602E • IGW605E

Module: IGWXSC40, IGWXSC41

Routing code: 2,10

Descriptor code: -

IGW602E ADD SHARE CONTROL DATA SET FAILED, *shcdsname* IS NOT A VSAM LINEAR DATA SET.

Explanation: The operator issued the command, VARY SMS,SHCDS(*shcdsname*),NEW[SPARE] for a data set which was not a VSAM linear data set.

System action: The command, VARY SMS,SHCDS(*shcdsname*),NEW[SPARE], is failed

Operator response: Respecify command with another data set.

System programmer response: Create a new sharing control data set, *shcdsname*, if necessary

Source: DFSMSsdfp

Module: IGWXSD40

Routing code: 2,10

Descriptor code: -

IGW603E ADD SHARE CONTROL DATA SET FAILED. THERE ARE FIVE *typedataset* SHARE CONTROL DATA SETS.

Explanation: The operator issued the command VARY SMS,SHCDS(*shcdsname*),NEW[SPARE], for a sharing control data set. The maximum number of possible *typedataset* Control Datasets are already in use. The *typedataset* can be ACTIVE or SPARE.

System action: The command, VARY SMS,SHCDS(*shcdsname*),NEW[SPARE], is failed.

Operator response: Issue the DISPLAY SMS,SHCDS command to determine which sharing control data sets are active.

Source: DFSMSsdfp

Module: IGWXSC41

Routing code: 2,10

Descriptor code: -

IGW604E ADD SHARE CONTROL DATA SET FAILED, *shcdsname* COULD NOT BE FORMATTED.

Explanation: The operator issued the command, VARY SMS,SHCDS(*shcdsname*),NEW[SPARE], sharing control data set. A permanent I/O error occurred while formatting the data set.

System action: The command, VARY SMS,SHCDS(*shcdsname*),NEW[SPARE], is failed. A dump will be taken.

System programmer response: Create a new sharing control data set *shcdsname*.

Source: DFSMSsdfp

Module: IGWXSC40

Routing code: 2,10

Descriptor code: -

IGW605E DELETE *shcdsname* DENIED, WOULD RESULT IN LESS THAN TWO ACTIVE SHARE CONTROL DATA SETS.

Explanation: The operator issued the command VARY SMS,SHCDS(*shcdsname*),DELETE for sharing control data set, *shcdsname*. The request was denied because the command would result in less than two sharing control data sets.

System action: The command VARY SMS,SHCDS(*shcdsname*),DELETE is failed.

System programmer response: The operator can use the command, VARY SMS,SHCDS(*shcdsname*),NEW[SPARE], to

add another spare or active sharing control data set before reissuing the command VARY SMS,SHCDS(*shcdsname*),DELETE.

Source: DFSMSdfp

Module: IGWXSC50

Routing code: 2,10

Descriptor code: -

IGW606E DELETE *shcdsname* DENIED, WOULD RESULT IN NO SPARE SHARE CONTROL DATA SETS.

Explanation: The operator issued the command VARY SMS,SHCDS(*shcdsname*),DELETE, for a spare sharing control data set *shcdsname*. The request was denied because it would result in no spare sharing control data sets, while the SMSVSAM address space was still actively supporting VSAM RLS processing.

System action: The command VARY SMS,SHCDS(*shcdsname*),DELETE, is failed.

System programmer response: The operator can issue the command, VARY SMS,SHCDS(*shcdsname*),NEWSPARE, and reissue the command VARY SMS,SHCDS(*shcdsname*),DELETE.

Source: DFSMSdfp

Module: IGWXSC50

Routing code: 2,10

Descriptor code: -

IGW607E DELETE FAILED, *shcdsname* WAS NOT A SHARE CONTROL DATA SET

Explanation: The operator issued the command, VARY SMS,SHCDS(*shcdsname*),DELETE, for a data set *shcdsname* which was not currently an active or spare sharing control data set.

System action: The command VARY SMS,SHCDS(*shcdsname*),DELETE, is failed.

System programmer response: The operator should reissue the command with the correct sharing control data set name.

Source: DFSMSdfp

Module: IGWXSC50

Routing code: 2,10

Descriptor code: -

IGW608A THE SHARE CONTROL DATA SET IS NOT CURRENTLY DUPLEXED, IMMEDIATE ACTION REQUIRED.

Explanation: The sharing control data set is currently not duplexed and there are no spares available. There must be at least two sharing control data sets and one spare sharing control data set. There is currently one active sharing control data set and no spare sharing control data sets.

System action: The system continues to process with one data set. The message will be displayed until there are at least two active sharing control data sets.

Operator response: Immediately add at least one active and one spare sharing control data set. Alternatively add two spare sharing control data sets, one of which will become an active sharing control data set.

System programmer response: Direct the system operator to add a new active sharing control data set and spare sharing control data set.

Source: DFSMSdfp

Module: IGWXSD80

Routing code: 2,10

Descriptor code: -

IGW609A • IGW611A

IGW609A NO SPARE SHARE CONTROL DATA SETS EXIST. IMMEDIATE ACTION REQUIRED.

Explanation: There are no spare sharing control data sets. Previous spare data sets were either never specified or were used when I/O errors were encountered on the active sharing control data set. Immediate operator action is required.

System action: The system continues processing. The message remains until at least one SPARE sharing control data set is added.

Operator response: Immediately add spare sharing control data sets with the command VARY SMS,SHCDS(*shcdsname*),NEWSPARE.

Source: DFSMSdfp

Module: IGWXSD80

Routing code: 2,10

Descriptor code: -

IGW610A SHARE CONTROL DATA SET IS NOT AVAILABLE.

Explanation: The sharing control data set is currently not available. VSAM RLS processing is disabled until at least one sharing control data set is available.

System action: All processing against RLS VSAM data sets is disabled.

Operator response: Immediately issue the command, VARY SMS,SHCDS(*shcdsname*),NEW[SPARE], twice to add new active or spare sharing control data sets.

System programmer response: Add two active or spare sharing control data sets to resume VSAM RLS processing or to enable VSAM RLS processing for the first time.

Source: DFSMSdfp

Module: IGWXSD80

Routing code: 2,10

Descriptor code: -

IGW611A SHARE CONTROL DATA SET NEVER ASSIGNED

Explanation: The installation has never assigned sharing control data sets. At least two active sharing control data sets and one spare sharing control data set must be available to start the SMSVSAM address space. Initialization of the SMSVSAM address space is suspended and VSAM RLS functions will not be available.

Note: This should only occur on the first IPLs before VSAM RLS processing is enabled.

System action: All attempted processing against RLS VSAM data sets will fail.

Operator response: Immediately add new active or spare sharing control data sets. using the command VARY SMS,SHCDS(*shcdsname*),NEW[SPARE], for each sharing control data set.

System programmer response: Add two active or spare sharing control data sets to resume VSAM RLS processing or to enable VSAM RLS processing for the first time.

Source: DFSMSdfp

Module: IGWXSD80

Routing code: 2,10

Descriptor code: -

IGW612I *hh.mm.ss* **DISPLAY SMS,SHCDS** *text*

Explanation: In the message, text is:

NAME	Size	%UTIL	STATUS	TYPE
identifier	nnnnnKb	pp%	status	type
identifier	nnnnnKb	pp%	status	type
identifier	nnnnnKb	pp%	status	type
identifier	nnnnnKb	pp%	status	type
identifier	nnnnnKb	pp%	status	type
-----	0Kb	0%	N/A	N/A

The operator issued the DISPLAY SMS,SHCDS command. In response, this message shows the names and status of up to 10 active and spare sharing control data sets.

In the message text:

identifier

the qualifier.volser which identifies the name of the sharing control data set.

nnnnnKb

Allocated and formatted size of the sharing control data set.

pp%

Amount of sharing control data set which is currently being used.

status

Status of the sharing control data set. The status can be **GOOD**, **BROKEN**, or **N/A** if not applicable.

type

Type of sharing control data set. The type can be either **ACTIVE**, **SPARE**, or **N/A** if not applicable.

System action: Processing continues

Source: DFSMSdfp

Module: IGWXSC60

Routing code: 2

Descriptor code: 5,8,9

IGW613A **SHARE CONTROL DATA SET** *shcdsname* **HAS INSUFFICIENT RESERVED SPACE**

Explanation: The sharing control data set, *shcdsname*, has less than 10% free space and it cannot be extended.

System action: The system continues to use the data set.

Operator response: Insure there are sufficient spares for the data set, since the system may be forced to stop using the data set, should the amount of space exceed the maximum size of *shcdsname*.

System programmer response: Create a new sharing control data set if necessary

Source: DFSMSdfp

Module: IGWXSSC0

Routing code: 2,10

Descriptor code: -

IGW614I **SHARE CONTROL DATA SET** *shcdsname* **HAS BEEN CONVERTED FROM A SPARE TO A PRIMARY SHARE CONTROL DATA SET**

Explanation: The system has detected the loss of a sharing control data set and automatically converted spare sharing control data set, *shcdsname*, to an active sharing control data set

System action: The system continues processing.

Operator response: Check the policies of the installation, it may be necessary to contact the system administrator to see if a new spare sharing control data set should be added to the system.

IGW615I • IGW617A

System programmer response: Create a new spare sharing control data set if necessary.

Source: DFSMSdfp

Module: IGWXSD80

Routing code: 2,10

Descriptor code: -

IGW615I SHARE CONTROL DATA SET *shcdsname* HAS FAILED.

Explanation: The system has detected the failure of a sharing control data set, *shcdsname*, and automatically stopped using it.

System action: The system continues processing.

Operator response: Check the policies of the installation, it may be necessary to contact the system administrator to see if a new spare sharing control data set should be added to the system.

System programmer response: Create a new spare sharing control data set if necessary.

Source: DFSMSdfp

Module: IGWXSSB0, IGWXSSD0, IGWXSS41, IGWXSS90, IGWXSS94, IGWXSS95

Routing code: 2,10

Descriptor code: -

IGW616A SHARING CONTROL PROCESSING STOPPED, OPERATING IN XCF-LOCAL MODE

Explanation: The SYSPLEX is in XCF-LOCAL mode, and cannot communicate via XCF with other systems in the sysplex.

System action: System initialization is terminated.

Operator response: Notify the system programmer.

System programmer response: Specify a COUPLxx PARMLIB member in the IEASYSxx PARMLIB member to avoid running in XCF-LOCAL mode.

Source: DFSMSdfp

Module: IGWXSC13

Routing code: 2,10

Descriptor code: -

IGW617A SHARING CONTROL PROCESSING STOPPED, UNABLE TO CONNECT TO XCF RC=*return-code* RSN=*reason-code*

Explanation: An error occurred when attempting to join the XCF group. The referenced return and reason code is returned from the IXCJOIN macro. Condition detected during NIP.

System action: SMSVSAM server initialization is terminated.

Operator response: Notify the system programmer.

System programmer response: Determine the reason for the failure to avoid running in XCF-LOCAL mode. Refer to the *z/OS MVS Programming: Authorized Assembler Services Reference SET-WTO* for a list of return and reason codes from the IXCJOIN macro.

Source: DFSMSdfp

Module: IGWXSC13

Routing code: 2,10

Descriptor code: -

IGW618W SHARE CONTROL DATA SET *shcdsname* MUST RESIDE ON SHARED DASD

Explanation: The sharing control data set *shcdsname* was found on a device that was not designated as SHARED.

System action: System continues processing.

Operator response: Notify the system programmer.

System programmer response: Move the data set to another unit, or specify another data set that does reside on SHARED DASD.

Source: DFSMSdftp

Module: IGWXSC41

Routing code: 2,10

Descriptor code: -

IGW619I *typedataset* SHARE CONTROL DATA SET *shcdsname* ADDED

Explanation: The operator issued the command, VARY SMS,SHCDS(*shcdsname*),NEW[SPARE], for sharing control data set, *shcdsname*. The data set was successfully added to the list of sharing control data sets in use. The *typedataset* can be *ACTIVE* or *SPARE*.

Source: DFSMSdftp

Module: IGWXSC40, IGWXSC41

Routing code: 2,10

Descriptor code: -

IGW620I SHARE CONTROL DATA SET SPECIFICATIONS MUST NOT EXCEED 17 CHARACTERS IN LENGTH.

Explanation: The operator issued the command VARY SMS,SHCDS(*shcdsname*),NEW[SPARE] or the command VARY SMS,SHCDS(*shcdsname*),DELETE and exceeded 17 characters for the unique portion of the data set qualifiers.

Source: DFSMSdftp

Module: IGWSRTE2

Routing code: 2,10

Descriptor code: -

IGW621I SHARE CONTROL DATA SET SPECIFICATIONS MUST CONTAIN TWO QUALIFIERS (qualifier.volser).

Explanation: The operator issued the command VARY SMS,SHCDS(*shcdsname*),NEW[SPARE] or the command VARY SMS,SHCDS(*shcdsname*),DELETE which did not contain the correct number of qualifiers for the unique portion of the data set name.

Source: DFSMSdftp

Module: IGWSRTE2

Routing code: 2,10

Descriptor code: -

IGW622E SHARE CONTROL DATA SET *shcdsname* NOT ADDED, INSUFFICIENT PRIMARY SPACE ALLOCATION

Explanation: The primary extent for the sharing control data set being added is not large enough to contain the current amount of data saved in the active sharing control data sets.

System action: The data set is not added.

IGW623I • IGW625E

Operator response: Issue the DISPLAY SMS,SHCDS command to see the current size of the sharing control data sets in use. Reissue the command, VARY SMS,SHCDS(*shcdsname*),NEW[SPARE], with a data set that has sufficient primary allocation.

System programmer response: Create a new sharing control data set, *shcdsname*, if necessary.

Source: DFSMSdfp

Module: IGWXSC40

Routing code: 2,10

Descriptor code: -

IGW623I SHARE CONTROL DATA SET *shcdsname* NOT ADDED, INVALID DATA SET NAME QUALIFIERS

Explanation: The second qualifier for *shcdsname* must begin with the character "V" in the first position of a qualifier.

System action: The data set is not added.

Operator response: Reissue the command, VARY SMS,SHCDS(*shcdsname*),NEW[SPARE], with a valid data set name.

System programmer response: Create a new sharing control data set if necessary.

Source: DFSMSdfp

Module: IGWSRTE2

Routing code: 2,10

Descriptor code: -

IGW624I UNABLE TO ADD GROUP IGWXSGIS MAXIMUM GROUPS OR MEMBERS EXCEEDED

Explanation:

System action: SMSVSAM server initialization is terminated.

Operator response: Notify the system programmer.

System programmer response: Increase the number of members and groups that can be allowed on your system. The minimum number of members needed for the IGWXSGIS group is ten plus 1 for each system in the sysplex. See *z/OS MVS Setting Up a Sysplex*, for information about defining groups and members.

Source: DFSMSdfp

IGW624E ADD SHARE CONTROL DATA SET FAILED FOR DATA SET, *dsname* BECAUSE NO VVR EXISTS FOR DATASET

Explanation: The SHCDS *dsname* has no VVR but is catalogued.

System action: If SMSVSAM server is initializing, system will wait until SHCDS is added. Otherwise, system continues.

System programmer response: Make sure that the name *dsname* is correct. If the name is correct, examine the SHCDS. Correct the problem and try again or select another SHCDS.

Source: DFSMSdfp

Module: IGWXSD40

IGW625E ADD SHARE CONTROL DATA SET FAILED FOR DATA SET, *dsname* - ERROR FROM ATTEMPT TO CATALOG DATA SET

Explanation: The SHCDS *dsname* had an error during a catalog attempt.

System action: If SMSVSAM server is initializing, system will wait until SHCDS is added. Otherwise, system continues.

System programmer response: Make sure that the name *dsname* is correct. If the name is correct examine the associated catalog error messages. Correct the problem and try again.

Source: DFSMSdfp

Module: IGWXSC41

IGW626E **ADD SHARE CONTROL DATA SET
FAILED FOR DATA SET, *dsname* -
ERROR FROM ATTEMPT TO
[CATALOG|LOCATE] DATA SET
RETURN CODE (IN HEX): 000000xx
REASON CODE (IN HEX): 000000yy
MODULE ID : *ii***

Explanation: The SHCDS, *dsn*, had an error during a catalog or locate attempt. The system also returns the catalog return code, reason code, and the module ID that had the error.

System action: If SMSVSAM server is initializing, the share control data set will not be added. Initialization will not continue. If a new share control data set was being added, the share control data set will not be added.

System programmer response: Verify that the name, *dsname*, is correct. Examine the associated catalog error messages. If needed, issue the DISPLAY SMS,SHCDS command to examine which share control data sets have been added. IDC3009I documents the error codes in the message, where *xx* is the hexadecimal return code and *yy* is the hexadecimal reason code. Convert these error codes to decimal values before consulting the IDC3009I message. Correct the problem and try again.

Source: DFSMSdfp

Module: IGWXSD40

IGW627E **PREVIOUSLY DEFINED SHARE CONTROL DATA SET COULD NOT BE USED ON THIS
SYSTEM: *shcdsname*. CORRECT THE SHARE CONTROL DATA SET THAT IS IN ERROR AND
RESTART VSAM/RLS.**

Explanation: During SMSVSAM initialization, a previously used SHCDS, *shcdsname*, had an error.

System action: The SMSVSAM server will terminate. The SHCDS, *shcdsname*, will not be deleted.

System programmer response: In general, this message will be accompanied by other messages that will identify the root cause of the error (such as connectivity, security authorization, or SHCDS definition). Use the information in the accompanying messages to determine the appropriate corrective action. Correct the problem and try to initialize SMSVSAM again.

Source: DFSMSdfp

Module: IGWXSC20

IGW628E **ADD SHARE CONTROL DATA SET FAILED. THE CISIZE FOR *shcdsname* IS NOT 4096.**

Explanation: The CISIZE for the SHCDS must be 4096.

System action: The system fails the request to the SHCDS.

System programmer response: Correct the problem and try again.

Source: DFSMSdfp

Module: IGWXSD30, IGWXSD40

IGW629E **CONNECT TO SHARE CONTROL
DATA SET FAILED FOR, *shcdsname*
RETURN CODE (IN HEX): 000000xx
REASON CODE (IN HEX): 0000yyyy
FEEDBACK : zzzzzzzzzzzzzzzzzzz**

Explanation: During initialization, SMSVSAM was unable to connect to the SHCDS, *shcdsname*.

System action: SMSVSAM fails to initialize.

System programmer response: Examine the system log for other errors related to the SHCDS, *shcdsname*. Examples

IGW630E • IGW633E

of messages related to this error include IGW627E and IGW408I. Correct the problem and try again.

Source: DFSMSDfp

Module: IGWXS120

IGW630E A SECURITY VERIFICATION FAILED FOR SHARE CONTROL DATA SET, *shcdsname*

Explanation: During SMSVSAM initialization or when attempting to add a new SHCDS, the SHCDS, *shcdsname*, failed a security verification check. SMSVSAM was unable to initialize or add the SHCDS.

System action: SMSVSAM fails to initialize or the SHCDS was not added.

System programmer response: Examine the system log for other errors related to a failed security verification check for the SHCDS, *shcdsname*. Correct the problem and try again.

Source: DFSMSDfp

Module: IGWXSD30, IGWXS120, IGWXS40

IGW631E THE SHARE CONTROL DATA SET, *shcdsname* IS UNFORMATTED.

Explanation: The share control data set, *shcdsname* is unusable.

System action: If the SMSVSAM server was initializing, the server might be terminated.

System programmer response: This error can occur if the SHCDS was deleted and redefined while SMSVSAM was inactive, after which the SMSVSAM server was brought up. To correctly change the size of the share control data set (SHCDS), do the following:

1. Delete the SHCDS while SMSVSAM is active by using the command **V SMS,SHCDS(*shcdsname*),DELETE**. Three or more active share control data sets must exist in order for the DELETE command to work.
2. Redefine the share control data set. The new space allocation must be greater than or equal to the space allocation of the existing SHCDS's.
3. Add the data set back using this command **V SMS,SHCDS(*shcdsname*),NEW**.

If this error was encountered in a different scenario, contact IBM support.

Source: DFSMSDfp

Module: IGWXS90

IGW632E SHARE CONTROL DATA SET *shcdsname* HAS FAILED BECAUSE OF I/O ERROR. ERROR INFORMATION IS: RETURN CODE (IN HEX):*xxxxxxxx* TCB Pointer:*xxxxxxxx* RB Pointer:*xxxxxxxx*

Explanation: The SHCDS failed because of an I/O error.

System action: You can delete the SHCDS. You can terminate the SMSVSAM address space.

System programmer response: If this error was encountered during SMSVSAM initialization, the server might have been terminated. Correct the problem and recycle the server. If the cause of the problem is that the SHCDS is on a device that is offline, examine the system log and correct the problem. If the error cannot be determined, contact IBM support with this message and any related messages and dumps.

Source: DFSMSDfp

Module: IGWXS140

IGW633E AN ERROR OCCURRED WHILE READING SHARE CONTROL DATA SET, *shcdsname*. IF ERROR CONDITION IS NOT CORRECTED, THE SHARE CONTROL DATA SET WILL BE DELETED WHEN NEXT WRITTEN.

Explanation: An error occurred while reading share control data set, *shcdsname*. If the error condition is not corrected, the share control data set is deleted when next written.

System action: None.

System programmer response: Examine the system log for errors related to this SHCDS, *shcdsname*. Correct the problem.

Source: DFSMSdfp

Module: IGWXSI40

IGW635E **ADD SHARE CONTROL DATA SET FAILED.**
SHARE CONTROL DATA SET *shcdsname*
CANNOT BE ADDED WHILE SHARE CONTROL IS INITIALIZING

Explanation: The SHCDS, *shcdsname*, had an error while adding a share control data set.

System action: If SMSVSAM server is initializing, the share control data set will not be added and the initialization will not continue. If a new share control data set was added, the share control data set will not be added.

System programmer response: If the SHC subsystem of SMSVSAM has not been initialized yet, wait for SHCDS to come up. Verify that the name, *shcdsname*, is correct and whether the data sets are on. If needed, issue the DISPLAY SMS,SHCDS command to examine which share control data sets have been added. Correct the problem and try again. If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: DFSMSdfp

Module: IGWXSC40

IGW636A **xx VOLUME IS OFFLINE FOR THIS SHCDS. REPLY RETRY <R>, TERMINATESERVER <T> OR
FORCEDELETESHCDS <F> TO DELETE.**

Explanation: Failed to add SHCDS data set. The volume on which SHCDS data set resides is offline.

In the message text:

xx Standard MVS reply number associated with this message. xx is required when responding to this message.
For example:

R **xx**,RETRY

System action: The system waits for the operator response.

Operator response:

T or TERMINATESERVER

Terminate the SMSVSAM address space.

F or FORCEDELETESHCDS

Delete the SHCDS in problem. In this case, make sure that there is another SHCDS data set on a volume that is online.

R or Retry

Attempt to start the SMSVSAM address space again.

Source: DFSMSdfp

Module: IGWXSC20

IGW637I **xx INVALID RESPONSE. REPLY RETRY <R>, TERMINATESERVER <T> OR
FORCEDELETESHCDS <F>**

Explanation: An invalid response was entered for message IGW636A. See message IGW636A explanation for additional information.

In the message text:

xx Standard MVS reply number associated with this message.

System action: The system waits for the operator response.

Operator response: Reply 'R' to retry to permit the SMSVSAM server address space to attempt another restart. Or reply 'T' to terminate SMSVSAM server address space. Or reply 'F' to delete the SHCDS data set in error.

If 'T' is replied to this message, issue the command VARY SMS,SMSVSAM,ACTIVE to start the SMSVSAM Server address space.

IGW638E • IGW639A

Source: DFSMSdfp

Module: IGWXSC20

Routing code: 2, 10

IGW638E ADD SHARE CONTROL DATA SET FAILED, *shcdsname* WAS DEFINED WITH INVALID SHAREOPTION

Explanation: Add sharing control data set failed. Sharing control data set was defined with a shareoption other than (3,3) for RLS processing.

In the message text:

shcdsname

The name of the data set

System action: Sharing control data set was not added.

Operator response: MISSING INFO.

Examine the shareoption for the sharing control data set related to the failure. Correct the problem and try again. For more information on rules for defining sharing control data sets, see the *z/OS DFSMSdfp Storage Administration*.

Source: DFSMSdfp

Module: IGWXSD30, IGWXSC40

Routing code: MISSING INFO.

IGW639I INVALID SHAREOPTION WAS DETECTED FOR SHARING CONTROL DATA SET *shcdsname*. REQUIRED SHAREOPTION IS (3,3) IN MULTI-SYSTEM SYSPLEX ENVIRONMENT.

Explanation: Invalid shareoption detected. Sharing control data set was defined with a shareoption other than (3,3) for RLS processing. This message will be followed by an outstanding IGW639A WTOR.

In the message text:

shcdsname

The name of the data set

System action: None

Operator response: MISSING INFO.

Examine the shareoption for the sharing control data set related to the failure. Correct the problem and try again. For more information on rules for defining sharing control data sets, see the *z/OS DFSMSdfp Storage Administration*.

Source: DFSMSdfp

Module: IGWXSD30, IGWXSC40

Routing code: MISSING INFO.

IGW639A *xx* TO CONTINUE USING THIS DATA SET, SPECIFY YES. OTHERWISE COMMAND WILL FAIL.

Explanation: Invalid shareoption detected. Sharing control data set was defined with shareoption other than (3,3) for RLS processing. This message is displayed in conjunction with IGW639I.

In the message text:

xx Standard MVS reply number associated with the message. This number is required when responding to this message (for example, R *xx*,CANCEL).

System action: The system waits for the operator response

Operator response: MISSING INFO.

Expected responses are:

- YES: Will try to add the sharing control data set with incorrect shareoption. Sharing control data set is only added successfully to the system that issues the command and not to any other system in the sysplex because of the invalid shareoption. This response is not recommended for a multi-system sysplex.
- Any other response does not add the sharing control data set.

Source: DFSMSdfp

Module: IGWXSD30, IGWXSC40

Routing code: MISSING INFO.

IGW637I **xx INVALID RESPONSE. REPLY RETRY <R>, TERMINATESERVER <T> OR
FORCEDELETESHCHDS <F>**

Explanation: An invalid response was entered for message IGW636A. See message IGW636A explanation for additional information.

In the message text:

xx Standard MVS reply number associated with this message.

System action: The system waits for the operator response.

Operator response: Reply 'R' to retry to permit the SMSVSAM server address space to attempt another restart. Or reply 'T' to terminate SMSVSAM server address space. Or reply 'F' to delete the SHCHDS data set in error.

If 'T' is replied to this message, issue the command VARY SMS,SMSVSAM,ACTIVE to start the SMSVSAM Server address space.

Source: DFSMSdfp

Module: IGWXSC20

Routing code: 2, 10

IGW650I **DISPLAY DFSMS CF MONITOR DATA SET STATUS** *text*

Explanation: In the message, *text* is:

```
TOTAL NUMBER OF DATASET SPECIFICATIONS = total
DATASET MASK SPECIFICATION:  CURRENT VIEWING STATUS;
yyy.yyyy                    {SMF | MACRO xx. | BOTH xx}
```

The operator entered the DISPLAY SMS,MONDS command

In the message text:

total Total number of data set specifications known to the SYSPLEX.

yyy.yyyy data set specification mask. All data sets which match this mask are currently creating data set response time statistics.

SMF SMF recording is set on to capture the data set CF statistics.

MACRO

The IGWCDATA macro has been specified to capture the data set statistics.

BOTH Both SMF recording and IGWCDATA is being used to view the data set statistics

xx The number of IGWCDATA active connections that are requesting data for the specified data set mask.

System action: Command accepted

Source: DFSMSdfp

Module: IGWMONDS, IGWMSG

Routing code: 2,10

Descriptor code: 5,8,9

IGW660I DFSMS CF REQUEST TO MONITOR DATA SETS IS REJECTED. INVALID DATA SET NAME SPECIFIED (*.*).

Explanation: The operator entered the command VARY SMS,MONDS(*.*),ON. This form of the command requires that one high level data set qualifier be specified.

Valid command specifications are:

1. A.* - all data sets in the format A.x
2. A.** - all data sets in the format A.x.y.z...
3. A.B.* - all data sets in the format A.B.x
4. A.B.** - all data sets in the format A.B.x.y.z...

System action: Command rejected

Operator response: Re-issue the command adding the high level qualifier.

Source: DFSMSdfp

Module: IGWMONDS

IGWSGMSG

Routing code: 2,10

Descriptor code: 5,8,9

IGW661I DFSMS CF REQUEST TO MONITOR DATA SETS IS REJECTED. INVALID DATA SET MASK SPECIFIED: MASK SPECIFICATION: xx.xx

Explanation: The operator entered the command VARY SMS,MONDS('xx.xx').

When specifying a wild card (*), it must be the last character. CICS.*, CICS.**, and CICS.WORK.** are valid, CICS*.WORK is invalid.

Valid command specifications are:

1. A.* - all data sets in the format A.x
2. A.** - all data sets in the format A.x.y.z...
3. A.B.* - all data sets in the format A.B.x
4. A.B.** - all data sets in the format A.B.x.y.z...

System action: Command rejected

Operator response: Re-issue the command correcting the mask specification.

Source: DFSMSdfp

Module: IGWMONDS, IGWSGMSG

Routing code: 2,10

Descriptor code: 5,8,9

IGW663I DFSMS CF MONITORING HAS BEEN ACTIVATED FOR VSAM/RLS DATA SETS WHICH MATCH THE MASK SPECIFICATION: xxx.xxx

Explanation: The operator has entered the command VARY SMS,MONDS(xxx.xxx),ON. All data sets which match the supplied mask xxx.xxx will have data set level response time statistics information gathered. If SMF recording is on for type 42, subtype 16 records, SMF records are created.

System action: Command accepted.

Source: DFSMSdfp

Module: IGWMONDS, IGWSGMSG

Routing code: 2,10

Descriptor code: 5,8,9

IGW664I DFSMS CF REQUEST TO MONITOR DATA SETS IS REJECTED. 100 DATA SET MASK SPECIFICATIONS EXIST.

Explanation: The operator has entered the command VARY SMS,MONDS(*xxx.xxx*),ON, where *xxx.xxx* is a data set mask specification. This specification created more than 100 SYSPLEX data set mask entries.

System action: Command rejected

Operator response: Inform the system administrator that you were unable to complete the command due to the data set mask limitation.

System programmer response: Evaluate all of the current data set mask specifications and delete the ones which are not required.

Source: DFSMSdfp

Module: IGWMONDS, IGWMSGMSG

Routing code: 2,10

Descriptor code: 5,8,9

IGW665I DFSMS CF MONITORING HAS BEEN DEACTIVATED FOR VSAM/RLS DATA SETS WHICH MATCH THE MASK SPECIFICATION: *xxx.xxx* - or - DFSMS CF REQUEST TO DEACTIVATE MONITORING FOR DATA SETS *xxx.xxx* IS REJECTED. THE SPECIFICATION IS NOT CURRENTLY ACTIVE.

Explanation: The operator entered the command VARY SMS,MONDS(*xxx.xxx*),OFF. All specified data sets which match the mask *xxx.xxx* will be removed from the list of monitored data sets. Or, there was no specification which matched the input.

System action: Command accepted.

Operator response: Issue the DISPLAY SMS,MONDS(*) command to get a list of all active specifications.

Source: DFSMSdfp

Module: IGWMONDS, IGWMSGMSG

Routing code: 2,10

Descriptor code: 5,8,9

IGW675I BASE-VSAM DEBUG INDICATORS: VSAM FOOTSTEP: ON|OFF INDEX TRAP: ON|OFF

Explanation: The operator entered the command D SMS,MONDS(IGWVSAM.BASE.VSAM.DEBUG.FEATURES) to display the settings of the base-VSAM footsteps and index trap.

System action: Command accepted.

Source: DFSMSdfp

Module: IGWSMSMS

Routing code: 2, 10

Descriptor code: 5, 8

IGW676I BASE-VSAM INDEX TRAP IS ENABLED --WHEN THE TRAP HITS, A DUMP, A "BROKEN DATA SET" CONSOLE MSG WITH THE DATA SET NAME WILL BE GENERATED, ETC.

Explanation: The operator entered the command V SMS,MONDS(IGWVSAM.BASE.INDEX.TRAP),ON to activate index trap for base VSAM.

System action: Command accepted.

Source: DFSMSdfp

Module: IGWMONDS, IGWSMSMS

Routing code: 2, 10

IGW677I • IGW681I

Descriptor code: 5, 8

IGW677I BASE-VSAM INDEX TRAP IS DISABLED

Explanation: The operator entered the command V SMS,MONDS(IGWVSAM.BASE.INDEX.TRAP),OFF to deactivate index trap for base VSAM.

System action: Command accepted.

Source: DFSMSdfp

Module: IGWMONDS, IGWSMSMS

Routing code: 2, 10

Descriptor code: 5, 8

IGW678I BASE-VSAM FOOTSTEP TRACING IS ENABLED

Explanation: The operator entered the command V SMS,MONDS(IGWVSAM.BASE.FOOTSTEP),ON to activate footsteps for base VSAM.

System action: Command accepted.

Source: DFSMSdfp

Module: IGWMONDS, IGWSMSMS

Routing code: 2, 10

Descriptor code: 5, 8

IGW679I BASE-VSAM FOOTSTEP TRACING IS DISABLED

Explanation: The operator entered the command V SMS,MONDS(IGWVSAM.BASE.FOOTSTEP),OFF to deactivate footsteps for base VSAM.

System action: Command accepted.

Source: DFSMSdfp

Module: IGWMONDS, IGWSMSMS

Routing code: 2, 10

Descriptor code: 5, 8

IGW680I VSAM-RLS INDEX TRAP IS ENABLED --ABEND0F4 RSN=61609DXX WILL BE GENERATED IF A CORRUPTED INDEX CI IS ABOUT TO BE WRITTEN

Explanation: The operator entered the command V SMS,MONDS(IGWVSAM.INDEX.TRAP),ON to activate index trap for VSAM RLS.

System action: Command accepted.

Source: DFSMSdfp

Module: IGWMOND2, IGWSGMSG

Routing code: 2, 10

Descriptor code: 5, 8

IGW681I VSAM-RLS INDEX TRAP IS DISABLED --ABEND0F4 RSN=61609DXX WILL NOT BE GENERATED IF A CORRUPTED INDEX CI IS ABOUT TO BE WRITTEN

Explanation: The operator entered the command V SMS,MONDS(IGWVSAM.INDEX.TRAP),OFF to deactivate the index trap for VSAM RLS.

System action: Command accepted.

Source: DFSMSdfp

Module: IGWMOND2, IGWMSGMSG

Routing code: 2, 10

Descriptor code: 5, 8

IGW699I PDSE Directory Validation Unsuccessful*text*

Explanation: A PDSE directory validation request to verify the integrity of a data set was unsuccessful because the PDSE structure is corrupted. This message displays information returned by the request.

text is the following:

```
DESC:PDSE structure is corrupted
ERROR NUM:{error_num}
DSN:{dsname}
VOLSER:{volser}
```

In the message text:

ERROR NUM:{error_num}

This is an internal indicator of where in the directory the error occurred and is an internal diagnostic aid.

DSN:{dsname}

The data set being verified.

VOLSER:{volser}

The volume serial number where the data set is located.

System action: The system continues processing.

System programmer response: The system administrator should replace the corrupted data set with an earlier copy if possible.

Source: DFSMSdfp

Module: IGWDAV00

Routing code: 8/12

Descriptor code: -

IGW700I PDSE Directory Validation Successful*text*

Explanation: A PDSE directory validation request to verify the integrity of a data set was successful. This message displays information returned by the request.

text is the following:

```
DSN:{dsname}
ADPages:{ad_pages} IXRecords:{ad_index_records}
NDPages:{nd_pages} IXRecords:{nd_index_records}
AD ND Tree Nodes:{number_of_nodes}
```

In the message text:

DSN:{dsname}

The name of the data set being verified.

ADPages:{ad_pages}

Number attribute directory (AD) pages allocated to the data set being verified.

IXRecords:{ad_index_records}

Number of AD index records for the data set being verified.

NDPages:{nd_pages}

Number of name directory (ND) pages allocated to the data set being verified.

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| **IXRecords:**{*nd_index_records*}

| Number of ND index records for the data set being verified

| **AD ND Tree Nodes:**{*number_of_nodes*}

| Number of AD and ND tree nodes for the data set being verified. This number will be used as a diagnostics aid.

| **System action:** The system continues processing.

| **Source:** DFSMSsdfp

| **Module:** IGWDAV00

| **Routing code:** 0,0

| **Descriptor code:** -

IGW702I PDSE Directory Validation Unsuccessful *text*

| **Explanation:** A PDSE directory validation request to verify the integrity of a data set was unsuccessful because the ND or AD structure is corrupted. This message displays information returned by the request.

| *text* is the following:

| **DESC:**{*ND | AD*} Structure is corrupted

| **ERROR NUM:**{*error_num*}

| **DSN:**{*dsname*}

| **VOLSER:**{*volser*}

| **MEMBER NAME:**{*member_name*}

| In the message text:

| **DESC:**{*ND | AD*} **Structure is corrupted**

| Indicates that either the ND or AD structure is corrupted, so the data set verification request was unsuccessful.

| **ERROR NUM:**{*error_num*}

| This is an internal indicator of where in the directory the error occurred and is a diagnostic aid.

| **DSN:**{*dsname*}

| The data set being verified.

| **VOLSER:**{*volser*}

| The volume serial number where the data set is located.

| **MEMBER NAME:**{*member_name*}

| The member name associated with the corruption.

| **System action:** The system continues processing.

| **System programmer response:** Replace the corrupted data set with an earlier copy if possible.

| **Source:** DFSMSsdfp

| **Module:** IGWDAV00

| **Routing code:** 8/12

| **Descriptor code:** -

IGW703I DESC: One or more PDSE members are corrupted *text*

| **Explanation:** A PDSE directory validation request to verify the integrity of a data set was unsuccessful because one or more PDSE members are corrupted. This message displays information returned by the request.

| *text* is the following:

| **DESC:**{*ND | AD*} Structure is corrupted

| **ERROR NUM:**{*error_num*}

| **DSN:**{*dsname*}

| **VOLSER:**{*volser*}

| **RPN:**{*rpn*}

| In the message text:

DESC:{ND | AD} **Structure is corrupted**

Indicates that either the ND or AD structure is corrupted, so the data set verification request was unsuccessful.

ERROR NUM:{*error_num*}

This is an internal indicator of where in the directory the error occurred and is a diagnostic aid.

DSN:{*dsname*}

The data set being verified.

VOLSER:{*volser*}

The volume serial number where the data set is located.

RPN:{*rpn*}

An internal diagnostic aid

System action: The system continues processing.

System programmer response: Replace the corrupted data set with an earlier copy if possible.

Source: DFSMSdfp

Module: IGWDAV00

Routing code: 8/12

Descriptor code: -

IGW704A **One or more corrupted PDSE were found in LINKLIST please check the SYSLOG for more details.**

Explanation: The PDSE Validation tool has detected a broken PDSE in the LINKLIST.

System action: The PDSE validation tool issues accompanying message IGW699I, IGW700I, or IGW703I containing the name of the corrupted data set.

System programmer response: Look in the system log (SYSLOG) data set for details about the problem. If necessary, replace the corrupted data set, for example with an earlier version of the data set.

Source: DFSMSdfp

Module: IGWLHAT1

Routing code: 8/12

Descriptor code: -

IGW800I *hh.mm.ss* **DISPLAY SMS, TRANSACTIONAL VSAM** *text*

Explanation: In the message, *text* represents the following display:

```

DISPLAY SMS, TRANSACTIONAL VSAM - SERVER STATUS
System  TVSNMAME  State  Rrs  #Urs  Start
-----
sysname  tvsname  state  reg      urs  type/type

  AKP   QtimeOut
-----
   akp   nnn

```

```

DISPLAY SMS, TRANSACTIONAL VSAM - LOGSTREAM STATUS
LogStreamName  State  Type
-----
undolog        logstate  logtype
shntlog        logstate  logtype
loglogs        logstate  logtype
frlog          logstate  logtype
frlog          logstate  logtype

```

IGW800I

.
.

Connect Status

status
status
status
status
status

.
.
.

A DISPLAY SMS,TRANVSAM command was issued.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59). If the time-of-day clock is not working, *hh.mm.ss* appears as "00.00.00".

sysname

The name of the system in the sysplex to which the information applies.

tosname

The name of the DFSMStvs instance on the specified system.

state

The current state of the DFSMStvs instance: INITIALIZING, ACTIVE, QUIESCING, QUIESCED, DISABLING, or DISABLED.

reg

The current status of DFSMStvs with respect to resource recovery services (RRS): REG (registered) or UNREG (unregistered).

urs

The number of active units of recovery that DFSMStvs is processing.

type/type

The type of start that DFSMStvs last performed and the type of start that DFSMStvs performs if it restarts. The possible values are COLD and WARM.

akp

The DFSMStvs activity keypoint trigger.

nnn

The DFSMStvs quiesce timeout value.

undolog

The name of the primary system log stream (undo log stream) in use by DFSMStvs.

shntlog

The name of the secondary system log (shunt log) stream in use by DFSMStvs.

loglogs

The name of the log of logs stream in use by DFSMStvs, if any.

frlog

The name of a forward recovery log stream in use by DFSMStvs, if any.

logstate

The state of the log stream:

- Enabling
- Enabled
- Quiescing
- Quiesced
- Disabling
- Disabled

logtype

The type of log stream:

- UNDOLOG: The DFSMStvs primary system log (undo log)
- SHUNTLOG: The DFSMStvs secondary system log (shunt log)
- LOGOFLOGS: The DFSMStvs log of logs
- FRLOG: A forward recovery log (redo log)

status The connect status of the log stream: CONNECTED or DISCONNECTED.

System action: DFSMStvs continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSDTVS, IGWSDTV1, IGWSRTE2

Routing code: 2

Descriptor code: 10

IGW800I *hh.mm.ss* DISPLAY SMS, TRANSACTIONAL VSAM, ALL *text*

Explanation: In the message, *text* represents the following display:

DISPLAY SMS,TRANSACTIONAL VSAM,ALL - SERVER STATUS

System	TVSNAME	State	Rrs	#Urs	Start
<i>sysname</i>	<i>tvname</i>	<i>state</i>	<i>reg</i>	<i>urs</i>	<i>type/type</i>
.
AKP	QtimeOut				
<i>akp</i>	<i>nnn</i>				

DISPLAY SMS,TRANSACTIONAL VSAM,ALL LOGSTREAM STATUS

LogStreamName: *undolog*

System	TVSNAME	State	Type
<i>sysname</i>	<i>tvname</i>	<i>logstate</i>	<i>logtype</i>
Connect Status			
<i>status</i>			

LogStreamName: *shuntlog*

System	TVSNAME	State	Type
<i>sysname</i>	<i>tvname</i>	<i>logstate</i>	<i>logtype</i>
Connect Status			
<i>status</i>			

LogStreamName: *loglogs*

System	TVSNAME	State	Type
<i>sysname</i>	<i>tvname</i>	<i>logstate</i>	<i>logtype</i>
Connect Status			
<i>status</i>			

.

.

.

LogStreamName: *frlog*

IGW800I

System	TVSNAME	State	Type
-----	-----	-----	-----
<i>sysname</i>	<i>tvname</i>	<i>logstate</i>	<i>logtype</i>
Connect	Status		

<i>status</i>			
.			
.			
.			

A DISPLAY SMS,TRANVSAM ALL command was issued.

In the message text:

hh.mm.ss

The time in hours (00–23), minutes (00–59), and seconds (00–59). If the time-of-day clock is not working, *hh.mm.ss* appears as "00.00.00".

sysname

The name of the system in the sysplex to which the information applies.

tvname

The name of the DFSMStvs instance on the specified system.

state

The current status of the DFSMStvs instance: INITIALIZING, ACTIVE, QUIESCING, QUIESCED, DISABLING, or DISABLED.

reg

The current status of DFSMStvs with respect to resource recovery services (RRS): REG (registered) or UNREG (unregistered).

urs

The number of active units of recovery that DFSMStvs is processing.

type/type

The type of start that DFSMStvs last performed and the type of start that DFSMStvs performs if it restarts. The possible values are COLD and WARM.

akp

The activity keypoint trigger for DFSMStvs.

nnn

The quiesce timeout value for DFSMStvs.

undolog

The name of the primary system log (undo log) stream in use by DFSMStvs.

shntlog

The name of the secondary system log (shunt log) stream in use by DFSMStvs.

loglogs

The name of the log-of-logs stream in use by DFSMStvs, if any.

frlog

The name of a forward recovery log stream in use by DFSMStvs, if any.

logstate

The state of the log stream:

- ENABLING
- ENABLED
- QUIESCING
- QUIESCED
- DISABLING
- DISABLED

logtype

The type of log stream:

- UNDOLOG: The primary system log (undo log) stream for DFSMStvs.
- SHUNTLOG: The secondary system log (shunt log) stream for DFSMStvs.
- LOGOFLOGS: The DFSMStvs log of logs.
- FRLOG: A forward recovery (redo) log.

status

The connect status of the log stream: CONNECTED or DISCONNECTED.

System action: DFSMStvs continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGWSDTVS, IGWSDTV1, IGWSRTE2

Routing code: 2, 10

Descriptor code: -

IGW800I DFSMS VSAMRLS REQUEST TO DISPLAY TRANSACTIONAL VSAM INFORMATION IS REJECTED: TRANSACTIONAL VSAM IS NOT ACTIVE ON THIS SYSTEM

Explanation: A DISPLAY SMS,TRANVSAM command was issued. DFSMStvs is not active.

System action: DFSMStvs continues processing.

Operator response: None

System programmer response: None

Problem determination: Examine the SYS1.PARMLIB(IGDSMSxx) active member to see if DFSMStvs should be active on this system.

Source: DFSMSsdfp

Module: IGWSDTVS, IGWSDTV1

Routing code: 2,10

Descriptor code: -

IGW800I DFSMS SETSMS REQUEST TO UPDATE AKP INFORMATION IS REJECTED: TRANSACTIONAL VSAM IS NOT ACTIVE ON THIS SYSTEM

Explanation: A SETSMS AKP command was issued. DFSMStvs is not active.

System action: DFSMStvs continues processing.

Operator response: None

System programmer response: None

Problem determination: Examine the SYS1.PARMLIB(IGDSMSxx) active member to see if DFSMStvs should be active on this system.

Source: DFSMSsdfp

Module: IGWSRTE2

Routing code: 2,10

Descriptor code: -

IGW801I

IGW801I *hh.mm.ss* DISPLAY SMS,JOB*text*

Explanation: In the message, *text* represents the following display:

TRANSACTIONAL VSAM Job Status On System: *sysname*

JobName StepName Urid

jobname stepname urid

Ur Status # Locks

status nnn

A DISPLAY SMS,JOB command was issued.

In the message text:

hh.mm.ss

The time in hours (00–23), minutes (00–59), and seconds (00–59). If the time-of-day clock is not working, *hh.mm.ss* appears as "00.00.00".

sysname

The name of the system in the sysplex on which the job is running.

jobname

The name of the job.

stepname

The name of the step within the job.

urid

The identifier of the current unit of recovery within the job, or "NO ACTIVE UR" if there is no current unit of recovery.

status

The status of the current unit of recovery within the job, or blank if there is no current unit of recovery. The status can be any of these values:

- In-flight
- In-prepare
- In-commit
- In-backout
- Indoubt
- Shunted

nnn

The number of locks that the unit of recovery holds.

System action: DFSMSStvs continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSDTV1

Routing code: 2,10

Descriptor code: -

IGW801I DFSMS REQUEST TO DISPLAY TRANSACTIONAL VSAM USAGE OF JOB: *job* WAS REJECTED. JOB IS NOT KNOWN TO ANY TRANSACTIONAL VSAM INSTANCE IN THE SYSPLEX.

Explanation: A DISPLAY SMS,JOB command was issued and either the job was not using DFSMSStvs or the job could not be found.

job

A job name.

System action: DFSMSStvs continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSDTV1

Routing code: 2,10

Descriptor code: -

IGW802I *hh.mm.ss* DISPLAY SMS,URID*text*

Explanation: In the message, *text* represents the following display:

```
TRANSACTIONAL VSAM URID Status For System: SYSTEM1
UrId                      Ur Status  JobName
-----
urid                      status    jobname
```

```
StepName # Locks
-----
stepname  nnn
```

A DISPLAY SMS,UR command was issued.

In the message text:

hh.mm.ss

The time in hours (00–23), minutes (00–59), and seconds (00–59). If the time-of-day clock is not working, *hh.mm.ss* appears as "00.00.00".

urid

The identifier of the unit of recovery.

status

The status of the unit of recovery. The status can be any of these values:

- In-flight
- In-prepare
- In-commit
- In-backout
- Indoubt

jobname

The name of the job.

stepname

The name of the step within the job.

nnn

The number of locks that the unit of recovery holds.

System action: DFSMSStvs continues processing.

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Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSDTV1

Routing code: 2,10

Descriptor code: -

IGW802I DFSMS REQUEST TO DISPLAY ACTIVE TRANSACTIONAL VSAM UR(s) WAS REJECTED, SPECIFIED URID(s) ARE NOT ACTIVE ON ANY TRANSACTIONAL VSAM INSTANCE IN THE SYSPLEX.

Explanation: A DISPLAY SMS,UR command was issued and either the unit of recovery was not using DFSMStvs or the unit of recovery could not be found.

System action: DFSMStvs continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSDTV1

Routing code: 2,10

Descriptor code: -

IGW803I *hh.mm.ss* DISPLAY SMS,SHUNTED (Summary Data)*text*

Explanation: In the message, *text* represents the following display:

```
SysName # Urid(s) SysName # Urid(s) ...  
-----  
sysname nnn sysname nnn ...
```

A DISPLAY SMS,SHUNTED command was issued.

In the message text:

hh.mm.ss

The time in hours (00–23), minutes (00–59), and seconds (00–59). If the time-of-day clock is not working, *hh.mm.ss* appears as "00.00.00".

sysname

The name of a system.

nnn

The number of shunted units of recovery on the system.

System action: DFSMStvs continues processing.

Operator response: None

System programmer response: Correct the problem that caused the entry or entries to become shunted. Then use the access method services (IDCAMS) SHCDS PURGE or REPLY command to resolve the shunted entry or entries. If the problem is that a data set has active log records but not locks, the outstanding recovery must be purged.

Problem determination: None

Source: DFSMSdfp

Module: IGWSDTV1

Routing code: 2,10

Descriptor code: -

IGW803I *hh.mm.ss* DISPLAY SMS,SHUNTED,SPHERE *text*

Explanation: In the message, *text* represents the following display:

```

Sphere: sphere
System: sysname
Urid                               Status
-----
urid                               status
.
.
.

Cause      JobName  StepName
-----
Disable   jobname stepname
.
.
.

```

A DISPLAY SMS,SHUNTED,SPHERE command was issued.

In the message text:

hh.mm.ss

The time in hours (00–23), minutes (00–59), and seconds (00–59). If the time-of-day clock is not working, *hh.mm.ss* appears as "00.00.00".

sphere

The name of the sphere with shunted log records.

sysname

The name of the system in the sysplex on which the shunted unit of recovery exists.

urid

The identifier of the unit of recovery.

status

The status of the current unit of recovery within the job, or blank if there is no current unit of recovery. The status can be any of the following values:

- In-flight
- In-prepare
- In-commit
- In-backout
- Indoubt
- Shunted

cause

One of the following values::

- C-FAILED: A commit failed.
- B-FAILED: A backout failed.
- IO-ERROR: An I/O error occurred on the data set.
- DS-FULL: The data set was full; no space was available on DASD to add records.
- IX-FULL: A larger alternate index is required.

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- LOCK: A failure occurred during an attempt to obtain a lock during backout, or DFSMStvs detected that a data set has active log records but no locks. This can occur if a data set that has retained locks is deleted.
- LOG: A log stream became or was made unavailable.
- CACHE: A cache structure or connection to it failed.

jobname

The name of the job.

stepname

The name of the step within the job.

System action: DFSMStvs continues processing.

Operator response: None

System programmer response: Correct the problem that caused the entry or entries to become shunted. Then use the access method services (IDCAMS) SHCDS PURGE or RETRY command to resolve the shunted entry or entries. If the problem is that a data set has active log records but not locks, the outstanding recovery must be purged.

Problem determination: None

Source: DFSMSdfp

Module: IGWSDTV1

Routing code: 2,10

Descriptor code: -

IGW803I *hh.mm.ss* DISPLAY SMS,SHUNTED,UR *text*

Explanation: In the message, *text* represents the following display:

Urid: *urid*

Status: *status* Cause: *cause*

System Name: *sysname*

SphereName

sphere

.
. .
.

JobName StepName

jobname stepname

.
. .
.

A DISPLAY SMS,SHUNTED,UR command was issued.

In the message text:

hh.mm.ss

The time in hours (00–23), minutes (00–59), and seconds (00–59). If the time-of-day clock is not working, *hh.mm.ss* appears as "00.00.00".

urid

The identifier of the unit of recovery.

status

The status of the current unit of recovery within the job, or blank if there is no current unit of recovery. The status can be any of the following values:

- In-flight

- In-prepare
- In-commit
- In-backout
- Indoubt
- Shunted

cause

One of the following values:

- C-FAILED: A commit failed.
- B-FAILED: A backout failed.
- IO-ERROR: An I/O error occurred on the data set.
- DS-FULL: The data set was full; no space was available on a direct access storage device (DASD) to add records.
- IX-FULL: A larger alternate index is required.
- LOCK: A failure occurred during an attempt to obtain a lock during backout, or DFSMSStvs detected that a data set has active log records but no locks. This can occur if a data set that has retained locks is deleted.
- LOG: A log stream became or was made unavailable.
- CACHE: A cache structure or connection to it failed.

sysname

The name of the system in the sysplex on which the shunted unit of recovery exists.

sphere

The name of the sphere set with shunted log records.

jobname

The name of the job.

stepname

The name of the step within the job.

System action: DFSMSStvs continues processing.

Operator response: None

System programmer response: Correct the problem that caused the entry or entries to become shunted. Then use the access method services (IDCAMS) SHCDS PURGE or REPLY command to resolve the shunted entry or entries. If the problem is that a data set has active log records but not locks, the outstanding recovery must be purged.

Problem determination: None

Source: DFSMSdfp

Module: IGWSDTV1

Routing code: 2,10

Descriptor code: -

IGW803I DFSMS REQUEST TO DISPLAY TRANSACTIONAL VSAM SHUNTED UR: *urid* WAS REJECTED, SPECIFIED UR IS NOT KNOWN TO ANY TRANSACTIONAL VSAM INSTANCE IN THE SYSPLEX.

Explanation: A DISPLAY SMS,SHUNTED,UR command was issued

In the message text:

urid

The identifier of the unit of recovery.

System action: DFSMSStvs continues processing.

Operator response: None

System programmer response: Correct the identifier of the unit of recovery and reissue the command.

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Problem determination: None

Source: DFSMSdfp

Module: IGWSDTV1

Routing code: 2,10

Descriptor code: -

IGW803I DFSMS REQUEST TO DISPLAY TRANSACTIONAL VSAM SHUNTED UR FOR SPHERE *dsn* WAS REJECTED, SPECIFIED SPHERE IS NOT KNOWN TO ANY TRANSACTIONAL VSAM INSTANCE IN THE SYSPLEX.

Explanation: A DISPLAY SMS,SHUNTED,SPHERE command was issued. The specified sphere either was not using DFSMStvs or could not be found.

In the message text:

dsn

The name of the VSAM sphere.

System action: DFSMStvs continues processing.

Operator response: None

System programmer response: Correct the sphere name and reissue the command.

Problem determination: None

Source: DFSMSdfp

Module: IGWSDTV1

Routing code: 2,10

Descriptor code: -

IGW804I *hh.mm.ss* DISPLAY SMS,LOG(logstream)*text*

Explanation: In the message, *text* represents the following display:

```
DISPLAY SMS,LOG      - LOG STREAM STATUS
Name: logstream  State: logstate  Type: logtype
System TVSNAMES JobName Urid of Oldest Log Block
-----
sysname tvsname          urid*
```

```
DISPLAY SMS,LOG      - LOG STREAM USAGE
LogStreamName: IGWTV001.IGWLOG.SYSLOG
System TVSNAMES JobName JobName JobName ...
-----
sysname tvsname job      job      job      ...
*OLDEST URID ACROSS ALL SYSTEMS IN THE SYSPLEX
```

A DISPLAY SMS,LOG command was issued.

In the message text:

hh.mm.ss

The time in hours (00–23), minutes (00–59), and seconds (00–59). If the time-of-day clock is not working, *hh.mm.ss* appears as "00.00.00".

logstream

The name of the log stream.

logstate

The state of the log stream:

- ENABLING
- ENABLED
- QUIESCING
- QUIESCED
- DISABLING
- DISABLED

logtype

The type of log stream:

- UNDOLOG: The DFSMStvs primary system log (undo log) stream.
- SHUNTLOG: The DFSMStvs secondary system log (shunt log) stream.
- LOGOFLOGS: The DFSMStvs log of logs.
- FRLOG: A forward recovery (redo) log.

sysname

The name of the system in the sysplex to which the information applies.

tvname

The name of the DFSMStvs instance on the specified system.

job

The name of a job that uses the log stream, if the log stream is a system log or a forward recovery log.

urid

The identifier of the unit of recovery that owns the oldest log block, if available. (This does not apply forward recovery logs.)

System action: DFSMStvs continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSDTV1.

Routing code: 2,10

Descriptor code: -

IGW804I DFSMS REQUEST TO DISPLAY TRANSACTIONAL VSAM LOG STREAM: *logstream* WAS REJECTED. LOG STREAM NOT KNOWN TO DFSMS.

Explanation: A DISPLAY SMS,LOG command was issued. The LOG was either not using DFSMStvs or could not be found.

In the message text:

logstream

The name of the log stream.

System action: DFSMStvs continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSDTV1.

Routing code: 2,10

Descriptor code: -

IGW805I

IGW805I *hh.mm.ss* **DISPLAY SMS,DSNAME***text*

Explanation: In the message, *text* represents the following display:

```
DATASET: dsn
IS CURRENTLY IN USE BY THE FOLLOWING JOBS:
System Name: sysname TVSNAME: tvname
JobNames: jobname jobname ...
.
.
.
```

A DISPLAY SMS,DSNAME command was issued.

In the message text:

hh.mm.ss

The time in hours (00–23), minutes (00–59), and seconds (00–59). If the time-of-day clock is not working, *hh.mm.ss* appears as "00.00.00".

dsn

The name of the data set.

sysname

The name of the system in the sysplex on which the job is running.

tvname

The name of the DFSMStvs instance on the specified system.

jobname

The name of a job that has the data set open for DFSMStvs access.

System action: DFSMStvs continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSDTV1

Routing code: 2,10

Descriptor code: -

IGW805I **DFSMS REQUEST TO DISPLAY TRANSACTIONAL VSAM USAGE OF DATASET: *dsn* WAS REJECTED. DATASET NOT KNOWN TO TRANSACTIONAL VSAM.**

Explanation: A DISPLAY SMS,DSNAME command was issued. The data set was either not using DFSMStvs or could not be found.

In the message text:

dsn

The name of the data set.

System action: DFSMStvs continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSDTV1

Routing code: 2,10

Descriptor code: -

IGW806I {JOB | URID | DATA SET | LOG STREAM} *name* NOT FOUND

Explanation: A DISPLAY SMS command was issued, but DFSMStvs could not find the job, unit of recovery, data set, or log stream that the command specified.

In the message text:

name

The name of the job, data set, or log stream, or the unit of recovery identifier.

System action: DFSMStvs continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSDTV1

Routing code: 2,10

Descriptor code: -

IGW807I THERE ARE NO SHUNTED UNITS OF RECOVERY

Explanation: A DISPLAY SMS command was issued to display information about shunted units of recovery, but there are no shunted units of recovery.

System action: DFSMStvs continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSDTV1

Routing code: 2,10

Descriptor code: -

IGW808I {*tvname* | LOG STREAM | DATA SET} *name* IS NOW {ENABLED | QUIESCED | DISABLED}

Explanation: The state of DFSMStvs, a log stream, or a data set has been changed to the state specified in the message.

In the message text:

tvname

The name of a DFSMStvs instance.

name

The name of a log stream or data set.

System action: DFSMStvs continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

IGW809I • IGW811I

Module: IGWSDTV1

Routing code: 2,10

Descriptor code: -

IGW809I {AKP | QTIMEOUT} SET TO *value*

Explanation: A SETSMS AKP or SETSMS QTIMEOUT command was issued. The value has been set to the value requested.

In the message text:

value

The AKP or QTIMEOUT value.

System action: DFSMSStvs continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: None

Routing code: 2,10

Descriptor code: -

IGW810I *date time* DATA SET *dsn* SUCCESSFULLY {QUIESCED | UNQUIESCED}

Explanation: A request to VSAM record-level sharing (RLS) to quiesce or unquiesce data set *dsn* was completed.

In the message text:

date

The current date.

time

The current time.

dsn

The name of the data set.

System action: DFSMSStvs continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: None

Routing code: 2,10

Descriptor code: -

IGW811I *date time* ATTEMPT TO QUIESCE DATA SET *dsn* FAILED. QUIESCE WAS CANCELLED.

Explanation: A request to VSAM record-level sharing (RLS) to quiesce the data set *dsn* throughout the sysplex was canceled. The quiesce was canceled for one of these reasons:

- A VARY SMS command was issued to unquiesce the data set.
- The quiesce would not complete and was timed out. If the request timed out, a preceding message IGW8141 is also issued.

In the message text:

date

The current date.

time

The current time.

dsn

The name of the data set.

System action: DFSMStvs continues processing. The quiesce state of the data set in the catalog is set to UNQUIESCED as a result of the cancel.

Operator response: None

System programmer response: The response depends on the reason for the cancellation:

- If a message precedes IGW811I, refer to the explanation for that message for background information.
- If a VARY SMS command was the reason, determine what the quiesce state should be.
- If the state should be QUIESCED, issue a new VARY SMS command to quiesce the data set.
- If the quiesce timed out, retry the quiesce using a VARY SMS command.

If the timeout occurs again, consider identifying those jobs that are using the data set and then canceling them. You can use the DISPLAY SMS,DSNAME command to identify jobs that are using the data set, if it is open for DFSMStvs access.

Problem determination: None

Source: DFSMSdftp

Module: None

Routing code: 2,10

Descriptor code: -

IGW812I *date time* ATTEMPT TO {QUIESCE | UNQUIESCE} DATA SET *dsn* FAILED. VSAM RLS RETURN CODE *rc* REASON CODE *rsnc*

Explanation: This message is issued after a request to VSAM record-level sharing (RLS) to quiesce or unquiesce data set *dsn* throughout the sysplex fails with an unexpected error. The VSAM IDAQUIES macro failed with return code *rc* and reason code *rsnc*.

In the message text:

date

The current date.

time

The current time.

dsn

The name of the data set.

rc The return code.

rsnc

The reason code.

System action: DFSMStvs continues processing after creating a memory dump. The quiesce state of the data set in the catalog is unpredictable.

Operator response: None

System programmer response: Use the IDAQUIES reason code to determine the cause of the problem. When the problem has been resolved, issue a VARY SMS command to set the quiesce state in the catalog to QUIESCED or UNQUIESCED. If you cannot resolve the problem or the problem recurs, the error might be more severe; in this case, contact the IBM Support Center.

IGW813I • IGW814I

Problem determination: None

Source: DFSMSdftp

Module: None

Routing code: 2,10

Descriptor code: -

IGW813I *date time* ATTEMPT TO {QUIESCE | UNQUIESCE} DATA SET *dsn* FAILED BECAUSE THE DATA SET {COULD NOT BE FOUND | IS MIGRATED}

Explanation: A request to VSAM record-level sharing (RLS) to quiesce or unquiesce the data set *dsn* throughout the sysplex failed for either of these reasons:

- DFSMS does not recognize the data set *dsn*.
- The data set *dsn* has been migrated. You need to recall the data set before VSAM RLS can quiesce or unquiesce it.

In the message text:

date

The current date.

time

The current time.

dsn

The name of the data set.

System action: DFSMSStvs continues processing.

Operator response: None

System programmer response: Take either of these actions:

- Correct the name of the data set and retry the quiesce or unquiesce request.
- Recall the data set and retry the quiesce or unquiesce request.

Problem determination: None

Source: DFSMSdftp

Module: None

Routing code: 2,10

Descriptor code: -

IGW814I *date time* TIMEOUT OCCURRED WHILE QUIESCING DATA SET *dsn*. QUIESCE WILL BE CANCELLED

Explanation: The request that was made to VSAM record-level sharing (RLS) to quiesce data set *dsn* throughout the sysplex has timed out. The timeout limit is given by the system initialization parameter QTIMEOUT.

The timeout might be due to the presence of long-running units of recovery failing to reach syncpoint, preventing the close of the data set.

In the message text:

date

The current date.

time

The current time.

dsn

The name of the data set.

System action: DFSMSStvs cancels the quiesce throughout the sysplex by issuing an unquiesce for the data set. Depending upon the timing of the unquiesce request, either of these situations can result:

- Normally the unquiesce is processed immediately and the quiesce request is cancelled by VSAM.
- Occasionally, depending on the timing of the unquiesce, the original quiesce request completes before the unquiesce request has been processed. Because the unquiesce cannot be canceled, it completes and thereby cancels the original quiesce.

Operator response: None

System programmer response: If timeouts occur regularly, you can take the following actions to resolve the problem:

1. Increase the quiesce timeout value. This can be useful if the system is particularly busy when quiesces are likely to be issued.
2. Change the long-running unit of recovery that is preventing the request from completing.

You can also identify those jobs that are using the data set and cancel them. This forces their current units of recovery to back out. If the data set is open for DFSMSStvs access, you can use the DISPLAY SMS,DSNAME command to identify jobs that are using it.

Problem determination: None

Source: DFSMSdfp

Module: None

Routing code: 2,10

Descriptor code: -

IGW815I AN ERROR OCCURRED WHILE TRANSACTIONAL VSAM WAS NOTIFYING VSAM RLS OF THE {COMPLETION | CANCELLATION} OF A {QUIESCE FOR CLOSE | QUIESCE FOR COPY | BWO BACKUP} REQUEST FOR DATA SET *dsn*. VSAM RLS RETURN CODE *rc* REASON CODE *rsnc*

Explanation: An unexpected error occurred when DFSMSStvs notified VSAM record-level sharing (RLS) that it had completed its processing or canceled a request for a data set quiesce or backup. The IDAQUIES macro failed with return code *rc* reason code *rsnc*.

In the message text:

dsn

The name of the data set.

rc The return code.

rsnc

The reason code.

System action: DFSMSStvs continues processing after creating a memory dump. The failure of the IDAQUIES macro might cause the data set operation to time out or fail.

Operator response: None

System programmer response: Use the IDAQUIES reason code to determine the cause of the problem. For the meaning of the IDAQUIES reason code, see *z/OS DFSMS Macro Instructions for Data Sets*. If the data set operation has failed, retry the data set operation after the problem has been resolved.

Problem determination: None

Source: DFSMSdfp

Module: IGW8QEXR.

Routing code: 2,10

Descriptor code: -

IGW819I DATA SET *dsn* IS BEING QUIESCED DUE TO AN ERROR ON ITS FORWARD RECOVERY LOG *logstream*. THE DATA SET SHOULD BE BACKED UP BEFORE BEING UNQUIESCED.

Explanation: A permanent error was detected in the forward recovery log stream *logstream*, which the data set *dsn* uses. As a result, the data set might contain changes that the forward recovery log does not reflect. DFSMStvs quiesced the data set so that a new backup of it can be created before further processing is done against the data set.

In the message text:

dsn

The name of the data set being processed.

logstream

The name of the forward recovery log stream that is associated with the data set.

System action: CLOSE processing of the data set continues to completion. DFSMStvs issues an IDAQUIES type QUICLOSE for the data set when the last open instance of DFSMStvs is closed. Then DFSMStvs issues this message to report the problem. Other transaction managers might reject the QUICLOSE request that DFSMStvs issues for the data set.

Operator response: None

System programmer response: Create a new backup of the data set. Then, either refer to earlier system logger messages and your installation's log recovery procedures to determine appropriate log recovery actions, or use the access method services (IDCAMS) ALTER command to change the name of the forward recovery log that the data set uses.

Problem determination: None

Source: DFSMSdfp

Module: IGW8OCDS

Routing code: 2,10

Descriptor code: -

IGW821I *date time* THE SYSTEM LOGGER RETURNED AN ERROR DURING IXGCONN CONNECT FOR LOG STREAM *logstream*. SOME DATA PREVIOUSLY WRITTEN TO THIS LOG STREAM HAS BEEN LOST. SYSTEM LOGGER RETURN CODE *rc* REASON CODE *rsnc*

Explanation: DFSMStvs has detected an error while attempting to access a log stream. Some of the data written to this log stream has been permanently lost.

This message is issued only if the log stream is a forward recovery log or log of logs (not for a DFSMStvs undo or shunt log).

In the message text:

date

The current date.

time

The current time.

logstream

The name of the log stream.

rc The system logger macro return code.

rsnc

The system logger macro reason code.

System action: The log stream is quiesced for DFSMStvs use.

Operator response: None

System programmer response: If the log stream is used as a forward recovery log, make a fresh backup of all data sets that use this log stream as soon as possible.

Use the system logger return and reason codes to further diagnose the problem. The system logger return and reason

codes are defined in *z/OS MVS Programming: Assembler Services Reference IAR-XCT* under the IXGCONN macro topic.

Problem determination: None

Source: DFSMSdfp

Module: IGW9LHS2

Routing code: 2,10

Descriptor code: -

IGW822I *date time* **THE SYSTEM LOGGER FAILED TO LOCATE A BLOCKID REQUESTED BY TRANSACTIONAL VSAM. MISSING BLOCKID *blkid1* CHAIN HISTORY POINT *blkid2***

Explanation: The system logger has returned an IxgRsnCodeNoBlock (X'00000804') reason code to DFSMStvs. This means that the log block that is requested by DFSMStvs could not be located by the system logger.

The message shows the BLOCKID number of the requested block and the BLOCKID number that represents the chain history point for the log block chain in question.

In the message text:

date

The current date.

time

The current time.

blkid1

The BLOCKID value for the requested block.

blkid2

The chain history point for the requested block.

System action: This is an informational message that provides the BLOCKID number of the missing block and the BLOCKID number of the chain history point for the chain that should contain the requested block.

This message is preceded by message IGW839I.

Message IGW833I follows this message. A quiesce of DFSMStvs is initiated.

Operator response: None

System programmer response: Compare the requested BLOCKID number with the BLOCKID number of the chain history point. If the requested BLOCKID number is equal to the number of the chain history point or is a higher relative number, then the BLOCKID value represents a log block that DFSMStvs is still interested in and that should be available from the system logger.

If the requested BLOCKID number is a lower relative number than the BLOCKID number of the chain history point, then DFSMStvs has requested a block that was written earlier than the current logical start of the chain. This indicates an internal logic error within DFSMStvs.

Use the DFHJUP utility to print the log stream before DFSMStvs is restarted.

If the failure occurred for the DFSMStvs system log, print both the primary and secondary DFSMStvs system log streams before restarting DFSMStvs.

If the error condition persists, contact the IBM Support Center.

Problem determination: None

Source: DFSMSdfp

Module: IGW9LBLC

Routing code: 2,10

Descriptor code: -

IGW823I *date time* **THE SYSTEM LOGGER RETURNED AN ERROR DURING IXGCONN CONNECT FOR LOG STREAM *logstream*. TRANSACTIONAL VSAM ATTEMPTED TO CONNECT TO A LOG STREAM MODEL, WHICH IS NOT POSSIBLE. SYSTEM LOGGER RETURN CODE *rc* REASON CODE *rsnc***

Explanation: DFSMStvs has detected an error while attempting to access a log stream. DFSMStvs attempted to connect to a log stream model, which is not possible.

In the message text:

date

The current date.

time

The current time.

logstream

The name of the log stream.

rc The system logger return code.

rsnc

The system logger reason code.

System action: For a general log (that is, a log of logs or forward recovery log stream), DFSMStvs makes the log stream locally unavailable. This causes the log stream to be inaccessible from the current system.

For a system log stream (that is, the undo or shunt log stream), DFSMStvs quiesces the log stream. This also causes DFSMStvs to be quiesced.

Operator response: None

System programmer response: Use the system logger return and reason codes to further diagnose the problem. For guidance, see the information about the IXGCONN macro in *z/OS MVS Programming: Assembler Services Reference IAR-XCT*.

It is possible that the data set has been defined with the wrong log stream name or that the log stream, has been defined incorrectly to have the MODEL(YES) attribute.

Problem determination: None

Source: DFSMSDfp

Module: IGW9LHS2

Routing code: 2,10

Descriptor code: -

IGW825I *date time* **A FAILURE HAS OCCURRED WHILE READING THE SYSTEM LOG *logstream*. THE REQUESTED DATA COULD NOT BE FOUND. TRANSACTIONAL VSAM WILL BE TERMINATED. THE NEXT TRANSACTIONAL VSAM START MUST BE COLD**

Explanation: DFSMStvs is unable to locate previously hardened data when reading from the system log during a restart. This implies that data in the system log has been lost. The integrity of the system log is suspect.

In the message text:

date

The current date.

time

The current time.

logstream

The name of the log stream.

System action: The restart of DFSMStvs ends. DFSMStvs is quiesced. DFSMStvs forces the next start to be cold to ensure that no data is read from the system log.

Operator response: None

System programmer response: Because the next DFSMStvs start must be cold, ensure that any transactions that were in-flight are recovered.

If the error condition persists, contact the IBM Support Center.

After the cold start, any data sets for which recovery was owed are most likely left in a damaged state and need to be recovered manually. If the data sets are forward recoverable, then their forward recovery logs might also be damaged. IBM recommends that you manually recover the data sets (without using forward recovery), take backups of them and of any other data sets that use the forward recovery log, and then delete and redefine the forward recovery log.

Problem determination: None

Source: DFSMSdfp

Module: IGW9LSE

Routing code: 2,10

Descriptor code: -

IGW827I *date time* **A FAILURE HAS OCCURRED WHILE {WRITING TO | READING FROM} THE SYSTEM LOG *logstream*. ACCESS TO THE SYSTEM LOG HAS BEEN LOST. TRANSACTIONAL VSAM WILL BE TERMINATED**

Explanation: DFSMStvs has detected a failure while writing to or reading from a system log, either the undo log or shunt log. The system logger return and reason codes indicate the failure. A previous IGW839I DFSMStvs message contains these codes.

In the message text:

date

The current date.

time

The current time.

logstream

The name of the log stream.

System action: DFSMStvs is disabled, as are its system logs.

Operator response: None

System programmer response: Using system logger return and reason codes from the previous IGW839I message as a guide, correct the problem and restart DFSMStvs. If you cannot resolve the problem, or if the problem recurs, the error might be more severe. In this case, contact the IBM Support Center.

Problem determination: None

Source: DFSMSdfp

Module: IGW9SLE

Routing code: 2,10

Descriptor code: -

IGW828E *date time* **A {SEVERE ERROR (CODE X'*code*') | FAILURE} HAS OCCURRED WHILE {OPENING | ACCESSING} THE [TRANSACTIONAL VSAM] SYSTEM LOG *logstream*. TRANSACTIONAL VSAM WILL BE TERMINATED.**

Explanation: DFSMStvs has detected a failure while opening or accessing the primary or secondary system log. A previous DFSMStvs message indicates the failure.

In the message text:

date

The current date.

IGW829I

time

The current time.

code

For severe errors, *code* is the exception trace point ID that uniquely identifies the place where the error was detected.

logstream

The name of the log stream.

System action: DFSMStvs is quiesced. A system memory dump is created.

Operator response: None

System programmer response: Using the system logger return and reason codes that were found in the previous IGW839I message as a guide, correct the problem and restart DFSMStvs.

If you cannot resolve the problem, or the problem recurs, there might be a more severe error. In this case, contact the IBM Support Center.

Problem determination: None

Source: DFSMSdfp

Module: IGW9LSLN, IGW9LSLE

Routing code: 2,10

Descriptor code: -

IGW829I *date time* **A SEVERE ERROR (CODE X'*code*') HAS OCCURRED IN MODULE *modname***

Explanation: An error has been detected in the module *modname*. The code X'*code*' is the exception trace point ID number that uniquely identifies what the error is and where it was detected.

In the message text:

date

The current date.

time

The current time.

code

The trace point ID.

modname

The DFSMStvs module that experienced the error.

System action: A system memory dump is created.

DFSMStvs continues processing. If appropriate, an error return code is sent to the caller.

Operator response: None

System programmer response: This message indicates a possible error in DFSMStvs code. The severity of its impact depends on the importance of the function being run at the time of the error.

DFSMStvs might not have abnormally ended. If the message occurs once and module *modname* is not crucial to the running of your system, you might decide to continue and to bring DFSMStvs down at a convenient time to resolve the problem.

If the message recurs or if you cannot continue without the full use of the module *modname*, disable or quiesce DFSMStvs.

If you need further assistance to resolve this problem, contact the IBM Support Center.

Problem determination: None

Source: DFSMSdfp

Module: IGW9LMEC

Routing code: 2,10

Descriptor code: -

IGW830I *date time* **JOB** *jobname* **STEP** *stepname* **HAS ENTERED RECOVERY DUE TO CANCEL PROCESSING AND TRANSACTIONAL VSAM LOGGING MUST SUSPEND THIS TASK TEMPORARILY**

Explanation: A task processing a DFSMStvs request has been forced or cancelled. At the time, DFSMStvs was in the process of performing a logging operation that must be retried. During the retry process, it was necessary to suspend this task because another task is currently responsible for writing out a log buffer. This message indicates that the task is ending, but that process might be delayed.

In the message text:

date

The current date.

time

The current time.

jobname

The name of the job being processed when the force or cancel occurred.

stepname

The name of the step being processed when the force or cancel occurred.

System action: The DFSMStvs logger temporarily suspends this task until the other task completes its logging operation.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGW9LMEC, IGW09LDSC

Routing code: 2,10

Descriptor code: -

IGW833I **A FAILURE OCCURRED WHILE READING FROM SYSTEM LOG** *logstream*. **THE REQUESTED DATA COULD NOT BE FOUND. TRANSACTIONAL VSAM WILL BE QUIESCED SO INFLIGHT TASKS CAN COMPLETE. NEXT TRANSACTIONAL VSAM START MUST BE COLD**

Explanation: DFSMStvs is unable to locate previously hardened data when reading from the system log during the backout of a task. This implies that data on the system log has been lost. The integrity of the system log is suspect.

In the message text:

logstream

The name of the log stream.

System action: DFSMStvs is quiesced to let as many tasks complete as possible. Any tasks that enter backout from this point on are not backed out. DFSMStvs forces the next start to be cold to ensure that no data is read from the system log.

Operator response: None

System programmer response: Because the next DFSMStvs start must be cold, ensure that any units of recovery that were in-flight are recovered. If the error condition persists, contact the IBM Support Center.

After the cold start, any data sets for which recovery was owed are most likely left in a damaged state and need to be recovered manually. If the data sets are forward recoverable, then their forward recovery logs might also be damaged. IBM recommends that you manually recover the data sets (without using forward recovery), take backups of them and of any other data sets that use the forward recovery log, and then delete and redefine the forward recovery log.

IGW834I • IGW835I

Problem determination: None

Source: DFSMSdfp

Module: IGW9LMEC

Routing code: 2,10

Descriptor code: -

IGW834I TRANSACTIONAL VSAM RECEIVED A LOST DATA WARNING FOR SYSTEM LOG *logstream*.
TRANSACTIONAL VSAM WILL BE QUIESCED SO INFLIGHT TASKS CAN COMPLETE. NEXT
TRANSACTIONAL VSAM START MUST BE COLD

Explanation: DFSMSStvs received a lost data warning when writing to the system log. This means that one or more blocks of previously hardened data have been lost from the system log. The integrity of the system log is most likely compromised.

In the message text:

logstream

The name of the log stream.

System action: DFSMSStvs is quiesced to let as many tasks complete as possible. Any tasks that enter backout from this point on are not backed out. DFSMSStvs forces the next start to be cold to ensure that no data is read from the system log.

Operator response: None

System programmer response: Because the next DFSMSStvs start must be cold, ensure that any units of recovery that were in-flight are recovered. If the error condition persists, contact the IBM Support Center.

After the cold start, any data sets for which recovery was owed are most likely left in a damaged state and need to be recovered manually. If the data sets are forward recoverable, then their forward recovery logs might also be damaged. IBM recommends that you manually recover the data sets (without using forward recovery), take backups of them and of any other data sets that use the forward recovery log, and then delete and redefine the forward recovery log.

Problem determination: None

Source: DFSMSdfp

Module: IGW9LMEC

Routing code: 2,10

Descriptor code: -

IGW835I A FAILURE TO READ DATA FROM SYSTEM LOG *logstream* DURING BACKOUT HAS CAUSED
JOB *jobname* STEP *stepname* UNIT OF RECOVERY *urid* TO BE SHUNTED

Explanation: The unit of recovery *urid* for job *jobname* step *stepname* has been shunted. Data that is required during backout could not be located on the system log. This message is preceded by message IGW827I or IGW833I.

In the message text:

logstream

The name of the log stream.

jobname

The name of the job.

stepname

The name of the step within the job.

urid

The unit of recovery identifier that resource recovery services (RRS) assigned.

System action: The unit of recovery is shunted.

Operator response: None

System programmer response: Refer to the explanation for message IGW827I or IGW833I.

Problem determination: None

Source: DFSMSdfp

Module: IGW9LMEC

Routing code: 2,10

Descriptor code: -

IGW836I *date time* TAIL OF LOG STREAM *logstream* DELETED AT BLOCKID *blockid*

Explanation: DFSMStvs trimmed the tail of log stream *logstream*. All records that were processed before the specified system logger block have been deleted. This error occurs during activity keypoint processing when DFSMStvs no longer needs records beyond a certain age on a DFSMStvs system log stream.

In the message text:

date

The current date.

time

The current time.

logstream

The name of the log stream.

blockid

The identifier of the log block at which the log was truncated.

System action: DFSMStvs continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGW9LMEC

Routing code: 2,10

Descriptor code: -

IGW837I *date time* ALL RECORDS IN LOG STREAM *logstream* HAVE BEEN DELETED

Explanation: DFSMStvs has deleted all records from log stream *logstream*. This occurs during DFSMStvs initialization when the start type is COLD.

In the message text:

date

The current date.

time

The current time.

logstream

The name of the log stream.

System action: DFSMStvs continues processing.

Operator response: None

System programmer response: After the cold start, any data sets for which recovery was owed are most likely left in a damaged state and need to be recovered manually. If the data sets are forward recoverable, then their forward recovery logs might also be damaged. IBM recommends that you manually recover the data sets (without using

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forward recovery), take backups of them and of any other data sets that use the forward recovery log, and then delete and redefine the forward recovery log.

Problem determination: None

Source: DFSMSdfp

Module: IGW9LMEC

Routing code: 2,10

Descriptor code: -

IGW838I *date time* A TEMPORARY ERROR CONDITION OCCURRED DURING SYSTEM LOGGER OPERATION {IXGCONN | IXGWRITE | IXGBRWSE | IXGDELET | IXGWRITE} {CONNECT | DISCONNECT | START | READCURSOR | READBLOCK | END | ALL | RANGE} FOR LOG STREAM *logstream*. SYSTEM LOGGER RETURN CODE *rc* REASON CODE *rsnc*

Explanation: DFSMSStvs called the system logger to access a log, and the system logger returned a temporary error condition. The system logger operation that returned the error condition is identified in the message. The return and reason codes that are shown are those returned by the system logger. These return and reason codes can be interpreted by reviewing the description of errors for the appropriate system logger operation in *z/OS MVS Programming: Assembler Services Reference ABE-HSP* and *z/OS MVS Programming: Assembler Services Reference IAR-XCT*.

In the message text:

logstream

The name of the log stream.

date

The current date.

time

The current time.

logstream

The name of the log stream.

rc The system logger return code.

rsnc

The system logger reason code.

System action: DFSMSStvs automatically retries the operation every three seconds while the temporary error condition persists. This message is issued every ten retries following the first or previous issue.

Operator response: None

System programmer response: No response is necessary because this is a temporary condition.

Problem determination: None

Source: DFSMSdfp

Module: IGW9LMEC

Routing code: 2,10

Descriptor code: -

IGW839I *date time* AN ERROR OCCURRED DURING SYSTEM LOGGER OPERATION {IXGCONN | IXGWRITE | IXGBRWSE | IXGDELET} {CONNECT | DISCONNECT | START | READCURSOR | READBLOCK | END | ALL | RANGE} FOR {SYSTEM | FORWARD RECOVERY} LOG STREAM *logstream*. SYSTEM LOGGER RETURN CODE *rc* REASON CODE *rsnc*

Explanation: DFSMSStvs called the system logger to access a log, and the system logger returned an error condition. The message identifies the system logger operation that returned the error condition and shows the return and reason codes that the system logger returns. Other DFSMSStvs messages might follow message IGW839I, especially if the log stream is a DFSMSStvs system log.

This situation can occur under one of the following conditions:

- DFSMStvs calls the system logger using an obsolete log stream connection token.
- Either a crash or a user request causes the system logger to be restarted.

In the message text:

date

The current date.

time

The current time.

logstream

The name of the log stream.

rc The system logger return code.

rsnc

The system logger reason code.

System action: The system action depends on the nature of the error that the system logger returns.

Operator response: None

System programmer response: If the system logger was recently restarted, shut down DFSMStvs and restart it. Otherwise, use the system logger return and reason codes to diagnose the problem. You can interpret these return and reason codes by reviewing the descriptions of errors for the appropriate system logger operation in *z/OS MVS Programming: Assembler Services Reference ABE-HSP* and *z/OS MVS Programming: Assembler Services Reference IAR-XCT*.

Problem determination: None

Source: DFSMSdfp

Module: IGW9LMEC

Routing code: 2,10

Descriptor code: -

IGW840I *date time* SYSTEM LOGGER RETURNED AN ALERT DURING OPERATION {IXCONN | CONNECT | IXGWRITE} FOR LOG STREAM *logstream*. THE LOG STREAM {DATA SET DIRECTORY IS FULL | WRITER OFFLOAD TASK IS FAILING | STAGING DATA SET FAILED}. SYSTEM LOGGER RETURN CODE *rc* REASON CODE *rsnc*

Explanation: DFSMStvs detected a warning while attempting to access a log stream. One of the following conditions occurred:

- The log stream's data set directory is full.
- The log stream writer offload task is failing.
- The log stream staging data set failed.

In the message text:

date

The current date.

time

The current time.

logstream

The name of the log stream.

rc The system logger return code.

rsnc

The system logger reason code.

System action: DFSMStvs continues normal operation until the current data set or structure of the log stream becomes full. When this happens, message IGW839I is issued.

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If the staging data set has failed, DFSMStvs continues normal operation, but the data that is written to the log stream structure is not being duplexed. Consequently, if the structure (or coupling facility) fails, the data cannot be recovered.

Operator response: None

System programmer response: The return and reason codes that are shown are those returned by the system logger. These return and reason codes can be interpreted by reviewing the description of errors for the appropriate system logger operation in *z/OS MVS Programming: Assembler Services Reference ABE-HSP* and *z/OS MVS Programming: Assembler Services Reference IAR-XCT*. After you have interpreted the return and reason codes, perform one of the following tasks:

- If the data set directory of the log stream is full, delete data from the log stream tail before the current data set fills up. You might want to take a copy of the data before deleting it.
- If the log stream writer offload task is failing, investigate and fix the failing log stream writer offload task (part of the system logger) before the log stream structure in the coupling facility fills up.
- If the staging data set has failed, IBM recommends that you shut down DFSMStvs as soon as possible. Investigate and fix the failing log stream, without losing the data. If the failing log stream is a DFSMStvs system log and DFSMStvs was immediately disabled, restart DFSMStvs to recover the in-flight units of recovery.

Problem determination: None

Source: DFSMSdfp

Module: IGW9LMEC

Routing code: 2,10

Descriptor code: -

IGW841I *date time* SYSTEM LOGGER RETURNED AN ERROR DURING OPERATION {IXGCONN CONNECT | IXGWRITE} FOR LOG STREAM *logstream*. {TRANSACTIONAL VSAM | THE SYSTEM LOGGER} DOES NOT HAVE AUTHORITY {TO PERFORM THIS OPERATION | TO ACCESS THE LOG STREAM STRUCTURE}. SYSTEM LOGGER RETURN CODE *rc* REASON CODE *rsnc*

Explanation: DFSMStvs detected an error while attempting to access a log stream. Either DFSMStvs has not been defined to the system logger with the authority to perform this operation using the user ID of the record-level sharing (RLS) address space (SMSVSAM), or the system logger does not have authority to access the log stream structure.

In the message text:

date

The current date.

time

The current time.

logstream

The name of the log stream.

rc The system logger return code.

rsnc

The system logger reason code.

System action: If the error occurred during access to either of the DFSMStvs system log streams (the undo or shunt log streams), those log streams are quiesced, as is DFSMStvs itself.

If the error occurred during access to either the log of logs or a forward recovery log, the log stream is made unavailable on this system.

Operator response: None

System programmer response: The return and reason codes that are shown are those returned by the system logger. These return and reason codes can be interpreted by reviewing the description of errors for the appropriate system logger operation in *z/OS MVS Programming: Assembler Services Reference ABE-HSP* and *z/OS MVS Programming: Assembler Services Reference IAR-XCT*. Ensure that DFSMStvs has authority to access the log stream using the user ID

of the RLS address space (SMSVSAM), or that the system logger address space has authority to access the log stream structure.

Problem determination: None

Source: DFSMSdfp

Module: IGW9LMEC

Routing code: 2,10

Descriptor code: -

IGW842I *date time* **SYSTEM LOGGER RETURNED AN ERROR DURING OPERATION IXGCONN CONNECT FOR LOG STREAM *logstream*. THE LOG STREAM IS BEING DELETED BY ANOTHER PROGRAM. SYSTEM LOGGER RETURN CODE *rc* REASON CODE *rsnc***

Explanation: DFSMStvs detected an error while attempting to access a log stream. The log stream is being deleted by a request from another program and DFSMStvs cannot connect to it until this program has finished running.

In the message text:

date

The current date.

time

The current time.

logstream

The name of the log stream.

rc The system logger return code.

rsnc

The system logger reason code.

System action: If the error occurred during access to either of the DFSMStvs system log streams (the undo or shunt log streams), those log streams are quiesced, as is DFSMStvs itself.

If the error occurred during access to either the log of logs or a forward recovery log, the log stream is made unavailable on this system.

Operator response: None

System programmer response: The return and reason codes that are shown are those returned by the system logger. These return and reason codes can be interpreted by reviewing the descriptions of errors for the appropriate system logger operation in *z/OS MVS Programming: Assembler Services Reference ABE-HSP* and *z/OS MVS Programming: Assembler Services Reference IAR-XCT*. You need to understand why another program was deleting the log stream and prevent such a conflict from occurring in the future.

Problem determination: None

Source: DFSMSdfp

Module: IGW9LMEC

Routing code: 2,10

Descriptor code: -

IGW843I *date time* **SYSTEM LOGGER RETURNED AN ERROR DURING OPERATION IXGCONN CONNECT FOR LOG STREAM *logstream*. THE MAXIMUM NUMBER OF LOG STREAM CONNECTIONS THAT SYSTEM LOGGER CAN SUPPORT HAS BEEN REACHED. SYSTEM LOGGER RETURN CODE *rc* REASON CODE *rsnc***

Explanation: DFSMStvs detected an error while attempting to access a log stream. The maximum number of log stream connections that the system logger can support has been reached.

In the message text:

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date

The current date.

time

The current time.

logstream

The name of the log stream.

rc The system logger return code.

rsnc

The system logger reason code.

System action: If the error occurred during access to either of the DFSMStvs system log streams (the undo or shunt log streams), those log streams are quiesced, as is DFSMStvs itself.

If the error occurred during access to either the log of logs or a forward recovery log, the log stream is made unavailable on this system.

Operator response: None

System programmer response: The return and reason codes that are shown are those returned by the system logger. You can interpret these return and reason codes by reviewing the descriptions of errors for the appropriate system logger operation in *z/OS MVS Programming: Assembler Services Reference ABE-HSP* and *z/OS MVS Programming: Assembler Services Reference IAR-XCT*. Investigate your usage of log streams within the sysplex and try to reduce the number of log streams that need to be connected concurrently.

Problem determination: None

Source: DFSMSdfp

Module: IGW9LMEC

Routing code: 2,10

Descriptor code: -

IGW844I *date time* **THE MVS LOGGER RETURNED AN ERROR DURING OPERATION IXGCONN CONNECT FOR LOG STREAM *logstream*. THE MVS LOGGER FAILED TO FIND A SUITABLE COUPLING FACILITY FOR THE LOG STREAM STRUCTURE. MVS LOGGER RETURN CODE *rc* REASON CODE *rsnc***

Explanation: DFSMStvs detected an error while attempting to access a log stream. The system logger failed to find a suitable coupling facility for the log stream structure.

In the message text:

date

The current date.

time

The current time.

logstream

The name of the log stream.

rc The system logger return code.

rsnc

The system logger reason code.

System action: A trace entry is written. DFSMStvs returns nonzero return and reason codes to the caller.

Operator response: None

System programmer response: Refer to any messages that were issued subsequently and to *z/OS MVS Programming: Assembler Services Reference ABE-HSP* and *z/OS MVS Programming: Assembler Services Reference IAR-XCT* for guidance. Use the system logger return and reason codes to diagnose the problem. Investigate your usage of the coupling facility resource within the sysplex.

Problem determination: None

Source: DFSMSdfp

Module: IGW9LMEC

Routing code: 2,10

Descriptor code: -

IGW845I *date time* **AN ACTIVITY KEYPOINT HAS BEEN TAKEN SUCCESSFULLY**

Explanation: DFSMSStvs has successfully taken an activity keypoint.

In the message text:

time

The current date.

date

The current time.

System action: Normal processing continues.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGW8RAKP

Routing code: 2,10

Descriptor code: -

IGW846I *date time* **ACTIVITY KEYPOINT PROCESSING ALREADY IN PROGRESS**

Explanation: DFSMSStvs initiated an activity keypoint process; however, an activity keypoint processing task is already running.

In the message text:

date

The current date.

time

The current time.

System action: Normal processing continues.

Operator response: None

System programmer response: Investigate the setting for the DFSMSStvs AKP parameter and determine if it is set too low.

If this message repeats several times without an IGW845I message indicating completion of the AKP task, however, there might be a more severe problem. Check the sizes of the DFSMSStvs system log streams because they might be increasing. If the condition persists, contact the IBM Support Center.

Problem determination: None

Source: DFSMSdfp

Module: IGW8RAKP

Routing code: 2,10

Descriptor code: -

IGW848I *date time* {SYSTEM UNDO LOG | SYSTEM SHUNT LOG | LOG OF LOGS} *logstream*
 INITIALIZATION HAS {STARTED | ENDED}

Explanation: This message indicates the start or end of initialization for the specified log.

In the message text:

date

The current date.

time

The current time.

logstream

The name of the log stream.

System action: DFSMStvs initialization continues.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGW9LSLN

Routing code: 2,10

Descriptor code: -

IGW850I *date time* SYSTEM LOGGER RETURNED AN ERROR DURING OPERATION IXGCONN
 CONNECT FOR LOG STREAM *logstream*. THE LOG STREAM IS A DASD-ONLY LOG WHICH IS
 CONNECTED ON ANOTHER SYSTEM. SYSTEM LOGGER RETURN CODE *rc* REASON CODE
rsnc

Explanation: DFSMStvs detected an error while attempting to access a log stream that is only for a direct access storage device (DASD). The system logger reported that the log stream is connected on another system. DASD-only log streams can be connected on only one system.

In the message text:

date

The current date.

time

The current time.

logstream

The name of the log stream.

rc The system logger return code.

rsnc

The system logger reason code.

System action: If the error occurred during access to either of the DFSMStvs system log streams (the undo or shunt log stream), both log streams are quiesced, as is DFSMStvs.

If the error occurred during access to either the log of logs or a forward recovery log, the log stream is made unavailable on this system.

Operator response: None

System programmer response: The return and reason codes shown are those returned by the system logger. These return and reason codes can be interpreted by reviewing the description of errors for the appropriate system logger operation in *z/OS MVS Programming: Assembler Services Reference ABE-HSP* and *z/OS MVS Programming: Assembler Services Reference IAR-XCT*. Investigate your usage of the log stream in question.

Problem determination: None

Source: DFSMSdfp
Module: IGW9LMEC
Routing code: 2,10
Descriptor code: -

IGW851I *date time* SYSTEM LOGGER RETURNED AN ERROR DURING OPERATION IXGCONN CONNECT FOR LOG STREAM *logstream*. THE LOG STREAM IS A DASD-ONLY LOG WHICH IS NOT SUPPORTED BY THE CURRENT LEVEL OF SYSTEM LOGGER. SYSTEM LOGGER RETURN CODE *rc* REASON CODE *rsnc*

Explanation: DFSMSStvs detected an error while attempting to connect to a log stream that is only for a direct access storage device (DASD). The system logger reported that DASD-only logs are not supported on this system.

In the message text:

date

The current date.

time

The current time.

logstream

The name of the log stream.

rc The system logger return code.

rsnc

The system logger reason code.

System action: If the error occurred during access to either of the DFSMSStvs system log streams (the undo or shunt log stream), both log streams are quiesced, as is DFSMSStvs.

If the error occurred during access to either the log of logs or a forward recovery log, the log stream is made unavailable on this system.

Operator response: None

System programmer response: The return and reason codes shown are those returned by the system logger. You can interpret these return and reason codes by reviewing the description of errors for the appropriate system logger operation in *z/OS MVS Programming: Assembler Services Reference ABE-HSP* and *z/OS MVS Programming: Assembler Services Reference IAR-XCT*. Determine if the level of z/OS is sufficient for running DFSMSStvs.

Problem determination: None

Source: DFSMSdfp
Module: IGW9LMEC
Routing code: 2,10
Descriptor code: -

IGW855I TRANSACTIONAL VSAM FAILED TO {CONNECT | WRITE} TO THE LOG OF LOGS {*logstream*. | *logstream* WHILE PROCESSING DSN *dsn*, FORWARD RECOVERY LOG STREAM *frlogstream*} RETURN CODE *rc* REASON CODE *rsnc*

Explanation: A failure occurred in trying to connect or write to the log of logs. A failure to update the log of logs might prevent automated forward recovery routines that utilize the log of logs from running.

In the message text:

logstream

The name of the log of logs.

dsn

The name of the data set that is associated with the attempt to write to the log of logs.

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frlogstream

The name of the forward recovery log stream that is associated with the data set.

rc The return code from DFSMStvs.

rsnc

The reason code from DFSMStvs.

System action: None

Operator response: Notify the system programmer.

System programmer response: Check the log for any previous IGW8xxI messages or associated system logger messages. If your forward recovery procedures do not require the use of a log of logs during forward recovery or can tolerate missing data in the log of logs, the message is informational. To correct the condition, either change the log-of-logs name that is specified in the IGDSMSxx member of SYS1.PARMLIB and restart DFSMStvs, or use the return and reason codes that are provided to investigate and correct the problem. To reconnect to the log of logs, use the VARY SMS command to quiesce or disable and then reenale the log of logs.

For descriptions of return and reason codes, see *z/OS DFSMStvs Administration Guide*. For descriptions of system logger return and reason codes, see *z/OS MVS Programming: Assembler Services Reference ABE-HSP* and *z/OS MVS Programming: Assembler Services Reference IAR-XCT*.

If your forward recovery procedures cannot tolerate missing data in the log of logs, follow these steps:

1. Use the SET SMS command to quiesce DFSMStvs.
2. Identify all data sets that have updated their associated forward recovery logs since the last backup.
3. Create new data set backups.
4. Reinitialize the forward recovery logs.
5. Initialize the existing log of logs or a new logs of logs,
6. Reenable DFSMStvs.

Problem determination: None

Source: DFSMSdfp

Module: IGW8OLOG, IGW8CVLG, IGW8IIN2, IGW8IRS1

Routing code: 2,10

Descriptor code: -

IGW857I ONE OR MORE DATA SETS ARE IN LOST LOCKS STATUS. TRANSACTIONAL VSAM WILL PERFORM LOST LOCKS RECOVERY

Explanation: One or more data sets were open in DFSMStvs access mode when a failure of the coupling facility lock structure occurred. SMSVSAM was not able to recover coupling facility lock structure failure. As a result, the locks held by DFSMStvs for those data sets have been lost. VSAM record-level sharing (RLS) informed DFSMStvs that one or more data sets are in a lost locks state, and DFSMStvs must perform lost locks recovery for those data sets. On a DFSMStvs cold start, if there are any data sets with lost locks status, that status is cleared in that instance of DFSMStvs.

System action: The data sets with lost locks status are marked as being unavailable for general use. New units of recovery that attempt to access these data sets will fail.

DFSMStvs performs lost locks recovery for the data sets. For each data set, this involves waiting until all units of recovery that made uncommitted updates to the data set have completed. These units of recovery can access the data set for DFSMStvs to perform recovery on their behalf. When DFSMStvs completes lost locks recovery for a data set, it reports this fact to VSAM RLS. When all resource managers that had been accessing the data set have completed their lost locks recovery, the data set is made available for general use. A data set becomes available for general use as soon as its lost locks recovery has been completed; it does not have to wait for all data sets to be recovered.

Operator response: None

System programmer response: Lost locks recovery normally completes automatically without requiring any action from the user. However, if there are shunted units of recovery that had updated a data set with lost locks status, these shunted units of recovery prevent lost locks recovery from completing until they are resolved. Use the DISPLAY SMS command to investigate these shunted units of recovery.

Problem determination: None

Source: DFSMSDfp

Module: IGW8IIN2, IGW8IRS2

Routing code: 2,10

Descriptor code: -

IGW858I AN ATTEMPT TO NOTIFY VSAM THAT TRANSACTIONAL VSAM HAS COMPLETED LOST LOCKS PROCESSING FOR DATA SET *dsn* FAILED. VSAM RETURN CODE *rc* REASON CODE *rsnc*

Explanation: Following a failure of the VSAM lock structure, VSAM marked a data set as being in lost locks state with regard to this instance of DFSMSStvs. DFSMSStvs has performed all recovery actions necessary to resolve its locks for this data set and has attempted to inform VSAM that it completed its recovery. This attempt has failed.

DFSMSStvs returned return code *rc* reason code *rsnc*.

In the message text:

dsn

The name of the data set.

rc The return code from DFSMSStvs.

rsnc

The reason code from DFSMSStvs.

System action: DFSMSStvs creates a memory dump.

Operator response: None

System programmer response: You can make DFSMSStvs retry the attempt to notify VSAM of the completion of lost locks processing by restarting the SMSVSAM server.

It is possible that your installation might have performed some action, such as deleting the data set, that caused VSAM not to recognize the data set and, therefore, to return an error. If this is the case, you do not need to take any further action.

If the VSAM return and reason codes suggest an internal DFSMSStvs or VSAM error, contact the IBM Support Center.

Problem determination: None

Source: DFSMSDfp

Module: IGWxxxxx

Routing code: 2,10

Descriptor code: -

IGW859I JOB *jobname* UNIT OF RECOVERY *urid* HAS REQUESTED *nnn* LOCKS

Explanation: This message is based on the MAXLOCKS parameter in the IGDSMSxx member of SYS1.PARMLIB. DFSMSDfp issues this message to alert the installation that an application might be requesting an excessive number of locks, which might cause it to interfere with other applications.

In the message text:

jobname

The name of the job.

urid

The unit of recovery identifier that resource recovery services (RRS) assigned.

nnn

The number of locks that the unit of recovery requested.

System action: The system continues processing.

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Operator response: None

System programmer response: Determine if the application should be allowed to request the number of locks it has requested. If so, allow it to continue processing. Otherwise, cancel the job and wait for backout to complete.

Problem determination: None

Source: DFSMSdfp

Module: IGW8FTSK

Routing code: 1

Descriptor code: 2

IGW860I TRANSACTIONAL VSAM HAS SUCCESSFULLY {REGISTERED | UNREGISTERED} WITH RLS

Explanation: This message provides a record of the registering or unregistering of a DFSMStvs instance with VSAM record-level sharing (RLS).

System action: DFSMStvs processing continues.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGW8IIN2, IGW8PIN2

Routing code: 2,10

Descriptor code: -

IGW861I THE {REGISTER | UNREGISTER} FOR *TvsName* FAILED. VSAM RETURN CODE *rc* REASON CODE *rsnc* [ERROR DATA *errdata*]

Explanation: If DFSMStvs was initializing, the call to VSAM to register returned an error. If DFSMStvs was abnormally ending, the call to VSAM to unregister returned an error.

In the message text:

TvsName

The name of the DFSMStvs instance that is involved in the error.

rc The return code from VSAM record-level sharing (RLS).

rsnc

The reason code from VSAM RLS.

errdata

The VSAM RLS error data (if available).

System action: DFSMStvs is unavailable. This type of error during initialization causes DFSMStvs initialization to fail. DFSMStvs initialization cannot complete until DFSMStvs successfully registers with VSAM RLS.

Operator response: None

System programmer response: Use the VSAM codes to determine the cause of the problem. For the meaning of the VSAM codes, see *z/OS DFSMStvs Administration Guide*.

Problem determination: None

Source: DFSMSdfp

Module: IGW8IIN2, IGW8PIN2

Routing code: 2,10

Descriptor code: -

IGW862I LOG STREAM *stream* IS IN USE BY ANOTHER INSTANCE OF TRANSACTIONAL VSAM.

Explanation: In the message text:

stream

The name of a log stream.

System action: None

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Routing code: 2,10

Descriptor code: -

IGW863I TRANSACTIONAL VSAM INITIALIZATION IS NOW ENABLED ON THIS SYSTEM.

Explanation: During initialization, VSAM record-level sharing (RLS) detected that DFSMStvs has been installed on this system. DFSMStvs initialization has been enabled on this system.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMStvs

Module: IGWTVSEN

Routing code: 2,10

Descriptor code: -

IGW864I TRANSACTIONAL VSAM IS NOT ENABLED ON THIS SYSTEM. RETURN CODE *rc* REASON CODE *rsnc*

Explanation: During initialization, VSAM record-level sharing (RLS) detected that DFSMStvs has been installed on this system. DFSMStvs attempted to indicate that it could be initialized on this system, but the process failed.

rc The return code.

rsnc

The reason code.

System action: The system continues processing, but DFSMStvs does not initialize.

Operator response: Report the problem to your system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Problem determination: The return and reason codes in the message are the return and reason codes that DFSMStvs received when it attempted to initialize. Report these return and reason codes to the IBM Support Center.

Source: DFSMSdfp

Routing code: 2,10

Descriptor code: -

IGW865I TRANSACTIONAL VSAM INITIALIZATION {HAS STARTED | IS COMPLETE}

Explanation: This is an informational message indicating the start and finish of DFSMStvs initialization.

System action: Initialization continues if it has started. If it has completed, then DFSMStvs processing is now available.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGW8IIN1, IGW8PIN2

Routing code: 2,10

Descriptor code: -

IGW866I TRANSACTIONAL VSAM RESTART PROCESSING IS COMPLETE

Explanation: During DFSMStvs restart or initialization, all restart processing required has finished.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGW8IIN2

Routing code: 2,10

Descriptor code: -

IGW867I TRANSACTIONAL VSAM WAS NOT INITIALIZED

Explanation: The DFSMStvs instance identified in the IGDSMSxx member of SYS1.PARMLIB could not be successfully initialized.

System action: The system continues processing. DFSMStvs services are not available.

Operator response: None

System programmer response: Use the preceding IGWxxxx messages to investigate the reason why DFSMStvs could not be initialized. After correction, use the SET SMS command to start DFSMStvs.

Problem determination: None

Source: DFSMSdfp

Module: IGW8IIN1, IGW8PIN2

Routing code: 2,10

Descriptor code: -

IGW870I TRANSACTIONAL VSAM NAME MISMATCH. OLD NAME WAS *oldname* NEW NAME IS *newname*

Explanation: The DFSMStvs instance name on this system has been changed since the last time DFSMStvs was started on the system.

oldname

The old name of the DFSMStvs instance.

newname

The new name of the DFSMStvs instance.

System action: DFSMStvs starts using the new name, but it cannot perform recovery for any unit of recovery that might have been in progress when it went down.

Operator response: None

System programmer response: Perform one of the following steps:

- Stop DFSMStvs, modify the initialization parameters to use the old name, and then restart DFSMStvs with the old name.
- If the name change was intentional, determine if any units of recovery need to be completed. The name needs to be changed back to the old name to resolve them.

Problem determination: None

Source: DFSMSdftp

Module: IGW8IIN2

Routing code: 2,10

Descriptor code: -

IGW873I DFSMS REQUEST TO START PEER RECOVERY ON SYSTEM: *sysname* FOR TRANSACTIONAL VSAM INSTANCE: *tvsname* WHICH WAS LAST ACTIVE ON SYSTEM: *AssociatedSystemName* IS ACCEPTED.

Explanation: In the message text:

sysname

The name of the z/OS system where the peer recovery process is running.

tvsname

The name of the DFSMStvs instance.

AssociatedSystemName

The name of the z/OS system where the instance of DFSMStvs was last active.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdftp

Module: IGWSVTVS

Routing code: 2,10

Descriptor code: -

IGW873I DFSMS REQUEST TO STOP PEER RECOVERY ON SYSTEM: *sysname* FOR TRANSACTIONAL VSAM INSTANCE: *tvsname* WHICH WAS LAST ACTIVE ON SYSTEM: *AssociatedSystemName* IS ACCEPTED.

Explanation: In the message text:

sysname

The name of the z/OS system where the peer recovery process is running.

tvsname

The name of the DFSMStvs instance.

AssociatedSystemName

The name of the z/OS system where the instance of DFSMStvs was last active.

System action: The system continues processing.

IGW873I

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

Routing code: 2,10

Descriptor code: -

IGW873I DFSMS REQUEST TO START PEER RECOVERY ON SYSTEM: *sysname* FOR TRANSACTIONAL VSAM INSTANCE: *tvname* IS REJECTED: TRANSACTIONAL VSAM IS NOT ACTIVE ON THIS SYSTEM.

Explanation: In the message text:

sysname

The name of the z/OS system where the peer recovery process was to run.

tvname

The name of the DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

Routing code: 2,10

Descriptor code: -

IGW873I DFSMS REQUEST TO STOP PEER RECOVERY ON SYSTEM: *sysname* FOR TRANSACTIONAL VSAM INSTANCE: *tvname* IS REJECTED: TRANSACTIONAL VSAM IS NOT ACTIVE ON THIS SYSTEM.

Explanation: In the message text:

sysname

The name of the z/OS system where the peer recovery process is running.

tvname

The name of the DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

Routing code: 2,10

Descriptor code: -

IGW873I DFSMS REQUEST TO START PEER RECOVERY ON SYSTEM: *sysname* FOR TRANSACTIONAL VSAM INSTANCE *tvname* IS REJECTED. TRANSACTIONAL VSAM INSTANCE *tvname* IS NOT KNOWN IN THE SYSPLEX.

Explanation: In the message text:

sysname

The name of the z/OS system where the peer recovery process was to run.

sysname

The name of the z/OS system where the peer recovery process was to run.

tvname

The name of the DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: Correct the name of the DFSMStvs instance and reissue the command.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

Routing code: 2,10

Descriptor code: -

IGW873I DFSMS REQUEST TO START PEER RECOVERY ON SYSTEM: *sysname* FOR TRANSACTIONAL VSAM INSTANCE *sysname* IS REJECTED: TRANSACTIONAL VSAM INSTANCE STATE IS QUIESCED.

Explanation: In the message text:

sysname

The name of the z/OS system where the peer recovery process was to run.

tvname

The name of the DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: If peer recovery is supposed to run on this system, enable the DFSMStvs instance and reissue the command.

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

Routing code: 2,10

Descriptor code: -

IGW873I DFSMS REQUEST TO START PEER RECOVERY ON SYSTEM: *sysname* FOR TRANSACTIONAL VSAM INSTANCE: *tvname* IS REJECTED: PEER RECOVERY IS RUNNING ON SYSTEM: *AssociatedSystemName*

Explanation: In the message text:

sysname

The name of the z/OS system where the peer recovery process was to run.

tvname

The name of the DFSMStvs instance.

IGW873I

AssociatedSystemName

The name of the z/OS system where the peer recovery process is running.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

Routing code: 2,10

Descriptor code: -

IGW873I DFSMS REQUEST TO START PEER RECOVERY ON SYSTEM: *sysname* FOR TRANSACTIONAL VSAM INSTANCE: *tvsname* IS REJECTED: THIS TRANSACTIONAL VSAM INSTANCE IS ACTIVE ON SYSTEM: *TvsAssociatedSysname*

Explanation: In the message text:

sysname

The name of the z/OS system where the peer recovery process was to run.

tvsname

The name of the DFSMStvs instance.

TvsAssociatedSysname

The name of the z/OS system where the current DFSMStvs instance is active.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

Routing code: 2,10

Descriptor code: M

IGW873I DFSMS REQUEST TO STOP PEER RECOVERY ON SYSTEM: *sysname* FOR TRANSACTIONAL VSAM INSTANCE: *tvsname* WHICH WAS LAST ACTIVE ON SYSTEM: *TvsAssociatedSysname* IS COMPLETED. STOP REASON: PEER RECOVERY INACTIVATE COMMAND ISSUED.

Explanation: In the message text:

sysname

The name of the z/OS system where the peer recovery process was running.

tvsname

The name of the DFSMStvs instance.

TvsAssociatedSysname

The name of the z/OS system where the DFSMStvs instance was last active.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp
 Module: IGWSPEND
 Routing code: 2,10
 Descriptor code: -

IGW873I DFSMS REQUEST TO STOP PEER RECOVERY ON SYSTEM: *sysname* FOR TRANSACTIONAL VSAM INSTANCE: *tvname* IS REJECTED: PEER RECOVERY FOR THIS TRANSACTIONAL VSAM INSTANCE IS NOT ACTIVE ON THIS SYSTEM.

Explanation: In the message text:

sysname

The name of the z/OS system where the peer recovery process is running.

tvname

The name of the DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS, IGWSVTV2, IGWSVTV3

Routing code: 2,10

Descriptor code: -

IGW873I DFSMS REQUEST TO STOP PEER RECOVERY ON SYSTEM: *sysname* FOR TRANSACTIONAL VSAM INSTANCE: *tvname* IS REJECTED: PEER RECOVERY FOR THIS TRANSACTIONAL VSAM INSTANCE IS ALREADY QUIESCING.

Explanation: In the message text:

sysname

The name of the z/OS system where the peer recovery process is running.

tvname

The name of the DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS, IGWSVTV2, IGWSVTV3

Routing code: 2,10

Descriptor code: -

IGW873I DFSMS REQUEST TO START PEER RECOVERY ON SYSTEM: *sysname* FOR TRANSACTIONAL VSAM INSTANCE: *tvname* IS REJECTED: TRANSACTIONAL VSAM INSTANCE STATE IS DISABLING/DISABLED. TO RECOVER THIS TRANSACTIONAL VSAM INSTANCE USE THE ACTIVEFORCE KEYWORD. EX: V SMS,TRANVSAM(XXX), PEERRECOVERY,ACTIVEFORCE

Explanation: In the message text:

IGW873I

sysname

The name of the z/OS system where the peer recovery process was to run.

tvsname

The name of the DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

Routing code: 2,10

Descriptor code: -

IGW873I DFSMS REQUEST TO START PEER RECOVERY ON SYSTEM: *sysname* FOR TRANSACTIONAL VSAM INSTANCE: *tvsname* WHICH WAS LAST ACTIVE ON SYSTEM: *TvsAssociatedSysname* IS ACCEPTED. MVS/RRS SERVICES ON THIS SYSTEM ARE NOT AVAILABLE. PEER RECOVERY WILL COMPLETE INITIALIZATION AND START PROCESSING UR'S WHEN MVS/RRS SERVICES BECOME AVAILABLE.

Explanation: In the message text:

sysname

The name of the z/OS system where the peer recovery process is to run.

tvsname

The name of the DFSMStvs instance.

TvsAssociatedSysname

The name of the z/OS system where the last DFSMStvs instance was found.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

Routing code: 2,10

Descriptor code: -

IGW873I DFSMS REQUEST TO START PEER RECOVERY ON SYSTEM: *sysname* FOR TRANSACTIONAL VSAM INSTANCE: *tvsname* IS REJECTED: OPERATOR REPLIED 'NO' TO IGW873A WTOR.

Explanation: In the message text:

sysname

The name of the z/OS system where the peer recovery process was to run.

tvsname

The name of the DFSMStvs instance.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp
 Module: IGWSVTVS
 Routing code: 2,10
 Descriptor code: -

IGW873I DFSMS REQUEST TO STOP PEER RECOVERY ON SYSTEM: *sysname* FOR TRANSACTIONAL VSAM INSTANCE: *tvname* WHICH WAS LAST ACTIVE ON SYSTEM: *TvsAssociatedSysname* IS COMPLETED. STOP REASON: PEER RECOVERY COMPLETE.

Explanation: In the message text:

sysname

The name of the z/OS system where the peer recovery process was running.

tvname

The name of the DFSMStvs instance.

TvsAssociatedSysname

The name of the z/OS system where this DFSMStvs instance was found active.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSPEND

Routing code: 2,10

Descriptor code: -

IGW873I DFSMS REQUEST TO STOP PEER RECOVERY ON SYSTEM: *sysname* FOR TRANSACTIONAL VSAM INSTANCE: *tvname* WHICH WAS LAST ACTIVE ON SYSTEM: *TvsAssociatedSysname* IS ACCEPTED. STOP REASON: TRANSACTIONAL VSAM DETECTED RRS IS UNAVAILABLE

Explanation: In the message text:

sysname

The name of the z/OS system where the peer recovery process was running.

tvname

The name of the DFSMStvs instance.

TvsAssociatedSysname

The name of the z/OS system where this DFSMStvs instance was found active.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSVTVS

Routing code: 2,10

Descriptor code: -

IGW873I DFSMS REQUEST TO STOP PEER RECOVERY ON SYSTEM: *sysname* FOR TRANSACTIONAL VSAM INSTANCE: *tvsvname* WHICH WAS LAST ACTIVE ON SYSTEM: *TvsAssociatedSysname* IS ACCEPTED. STOP REASON: TRANSACTIONAL VSAM DETECTED LOG ERROR RETURN CODE LOG ERROR RETURN CODE: *logerrorreturncode*

Explanation: In the message text:

sysname

The name of the z/OS system where the peer recovery process was running.

tvsvname

The name of the DFSMStvs instance.

TvsAssociatedSysname

The name of the z/OS system where this DFSMStvs instance was found active.

logerrorreturncode

The code returned by logger to TransactionalVsam.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGWSPEND

Routing code: 2,10

Descriptor code: -

IGW874I LOG NAME MISMATCH. RRS PREVIOUS LOG STREAM NAME: *logstream1* RRS CURRENT LOG STREAM NAME: *logstream2* TRANSACTIONAL VSAM PREVIOUS LOG STREAM NAME: *logstream3* TRANSACTIONAL VSAM CURRENT LOG STREAM NAME: *logstream4*

Explanation: DFSMStvs detected a mismatch of log stream names while it was initializing. Either the name of the log stream for use by DFSMStvs or the name of the log stream for use by resource recovery services (RRS) has changed since the last initialization of DFSMStvs.

In the message text:

logstream1

The name of the log stream that was previously defined to RRS.

logstream2

The name of the log stream that is currently defined to RRS.

logstream3

The name of the log stream that was previously defined to DFSMStvs.

logstream4

The name of the log stream that is currently defined to DFSMStvs.

System action: DFSMStvs initialization fails.

Operator response: None

System programmer response: Because the name of the DFSMStvs log is determined by DFSMStvs, it is likely that the cause of the problem is a mismatch of RRS log stream names. Determine the cause of the mismatch and correct it; otherwise, it might be necessary to cold start RRS and DFSMStvs.

After a cold start, any data sets for which recovery was owed are most likely left in a damaged state and need to be recovered manually. If the data sets are forward recoverable, then their forward recovery logs might also be damaged. IBM recommends that you manually recover the data sets (without using forward recovery), make backups of them and of any other data sets that use the forward recovery log, and then delete and redefine the forward recovery log.

Problem determination: None

Source: DFSMSdfp

Module: IGW8IIN2, IGW8ISTX

Routing code: 2,10

Descriptor code: -

IGW875I RRS IS UNAVAILABLE AND TRANSACTIONAL VSAM CAN NOT INITIALIZE

Explanation: The call to resource recovery services (RRS) to set the DFSMStvs RRS exits failed.

System action: DFSMStvs is unavailable. This type of error during initialization causes DFSMStvs initialization to fail. DFSMStvs initialization cannot complete until RRS is available.

Operator response: None

System programmer response: When RRS is available, restart DFSMStvs.

Problem determination: None

Source: DFSMSdfp

Module: IGW8IIN2

Routing code: 2,10

Descriptor code: -

IGW876I TRANSACTIONAL VSAM INITIALIZATION WAITING FOR RRS

Explanation: During DFSMStvs initialization, DFSMStvs is waiting for resource recovery services (RRS).

System action: None

Operator response: None

System programmer response: If RRS is not started, start it. Message IGW877I is issued when RRS is available, and DFSMStvs continues.

Problem determination: None

Source: DFSMSdfp

Module: IGW8IIN2

Routing code: 2,10

Descriptor code: -

IGW877I TRANSACTIONAL VSAM INITIALIZATION RESUMING AFTER WAIT FOR RRS

Explanation: During DFSMStvs initialization, DFSMStvs was waiting for resource recovery services (RRS). This message is issued after RRS has come up and DFSMStvs has continued.

System action: None

Operator response: None

System programmer response: No response is necessary because this informational message is issued following informational message IGW876I.

Problem determination: None

Source: DFSMSdfp

Module: IGW8IIN2

Routing code: 2,10

Descriptor code: -

IGW878A TRANSACTIONAL VSAM PERMANENT LOG ERROR, START WILL BE COLD. REPLY 'COLD' TO PROCEED, 'DISABLE' TO DISABLE.

Explanation: During DFSMSStvs initialization or restart, a permanent log error was discovered. Only a cold start is allowed. If this option is not acceptable, a DISABLE reply disables DFSMSStvs.

System action: None

Operator response: Reply COLD if a cold start for DFSMSStvs is to be done. If this is not acceptable, reply DISABLE to disable DFSMSStvs.

System programmer response: After a cold start, any data sets for which recovery was owed are most likely left in a damaged state and need to be recovered manually. If the data sets are forward recoverable, then their forward recovery logs might also be damaged. IBM recommends that you manually recover the data sets (without using forward recovery), take backups of them and of any other data sets that use the forward recovery log, and then delete and redefine the forward recovery log.

Problem determination: None

Source: DFSMSdfp

Module: IGW8II2

Routing code: 1

Descriptor code: -

IGW879A TRANSACTIONAL VSAM COLD START REQUESTED REPLY 'COLD', 'WARM', OR 'DISABLE'

Explanation: During DFSMSStvs initialization or restart, cold start was requested. The operator can choose one of the following options:

- Reply COLD to accept the cold start.
- Reply WARM to override the cold start request.
- Reply DISABLE to disable DFSMSStvs.

System action: None

Operator response: Reply COLD if a cold start for DFSMSStvs is to be done. If a warm start is desired, reply WARM, and reply DISABLE to disable DFSMSStvs.

System programmer response: After a cold start, any data sets for which recovery was owed are most likely left in a damaged state and need to be recovered manually. If the data sets are forward recoverable, then their forward recovery logs might also be damaged. IBM recommends that you manually recover the data sets (without using forward recovery), take backups of them and of any other data sets that use the forward recovery log, and then delete and redefine the forward recovery log.

Problem determination: None

Source: DFSMSdfp

Module: IGW8II2

Routing code: 1

Descriptor code: -

IGW880I IGW880I DYNAMIC {ALLOCATION | DEALLOCATION} OF DATA SET *dsn* FAILED. RETURN CODE *rc* REASON CODE *rsnc*

Explanation: While dynamically allocating or deallocating data set *dsn*, DFSMSStvs issued a supervisor call instruction (SVC) 99 process. SVC 99 processing failed with return code *rc* and reason code *rsnc*

In the message text:

dsn

The name of the data set being dynamically allocated or deallocated.

rc The SVC 99 return code.

rsnc

The SVC 99 reason code.

System action: DFSMStvs continues processing. If the error occurred during allocation, DFSMStvs is unable to complete restart recovery for the data set. As a result, all units of recovery against the data set that restart processing encounters are shunted. If the error occurred during deallocation, DFSMStvs continues with the data set closed but still allocated.

Operator response: None

System programmer response: For the meanings of the SVC 99 return codes, see the dynamic allocation reason codes in *z/OS MVS Programming: Authorized Assembler Services Guide*.

Problem determination: None

Source: DFSMSdfp

Module: IGW8RCLS, IGW8ROP2

Routing code: 2,10

Descriptor code: -

IGW881I INQUIRE RECOVERY FAILED. VSAM RETURN CODE *rc* REASON CODE *rsnc*

Explanation: During recovery, DFSMStvs issued an inquiry recovery request to VSAM. The request failed because VSAM detected an error.

In the message text:

rc The VSAM return code.

rsnc

The VSAM reason code.

System action: The DFSMStvs restart continues. All recoverable files accessed by DFSMStvs are unusable. DFSMStvs creates a memory dump.

Operator response: None

System programmer response: Restart the SMSVSAM server, if it has not already automatically restarted.

If the VSAM return and reason codes indicate an internal DFSMStvs or VSAM error, ensure that a memory dump has been created, and contact the IBM Support Center.

Problem determination: None

Source: DFSMSdfp

Module: IGWxxxxx

Routing code: 2,10

Descriptor code: -

IGW882I *nm* {INFLIGHT | INDOUBT | IN-COMMIT | IN-BACKOUT | COMMIT-FAILED | BACKOUT-FAILED} UNITS OF RECOVERY WERE RECONSTRUCTED

Explanation: This message displays the number of units of recovery in a particular state that were reconstructed during a restart. The message is issued once for each state that one or more units of recovery are in. It is issued before any of the reconstructed units of recovery are unshunted and processed in parallel.

Many of the commit-failed and backout-failed units of recovery are likely to be resolved during DFSMStvs initialization. Any true commit-failed or backout-failed units of recovery are highlighted by further messages, which are issued during DFSMStvs initialization. After DFSMStvs is fully initialized, you can use the DISPLAY SMS command to determine whether any commit-failed or backout-failed units of recovery are outstanding.

In the message text:

nm The number of units of recovery in the specified state.

System action: The system has performed the backward scan of the system log and is about to start unshunting

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units of recovery that need further processing. The units of recovery are processed in these ways:

- In-commit and commit-failed units of recovery are committed, if possible.
- In-flight, in-backout, and backout-failed units of recovery are backed out, if possible.
- Indoubt units of recovery are shunted. No action is taken until resource recovery services (RRS) indicates that the units of recovery should be committed or backed out.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdftp

Module: IGW8IIN2

Routing code: 2,10

Descriptor code: -

IGW886I *n* RESTART TASKS WILL BE PROCESSED DURING TRANSACTIONAL VSAM RESTART PROCESSING.

Explanation: This message appears at the beginning of a DFSMStvs restart.

In the message text:

n The number of tasks to be processed.

System action: This is an informational message only. DFSMStvs continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdftp

Module: IGW8RRRES

Routing code: 2,10

Descriptor code: -

IGW887I *m* OF *n* RESTART TASKS HAVE BEEN PROCESSED BY TRANSACTIONAL VSAM RESTART.

Explanation: This message appears intermittently to provide the status of a DFSMStvs restart. The message reappears after the completion of 100 restart tasks and continues to appear until the number of remaining restart tasks drops below 100. At that time, the message reappears after the completion of ten tasks.

In the message text:

mm The number of tasks that have been processed.

nn The total number of tasks to be processed.

System action: This is an informational message only. DFSMStvs continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdftp

Module: IGW8RRRTS

Routing code: 2,10

Descriptor code: -

IGW888I TRANSACTIONAL VSAM PERMITNONRLSUPDATE EXIT NOT LOADED FOR INSTANCE
tvsvname ON SYSTEM sysname

Explanation: During DFSMStvs initialization or restart, the exit for PERMITNONRLSUPDATE was not found and consequently not loaded. The name of the module is IGW8PNRU.

In the message text:

sysname

The name of the system.

tvsvname

The name of the DFSMStvs instance.

System action: None

Operator response: If the DFSMStvs PERMITNONRLSUPDATE exit is required by the installation, the exit should be installed, and DFSMStvs should be restarted.

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGW8IIN2

Routing code: 2,10

Descriptor code: -

IGW890I {OPEN | CLOSE} OF DATA SET *dsn* FAILED. RETURN CODE *rc* REASON CODE *rsnc*

Explanation: During restart processing of data set *dsn*, DFSMStvs issued an OPEN or a CLOSE. The OPEN or CLOSE failed with return code *rc* and reason code *rsnc*.

In the message text:

dsn

The name of the data set being opened or closed.

rc The OPEN or CLOSE return code.

rsnc

The OPEN or CLOSE reason code.

System action: DFSMStvs continues processing. If the error occurred during OPEN, DFSMStvs is unable to complete restart recovery for the data set. As a result, all units of recovery against the data set that restart processing encounters are shunted. If the error occurred during CLOSE, DFSMStvs continues with the data set still open and allocated.

Operator response: None

System programmer response: For the meaning of the OPEN or CLOSE return codes, see *z/OS DFSMStvs Administration Guide*.

Problem determination: None

Source: DFSMSdfp

Module: IGW8RCLS, IGW8ROP2

Routing code: 2, 10

IGW891I URID *urid* HAS BEEN SHUNTED DURING RESTART BECAUSE OF OPEN/ALLOCATION ERRORS.

Explanation: This message is generally preceded by message IGW880I or IGW890I. Message IGW891I is issued once for each unit of work that had to be shunted because a needed data set could not be opened or allocated.

In the message text:

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urid

The unit of recovery identifier of the work being backed out.

System action: DFSMStvs continues processing.

Operator response: None

System programmer response: Use the IGW880I or IGW890I message to determine and fix the causes of the open or allocation errors. Then, either submit the jobs to retry them, or purge the shunted units of recovery.

Problem determination: None

Source: DFSMSdfp

Module: IGW8RRTS

Routing code: 2, 10

IGW892I TRANSACTIONAL VSAM WAS NOTIFIED OF A {CACHE AVAILABLE | FORWARD RECOVERY COMPLETE | A QUIESCE FOR COPY END} EVENT FOR {CACHE FACILITY *cfn* | DATA SET *dsn*}

Explanation: DFSMStvs was notified to retry previously shunted units of recovery. Refer to the IGW10019I messages in the system log for a list of units of recovery that were successfully retried.

In the message text:

cfn

The cache facility name that became available.

dsn

The name of the data set that had completed forward recovery.

System action: For a cache available event, DFSMStvs retries all previously shunted units of recovery. For a forward-recovery complete or quiesce for copy end event, DFSMStvs retries all shunted units of recovery associated with the data set. Message IGW10019I is written to the system log for each unit of recovery that was successfully retried.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGW8QSHN

Routing code: 11

Descriptor code: -

IGW893A *nn* TRANSACTIONAL VSAM HAS PREVIOUSLY FAILED, REPLY 'CONTINUE' TO CONTINUE OR 'DISABLE' TO DISABLE

Explanation: This message is issued if an error occurred during DFSMStvs initialization (such as a program check) that caused the SMSVSAM server to be abnormally ended and restarted. The next DFSMStvs initialization causes this message to be issued, giving the operator an opportunity to take corrective action before restarting DFSMStvs, to avoid the possibility of recursive failures.

In the message text:

nn The standard z/OS MVS reply number that is associated with the message. This number is required for responding to this message (for example, R, *nn*, CONTINUE).

System action: The system waits for the operator response.

Operator response: The acceptable responses follow:

CONT[INUE]

DFSMStvs proceeds with the restart.

DISABLE

DFSMSStvs is disabled.

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGW8IIN2

Routing code: 1

Descriptor code: -

IGW894I *m OF n RESTART TASKS HAVE BEEN PROCESSED BY TRANSACTIONAL VSAM DURING PEER RECOVERY FOR SYSTEM sysname*

Explanation: This message reappears after one hundred restart tasks have been completed, and continues to appear until the number of remaining restart tasks drops below one hundred. At that time, the message is reissued after every ten tasks have been completed.

In the message text:

m The number of tasks that have been processed.

n The total number of tasks to be processed.

sysname

The name of the system.

System action: DFSMSStvs continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGW8RRRES

Routing code: 2,10

Descriptor code: -

IGW895I *n RESTART TASKS WILL BE PROCESSED DURING TRANSACTIONAL VSAM PEER RECOVERY FOR SYSTEM sysname*

Explanation: This message appears at the beginning of DFSMSStvs restart.

In the message text:

n The number of tasks to be processed by the peer recovery instance.

sysname

The name of the system.

System action: DFSMSStvs continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSsdfp

Module: IGW8RRRES

Routing code: 2,10

Descriptor code: -

IGW898I UNIT OF RECOVERY *urid* HAS ACTIVE LOG RECORDS BUT IS HOLDING NO LOCKS. THIS UNIT OF RECOVERY MUST BE PURGED

Explanation: DFSMStvs encountered a unit of recovery that has active log records in the undo log but is holding no locks. This is probably because one or more data sets updated by the unit of recovery were deleted while there were retained locks. Deleting a data set that has retained locks causes the locks to be discarded.

In the message text:

urid

The unit of recovery identifier.

System action: DFSMStvs continues processing, and the unit of recovery remains on the log until the installation purges it.

Operator response: None

System programmer response: Use the access method services (IDCAMS) LISTSHUNTED DATA command to obtain a list of all data sets, records, and their keys that have been updated by the unit of recovery. If necessary, you can obtain the data that is contained in the records by printing the undo log. If a version of the data set exists, verify that the records in the data set are correct. Then use the IDCAMS PURGE URID command to delete the unit of recovery.

Problem determination: None

Source: DFSMSdfp

Module: IGW8RRRES

Routing code: 2,10

Descriptor code: -

IGW899I UNEXPECTED ERROR DURING TRANSACTIONAL VSAM PROCESSING. MODULE WHICH DETECTED THE ERROR *modname* RETURN CODE *rc* REASON CODE *rsnc* CALLED MODULE ERROR INFORMATION RETURN CODE *rc2* REASON CODE *rsnc2* [PLEASE PRINT TRANSACTIONAL VSAM UNDO AND SHUNT LOGS NOW]

Explanation: In the message text:

modname

The name of the module that detected the error.

rc The return code from the module that detected the error.

rsnc

The reason code from the module that detected the error.

rc2

The return code from the service that was called by the detecting module.

rsnc2

The reason code from the service that was called by the detecting module.

System action: None

Operator response: None

System programmer response: If the message indicates that the DFSMStvs undo and shunt logs need to be printed, the logs should be printed as soon as possible.

Problem determination: None

Source: DFSMSdfp

Module: IGW8CARG, IGW8CDDS, IGW8CDJB, IGW8CDLG, IGW8CDTV, IGW8CDUR, IGW8CSAK, IGW8CSQT, IGW8CVLG, IGW8CVTV, IGW8CVT1, IGW8DDSN, IGW8DJOB, IGW8DLOG, IGW8DTVS, IGW8DUR, IGW8FCLN, IGW8FCRB, IGW8FEPL, IGW8FEXP, IGW8FIM, IGW8FLAI, IGW8FLBI, IGW8FLPA, IGW8FMSG, IGW8FTSK, IGW8IARG, IGW8IIN1, IGW8IIN2, IGW8IIN6, IGW8IIN7, IGW8INT, IGW8IRLB, IGW8IRS1, IGW8IRS2, IGW8ISTX, IGW8MAP, IGW8MDTA, IGW8MSG, IGW8OCDS, IGW8OLOG, IGW8OODS, IGW8OPNR, IGW8PCLN, IGW8PIN1, IGW8PIN2, IGW8QEXP, IGW8QEXR, IGW8QEXT, IGW8QPOP, IGW8QSHN, IGW8RAKP, IGW8RBID, IGW8RBOU,

IGW8RCEF, IGW8RCHN, IGW8RCID, IGW8RCLN, IGW8RCLS, IGW8RCMT, IGW8RCSE, IGW8RCS1, IGW8RDSN, IGW8RECE, IGW8REOM, IGW8REOX, IGW8RFRR, IGW8RIOM, IGW8RMAT, IGW8ROAE, IGW8ROP2, IGW8RPC1, IGW8RPC2, IGW8RPC3, IGW8RPRP, IGW8RPR1, IGW8RREF, IGW8RRMC, IGW8RRTS, IGW8RSCH, IGW8RSHN, IGW8RSN, IGW8RSNC, IGW8RSNE, IGW8RSNF, IGW8RSNI, IGW8RSNO, IGW8RSNQ, IGW8RSNR, IGW8RSRB, IGW8RSR1, IGW8RSR2, IGW8RSR3, IGW8RSR4, IGW8RVTV, IGW8SHNT, IGW8SLBC, IGW8SLUC, IGW8SLUR, IGW8SPBC, IGW8SPUR, IGW8SRBC, IGW8SRBP, IGW8SRUR, IGW8TRE, IGW8TYP, IGW8VLOG, IGW8VTVS

Routing code: 1

Descriptor code: 11

IGW998I PDSE error during NIP processing; *module name* **RC:** return code **RS:** reason code

Explanation: During the z/OS nucleus initialization processing (NIP) a call was made to PDSE that did not end successfully. Because the PDSE operation was not successful *module name* issued an informational message. Before returning to the caller, PDSE identifies a *module name* and provides the failing *return code and reason code* to help determine the cause for the failure.

System action: The user's PDSE request is not successful.

Operator response: None

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error. Contact the IBM support center.

Source: DFSMSdfp

IGW999I *text*

Explanation: This message is a temporary message issued from PDSE or VSAM RLS processing. It is intended to aid in problem determination associated with new support.

System action: None

Operator response: None

System programmer response: None

Source: DFSMS

Routing code: 1,2,11

Descriptor code: 0

IGW01000I REQUESTED OPERATION COMPLETED SUCCESSFULLY

Explanation: A File and Attribute Management Services request completed successfully.

System action: Processing of the current request continues.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

IGW01001T ABEND *code - reason-code* IN MODULE *modname* AT OFFSET *offset*

Explanation: An ABEND has occurred. If the ABEND occurred in a CSECT contained in IGWAFMS0, the CSECT name will be indicated in *modname* and the offset from the start of the CSECT will be indicated by *offset*. If the error did not occur in a CSECT contained in IGWAFMS0, the module name and offset fields will contain '?'.
 In the message text:

code The abnormal end code.

reason-code
The reason code.

modname
The module name.

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offset The specified offset.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01003T ERROR COPYING *blockname* STORAGE AT ADDRESS *address*

Explanation: During initial parameter validation, an attempt was made to make a copy of the type of block indicated, which was supplied by the caller, from the address indicated. However, the caller does not have the proper addressability to the storage and a program check resulted.

In the message text:

address The specified address.

blockname

The name of the specified block.

System action: Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: Examine the storage at the indicated address to determine whether or not it is a correct address owned by or accessible to the caller.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

IGW01004T FMH NOT PASSED OR ADDRESS DOES NOT BELONG TO USER. ADDRESS = *address*

Explanation: The parameter list passed for the request contained a zero for the address of the FMH, or the FMH was not in storage accessible to the caller.

In the message text:

address The specified address.

System action: Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: Examine the address and verify that it points to the proper storage for the FMH for this invocation.

Source: DFSMSDfp and File and Attribute Management Services.

Descriptor code: -

IGW01005T FMO NOT PASSED OR ADDRESS DOES NOT BELONG TO USER. ADDRESS = *address*

Explanation: The parameter list passed for the request contained a zero for the address of the FMO, or the FMO was not in storage accessible to the caller.

In the message text:

address The specified address.

System action: Processing of the current invocation is ended.

System programmer response: Verify that the proper address of the FMO was supplied to the invocation macro.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01006T DDNAME *ddname* SUPPLIED FOR MESSAGES, BUT MESSAGE OPTION NOT REQUESTED

Explanation: The field FMHMSGDD contained the value of the DDNAME indicating that the caller wanted messages to be written to a specific DD statement, but the option flag FMHMSGSO was not set.

In the message text:

ddname The specified ddname.

System action: Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: Verify that the field FMHMSGDD is either hex zeros or blanks if FMHMSGSO is not set, or ensure that FMHMSGSO is set.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01007T MESSAGE EXIT OR TOKEN SUPPLIED, BUT OPTION NOT REQUESTED

Explanation: The option flag FMHMSGSX was not set, but at least one of the fields FMHMSGEX and FMHMSGTK was nonzero.

System action: Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: Verify that both FMHMSGEX and FMHMSGTK are zero, or ensure that the flag FMHMSGEX is set.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01009T DATA SET NAME LENGTH IS ZERO OR NEGATIVE IN DSND AT ADDRESS *address*

Explanation: This message may be issued if either the DSND for a catalog data set name (as pointed to by the ALTICTGN or GETICTGN fields) is incorrect, or if the DSND pointed to by the FMHINP or CPYODSN field is incorrect.

In the message text:

address The specified address.

System action: Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: Examine the first halfword of the DSND at the address given in the message. Verify that the value contains a positive length less than or equal to the maximum data set name size, which is 44 bytes.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01010T VERSION NUMBER IN THE *cbname* IS UNKNOWN TO THIS VERSION OF IGWAFMS0. VALUE FOUND = *versno*, EXPECTED = *versno*

Explanation: The version number in the *cbname* structure supplied by the caller has an unsupported version number in the header.

In the message text:

cbname The indicated structure.

versno The version number.

System action: Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: Preserve the job output from the job that encountered this problem.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01011T LENGTH OF INPUT AREA IS TOO SMALL

Explanation: The size of the FMH supplied was less than the minimum allowed for the request. The minimum length must include the size of the FMH header plus the length of the appropriate request parameter list.

System action: Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: Examine the FMHLEN field in the passed FMH and determine the type of request. Increase the FMHLEN value to include the size of both the FMH header portion and the request-specific parameter list.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01012T REQUEST TYPE IN THE INPUT PARAMETER LIST HEADER IS NOT VALID. VALUE = *reqtype*

Explanation: The type of request specified in the field FMHREQ was not a correct value.

In the message text:

reqtyp The request type.

System action: Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: Verify that the value in FMHREQ is correct. Consult the IGWFMH parameter list for the proper values; the symbolic names that represent values for this field are FMHRQGET, FMHRQFLO, FMHRQALT and FMHRQCPY.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01013T NEITHER A DATA SET NAME NOR A DDNAME WAS PROVIDED FOR THE *type* DATA SET

Explanation: If *type* is 'INPUT', the FMHINP and FMHIDD fields were both null. If *type* is 'OUTPUT', the CPYODSN and CPYODD fields were both null.

In the message text:

type The specified type.

System action: Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: Examine the calling parameter list and verify that the data set name or the ddname has been supplied.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01015T REGISTER 1 CONTAINS ZEROS

Explanation: The address of the parameter list passed in register 1 is zero.

System action: Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: Examine the expansion of the invocation macro and ensure that register 1 is being correctly loaded with the address of the list that contains the addresses of the FMH and FMO.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01016T *parmname* AT ADDRESS *addr* CONTAINS AN INVALID VALUE OF *parmvalue*

Explanation: A field in the input parameter list contained a value that was not permitted. Either the value was not one of the correct values, or mutually exclusive flags are set.

In the message text:

parmname

The symbolic name of the field as defined in the parameter list. If *parmname* is a field less than 4 bytes, *parmvalue* will show the incorrect name.

addr Locates the specific field in error.

parmvalue

The incorrect value.

System action: Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: Verify that the proper value or combination of flags has been set in the named field by examining the parameter value in the message.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01017T NEITHER A DATA SET NAME DESCRIPTOR NOR AN EXIT ROUTINE ADDRESS WAS PROVIDED FOR THE *type* DATA SET

Explanation: If *type* is 'INPUT', the FMHINP field was empty and either the FMH flag FMHIFE (I/O exit supplied) or FMHIFN (DSND supplied) was set. If either of these flags are set, FMHINP must be nonzero.

If the *type* field contains 'OUTPUT', the CPYODSN field was empty and either the flag CPYOFEXT (I/O exit supplied) or CPYOFDSN (DSND supplied) was set. If either of these flags are set, CPYODSN must be nonzero.

In the message text:

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type The specified type.

System action: Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: Verify that the appropriate field contains the address of a DSND or of an I/O Exit.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01019T EBCDIC IDENTIFICATION FOR THE *cbname* CONTROL BLOCK AT ADDRESS *addr* IS INVALID. VALUE FOUND = '*cbid*'

Explanation: The control structure named by the *cbname* field does not contain the expected EBCDIC identification as defined for that block.

In the message text:

cbname The name of the control block.

addr The specified address.

cbid The value found in the control block.

System action: Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: Examine the named control block and ensure that the block identifier has been correctly specified. The parameter list for the indicated control block will indicate the proper control block identification to be used.

Preserve the job output from the job that encountered this error. Contact the IBM Support Center.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01021T THE SOURCE DATA SET *dsname* COULD NOT BE ACCESSED

Explanation: An attempt was made to locate the source data set for the request (COPY, GETATTR, FLOC, or ALTER) but the system indicated it was unable to access the data set.

This can result from any of four conditions:

- A data set name was provided for the request and the data set is not accessible through a search of the master catalog (or the catalog provided by the user for GETATTR or ALTER requests).
- The data set does not exist on the volume specified in the catalog.
- A ddname was provided for the indicated data set and the volume indicated for the data set does not contain the data set.
- A DD statement containing a member name has been encountered. Member names must be coded only on COPY statements.

In the message text:

dsname The data set name.

System action: Processing of the current invocation is ended.

System programmer response: List the appropriate catalog with IDCAMS and the appropriate VTOC with IEHLIST.

User response: Ensure the data set is properly catalogued and accessible.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01023T THE TARGET DATA SET *dsname* COULD NOT BE ACCESSED

Explanation: An attempt was made to locate the output data set for the COPY request, but the system indicated it was unable to access the data set. The name of the data set that was specified was *dsname*.

This can result from any of three conditions:

- A data set name was provided for the request and the data set is not accessible through a search of the master catalog.
- The data set does not exist on the volume specified in the catalog.
- A ddname was provided for the indicated data set and the volume indicated for the data set does not contain the data set.

In the message text:

dsname The data set name.

System action: Processing of the current invocation is ended.

System programmer response: List the appropriate catalog with IDCAMS and the appropriate VTOC with IEHLIST.

User response: Ensure the data set is properly catalogued and accessible.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01028T UNABLE TO OPEN DATA SET *dsname*

Explanation: An MVS OPEN of the data set *dsname* failed.

In the message text:

dsname The data set name.

System action: Processing of the current invocation is ended.

Operator response: Correct the errors found in OPEN and retry the request.

System programmer response: Examine the job log for any messages from OPEN or other failures during the OPEN process. The most likely cause of this error is that the data set was not actually available at the time of the OPEN.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01030T RESERVED FIELDS IN THE *cbname* AT ADDRESS *cbaddr* MUST BE ZEROS

Explanation: Fields that are identified in the interface documentation as “reserved” for the structure *cbname* supplied by the caller do not contain binary zero(s).

In the message text:

cbname The name of the control block.

cbaddr The address of the control block.

System action: Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: Examine the structure at address *cbaddr* to determine which reserved fields in the structure are not binary zeros.

Source: DFSMSdftp and File and Attribute Management Services.

IGW01031T • IGW01034T

Routing code: 11

Descriptor code: 6

IGW01031T FMO SIZE IS LESS THAN THE MINIMUM ALLOWED. LENGTH SUPPLIED = *suplen*, MINIMUM REQUIRED = *minlen*

Explanation: The FMO is smaller than the minimum allowed for the type of request.

In the message text:

suplen The length supplied.

minlen The minimum length required.

System action: Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: Verify that the size of the FMO (field FMHWKLN) is sufficient for the type of request. If necessary, allocate a larger FMO as indicated.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01033E OPEN FAILED FOR DDNAME *ddname*

Explanation: An attempt was made to open the messages data set, but the OPEN failed. The FMHMSGDD field contained *ddname*.

In the message text:

ddname The specified ddname.

System action: The message option will be cancelled and processing will continue. If the message data set could not be opened, any messages generated will be placed in the FMO.

System programmer response: Verify that the ddname passed in FMHMSGDD is correct and that the ddname was allocated at the time IGWFAMS was invoked. IGWFAMS does not dynamically allocate message data sets.

User response: Correct the JCL for the step.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01034T THE AFPL LIST ADDRESS AND SIZE AT *address* ARE INCONSISTENT. SIZE = *count*, ADDRESS = *afpllist*

Explanation: While validating the address of an AFPL pointer list, one of the following errors was encountered:

- The pointer to the list of AFPL addresses was nonzero, but the count of entries in the list was zero
- The pointer to the list of AFPL addresses was zero, but the count of entries in the list was nonzero
- Both of the values were zero for an ALTER request.

The inconsistent values may have been supplied in either a GETATTR or ALTER parameter list, in an MLS, or in a specific entry in a MEM. The address supplied points to the specific structure (or element in the MEM) where the error was detected.

In the message text:

address The specified address.

afpllist The address of the AFPL list.

count The specified size.

System action: Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: Examine the address of the list of AFPL addresses and the count in the structure indicated.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01035T COPY GROUP NO-REPLACE AND COPY GROUP CONDITIONAL-REPLACE USED TOGETHER IS AN INVALID REQUEST

Explanation: In one IGWFAMS invocation, copy group no-replace and copy group conditional-replace were specified. On a selective copy all members will be copied with either copy group no-replace option or copy group conditional-replace option.

System action: Processing of the current invocation is ended.

System programmer response: Ensure the validity of the CPYOPTNS field in the copy parameter list prior to invoking IGWFAMS.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01036T COPY AND COPY GROUP USED TOGETHER IS AN INVALID REQUEST

Explanation: In one IGWFAMS invocation, copy and copy group were specified.

System action: Processing of the current invocation is ended.

System programmer response: Ensure the validity of the CPYOPTNS field in the copy parameter list prior to invoking IGWFAMS.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01037T EXCLUDE IS NOT ALLOWED WITH COPY GROUP

Explanation: Excluding members is not allowed with copy group; Only selecting members or data set copy is allowed with copy group.

System action: Processing of the current invocation is ended.

System programmer response: Ensure the validity of the copy parameter list prior to invoking IGWFAMS. Refer to *z/OS DFSMSdftp Utilities* for a description of IEBCOPY copy group.

Source: DFSMSdftp and File and Attribute Management Services.

IGW01038T DDNAME *ddname* WAS NOT FOUND. IT MUST BE ALLOCATED BEFORE CALLING IGWAFMS0

Explanation: The caller supplied a ddname defining a data set to be processed. The specified ddname is not allocated in the current job step.

In the message text:

ddname The specified ddname.

System action: The data set will not be available for processing the current request. Additional messages may follow this message.

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System programmer response: Examine the JCL (batch job) or the output of a LISTA command (TSO) to determine what ddnames are available for the step/session.

User response: Ensure the ddname specified is allocated at the time IGWAFMS0 is invoked. IGWAFMS0 assumes that if a ddname is specified it has already been allocated to a data set by the caller.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01039T UNABLE TO OBTAIN THE JFCB FOR DDNAME *ddname*. RETURN CODE = *return-code*

Explanation: During an attempt to retrieve the JFCB for the indicated DD statement, an unexpected return code was received from MVS.

In the message text:

ddname The specified ddname.

return-code

The SWAREQ return code.

System action: Processing of the current invocation is ended.

Operator response: Examine the return code. The SWA Manager Move Mode service is used to obtain the JFCB. Refer to *z/OS MVS Programming: Authorized Assembler Services Reference SET-WTO* for a description of SWAREQ return codes.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01040T DATA SET NAME *dsname* WAS TOO LONG. LENGTH SUPPLIED =*len*

Explanation: A DSND pointed to by either the FMHINP or CPYODSN field specified a length in the first halfword that was longer than the maximum data set name length allowed, which is 44 bytes.

In the message text:

dsname The data set name.

len The length supplied.

System action: The first 44 bytes of the data set name will be displayed in the message. Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: Verify that the FMHINP and CPYODSN (if it is a copy request) point to a DSND beginning with a halfword containing a value up to 44 bytes.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01041S THE MESSAGE FILL COUNT FOR MESSAGE *msgnum* IS INCORRECT

Explanation: An internal module attempted to issue a message but it did not provide the correct number of items of variable information for the message.

In the message text:

msgnum

The message identifier.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Preserve the job output from the job that encountered this problem.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01042T NOT ENOUGH SPACE AVAILABLE FOR MESSAGE *msgnum*

Explanation: Insufficient space exists in the callers FMO to contain the message with the number *msgnum*.

In the message text:

msgnum

The message identifier.

System action: Processing of the current invocation is ended.

System programmer response: Provide a larger FMO and retry the request.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01043T MESSAGE EXIT ERROR. RETURN CODE WAS *return-code*. **REASON CODE WAS** *reason-code*

Explanation: The caller has supplied a message exit to process messages generated during processing of a request. The exit returned to IGWAFMS0 with a nonzero return code.

In the message text:

return-code

The return code.

reason-code

The reason code.

System action: Processing of the current invocation is ended.

System programmer response: Correct the message exit; the only correct return code from the exit is zero.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01044S MESSAGE NUMBER *msgnum* **IS NOT IN THE MESSAGE TABLE**

Explanation: An internal module attempted to write a message that does not exist.

In the message text:

msgnum

The message identifier.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing for the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

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System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01045S THE TEMPLATE FOR MESSAGE NUMBER *num* IS NOT IN THE MESSAGE TABLE

Explanation: An internal module attempted to write a message that does not exist.

In the message text:

num The message number.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing for the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01046S SEGMENT NUMBER *num* OF MESSAGE NUMBER *msgid* IS *len* BYTES LONG

Explanation: An internal logic error has occurred. A module attempted to issue a message with a filler that was longer than 79 bytes.

In the message text:

num The specified segment number.

msgid The message identifier.

len The specified length.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing for the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSDfp and File and Attribute Management Services.

| IGW01047T MEMBER SELECTION USER EXIT PARAMETER IS IN ERROR

| **Explanation:** The caller's IEBCOPY user exit parameter list structure that was passed to FAMS is either too small or does not follow the documented parameter list structure rules.

| **System action:** Processing of the current FAMS invocation terminates.

| **System programmer response:** Correct the IEBCOPY member selection user exit parameter list error and rerun the failing job.

| **Source:** DFSMSDfp

| **Routing code:** 11

| **Descriptor code:** 6

IGW01048T INVALID MEMBER SELECTION USER EXIT ADDRESS: X'xxxxxxxxxxxxxxxx'

Explanation: The IEBCOPY member selection user exit parameter list structure contains a user exit 31-bit address that is not on a word boundary or contains a one bit in one of the 33 high order bits.

System action: Processing of the current FAMS invocation terminates.

System programmer response: Correct the IEBCOPY member selection user exit parameter list error and rerun the failing job.

Source: DFSMSdftp

Routing code: 11

Descriptor code: 6

IGW01051E INVALID ALTER REQUEST FOR ATTRIBUTE *attrname*. THE ATTRIBUTE CANNOT BE ALTERED

Explanation: The caller has requested an attribute be altered that is not alterable.

In the message text:

attrname

The specified attribute.

System action: Processing of the attribute is skipped.

System programmer response: Correct the ALTER parameter list to remove the improper attribute.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01052E INVALID ALTER REQUEST FOR ATTRIBUTE *attrname*. ONLY ALTERABLE BY AUTHORIZED CALLER

Explanation: The caller has requested alteration of an attribute that can only be performed by an authorized caller.

In the message text:

attrname

The specified attribute.

System action: Processing of the attribute is skipped.

System programmer response: Consult the description of the attributes to determine which attributes require the caller be authorized. Correct the ALTER parameter list to remove the improper attribute, or invoke IGWAFMS0 as an authorized caller.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01053T ATTRIBUTE *attrname* CONTAINS INVALID DATA. *attrval* IS INVALID

Explanation: The caller has requested alteration of an attribute with an invalid attribute value.

In the message text:

attrname

The specified attribute.

attrval

The input attribute value.

System action: Processing of the attribute is ended.

System programmer response: Examine the AFPL for the named attribute to verify that field AFPLDPTR points to a

IGW01054T • IGW01057S

valid value. If the named attribute is a data type attribute, the latest valid date is September 17, 2042. 2042 is the year in which the CPU Time-of-Day Clock wraps.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01054T INTERNAL LOGIC ERROR. CALL TO *rtname* FAILED WITH RETURN CODE *rtncode* AND REASON CODE *reason-codeode*

Explanation: While trying to get the values for some attributes for a hierarchical file system (HFS), the specified function failed with the cited return and reason codes.

In the message text:

rtname

HFS function which returned the error.

rtncode The return code

reason-codeode

The reason code.

System action: Processing of the request is terminated and values of zero are returned for the requested attributes.

System programmer response: Verify that HFS is installed on the system. Refer to the *z/OS UNIX System Services Messages and Codes* manual for an explanation of the specific return and reason code.

Source: DFSMSDfp and File and Attribute Management Services

Routing code: 11

Descriptor code: 6

IGW01056T DFSMSDFP RELEASE *releaseno* IS NOT SUPPORTED

Explanation: The current release of DFSMSDfp is not defined in the attribute table of the current version of IGWAFMS0.

In the message text:

releaseno

The current release number.

System action: Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Obtain a dump of the DFA in the current system. Obtain a dump of the CSECT IGWAMAMT in the load module IGWAFMS0. Ensure that an attempt was not made to call IGWAFMS0 from a system prior to DFP 3.2.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01057S SOURCE TABLE INVALID. SOURCE TYPE *srce* FOR ATTRIBUTE *attrname* IS INVALID

Explanation: The table of correct sources for the indicated attribute contains an incorrect value.

In the message text:

srce The specified source type.

attrname

The specified attribute.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Obtain a dump of the CSECT IGWAMAMT in the load module IGWAFMS0.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01058E ATTRIBUTE *attrname* IS NOT KNOWN ON DFSMSDFP LEVEL *relno*

Explanation: The indicated attribute is a correct attribute, but it is not available on the level of DFSMSDfp on the current system.

In the message text:

attrname

The specified attribute.

relno

The current release number.

System action: Processing of the indicated attribute is skipped.

System programmer response: Verify the request was issued on a system with the proper level of DFSMSDfp installed. If possible, ignore the attribute or remove it from the list of attributes to be processed in the current call.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01059T MISSING POINTER TO THE ATTRIBUTE NAME IN THE AFPL AT ADDRESS *address*

Explanation: The field AFPLFLDN in the AFPL at *address* contains a zero.

In the message text:

address

The specified address.

System action: Processing of the attribute is skipped.

System programmer response: Examine the AFPL at the address given and ensure that the field AFPLFLDN is pointing to a proper attribute name.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01060E ATTRIBUTE *name* IS NOT KNOWN ON ANY DFSMSDFP LEVEL. DFSMSDFP LEVEL IS *level*

Explanation: The attribute name shown is not a correct attribute.

In the message text:

name

The name of the attribute.

level

The DFSMSDfp level.

System action: Processing of the attribute is skipped.

System programmer response: Examine the AFPLs to ensure that none of them point to an undefined attribute name. Ensure the name is padded to 8 characters with blanks if it is less than 8 characters.

Source: DFSMSDfp and File and Attribute Management Services.

IGW01061I • IGW01064S

Routing code: 11

Descriptor code: 6

IGW01061I ATTRIBUTE *attrname* HAS NO VALID SOURCES FOR THIS TYPE OF DATA SET

Explanation: This attribute is a correct attribute, but there are no available sources for this data set for this call.

This may occur if an attribute that is available only from a FASTLOC source is specified for a GETATTR request and the GETATTR request specified a user catalog to be used to satisfy the request for catalog attributes. Since a FASTLOC does not support specification of a user catalog, it cannot be used internally to obtain the attribute.

In the message text:

attrname

The specified attribute.

System action: Processing of the attribute is skipped.

System programmer response: Determine whether or not a user catalog has been specified in the request parameter list for this call.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01062I ATTRIBUTE *attrname* IS INCOMPATIBLE WITH THE ASSOCIATED DATA SET TYPE

Explanation: The indicated attribute is a correct attribute for some type of data set, but not for the type of data set being processed in this request.

In the message text:

attrname

The specified attribute.

System action: Processing of the attribute is skipped.

System programmer response: Consult the interface specifications to determine what types of data sets support this attribute and remove the AFPL containing this attribute from this call.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01064S AN INTERNAL LOGIC ERROR WAS DETECTED. A WORKAREA STORAGE REQUEST FOR *amount* IS INVALID

Explanation: An internal failure in managing the contents of the FMO has occurred.

In the message text:

amount The specified storage amount.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center for assistance.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01065S AN INTERNAL LOGIC ERROR WAS DETECTED. THE ENTRY TYPE *entry* IS INVALID

Explanation: An internal failure exists in one of the IGWAFMS0 control tables.

In the message text:

entry The specified entry type.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error. Obtain a SPZAP dump of the CSECT IGWAMAMT.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01066S AN INTERNAL LOGIC ERROR WAS DETECTED. A REQUEST FOR ATTRIBUTE *attrname* FROM A PDS IS INVALID

Explanation: An internal failure occurred while processing the attributes for a PDS.

In the message text:

attrname
The specified attribute.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error. Obtain a SPZAP dump of the CSECT IGWAMAMT.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01068T UNEXPECTED RESULTS FROM A CATALOG LOCATE REQUEST. RETURN CODE WAS *return-code*. REASON CODE WAS *reason-code*

Explanation: Catalog Management returned a return code and reason code that is not expected.

In the message text:

return-code
The Catalog Management return code.

reason-code
The Catalog Management reason code.

System action: Processing of the current invocation is ended.

User response: Examine the Catalog Management return and reason code. Refer to *z/OS MVS System Messages, Vol 6 (GOS-IEA)*, Catalog message IDC3009I, for a description of the Catalog Management return and reason code.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01069T UNEXPECTED RESULTS FROM A CATALOG ALTER REQUEST. RETURN CODE WAS *return-code*.
REASON CODE WAS *reason-code*

Explanation: Catalog Management returned a return code and reason code that is not expected while processing an ALTER request.

In the message text:

return-code

The Catalog Management return code.

reason-code

The Catalog Management reason code.

System action: Processing of the current invocation is ended.

User response: Examine the Catalog Management return and reason code. Refer to *z/OS MVS System Messages, Vol 6 (GOS-IEA)*, Catalog message IDC3009I, for a description of the Catalog Management return and reason code.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01070T UNEXPECTED RESULTS FROM AN SMSX SERVICE. RETURN CODE WAS *return-code* **REASON CODE WAS** *reason-code*

Explanation: An error occurred while processing a PDSE. The SMSX return and reason code associated with the error are listed.

In the message text:

return-code

The return code.

reason-code

The reason code.

System action: Processing of the current invocation is ended.

System programmer response: Examine the return code and reason code and perform a RETAIN[®] search. Save the output from the failing job and any logrec data set records for the error.

User response: Notify the System Programmer.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01071S ATTRIBUTE TABLE ERROR. ATTRIBUTE *attrname* **HAS AN UNSUPPORTED SAR CODE OF** *sarcode*

Explanation: An internal failure occurred while processing.

In the message text:

attrname

The specified attribute.

sarcode

The specified SAR code.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records

for the error. Obtain a SPZAP dump of the CSECT IGWAMAMT.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01072E ATTRIBUTE *attrname* CAN ONLY BE ALTERED

Explanation: The user requested that the indicated attribute be retrieved during a GET request, but that attribute is an "alter-only" attribute.

In the message text:

attrname

The specified attribute.

System action: Processing of the attribute is skipped.

System programmer response: Examine the AFPLs supplied to IGWAFMS0 and remove the AFPL for the failing attribute from the ALTER parameter list.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01073S INTERNAL LOGIC ERROR. THE *cbid* IDENTIFIER IS INVALID

Explanation: The identifier of an internal structure has been found to be incorrect.

In the message text:

cbid The control block identifier.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01074E UNEXPECTED RESULTS FROM A CVAFDIR READ REQUEST FOR DATA SET *dsname*. RETURN CODE = *return-code*. THE CVSTAT CODE = *cvstat*

Explanation: A CVAF error occurred while attempting to read the DSCBs for the indicated data set. The CVAF return code and contents of the CVSTAT field of the CVAF parameter list are displayed.

In the message text:

dsname The data set name.

return-code

The CVAFDIR return code.

cvstat The CVSTAT code.

System action: Processing of the DSCBs for the indicated data set is ended.

System programmer response: Examine the return code and CVSTAT value and determine the cause of the error. Refer to *z/OS DFSMSdfp Advanced Services* for description of CVAFDIR return codes. Refer to *z/OS DFSMSdfp Diagnosis* for a description of CVSTAT field codes.

IGW01075T • IGW01078E

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01075T BOTH MEMBER AND DATA SET LEVEL ATTRIBUTES REQUESTED

Explanation: A GETATTR request indicated data set level attributes were requested (GETIFNUM/GETIFPL nonzero), and there was an MLS and/or MEM that also requested member-level attributes.

System action: Processing of the current invocation is ended.

System programmer response: Both types of attributes cannot be requested in a single GETATTR call. Separate the request into two separate invocations.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01076E MLS REQUESTED ALL ATTRIBUTES, BUT MODEL AFPLS WERE SUPPLIED

Explanation: The MLS for a GETATTR request requested all attributes be returned (MLSIALLA was set), but the MLS also pointed to specific attributes to be returned (MLSI AFPL or MLSI AFPN were nonzero).

System action: Processing of the current invocation is ended.

System programmer response: Examine the parameters for the GETATTR request. Separate the request into two separate invocations.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01077E MEM REQUESTED ALL ATTRIBUTES AND USE MLS DEFAULTS

Explanation: The MEM for a GETATTR request requested all attributes be returned (MEMFALLA was set) and also indicated that the MLS defaults should be returned (MEMFDEFA was set). Both types of attributes cannot be requested in a single GETATTR call.

System action: Processing of the current invocation is ended.

System programmer response: Separate the request into two separate invocations.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01078E MEM ENTRY FOR MEMBER *name* SUPPLIED AFPLS AND ALSO REQUESTED ALL ATTRIBUTES

Explanation: The MEM for a GETATTR request pointed to a list of specific attributes to be returned (MEM AFPL nonzero), but the MEM also indicated that all attributes should be returned for the member (MEMFALLA was set). Both types of attributes cannot be requested in a single GETATTR call.

In the message text:

name The specified member name.

System action: Processing of the current invocation is ended.

System programmer response: Separate the request into two separate invocations.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01079E MEM ENTRY FOR MEMBER *name* SUPPLIED AFPLS AND ALSO REQUESTED MLS DEFAULTS

Explanation: The MEM for a GETATTR request pointed to a list of specific attributes to be returned (MEMAFPL was nonzero), but also indicated that the default attributes specified in the associated MLS should be returned for each member (MEMFDEFA was set). Both types of attributes cannot be requested in a single GETATTR call.

In the message text:

name the specified member name.

System action: Processing of the current invocation is ended.

System programmer response: Separate the request into two separate invocations.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01080T INVALID ALTER REQUEST

Explanation: One of the following errors occurred:

- The request may have specified attributes at the data set level and the member level to be altered.
- The request may have indicated the AFPLLIST but not the number of attributes or vice versa.

System action: Processing of the current invocation is ended.

System programmer response: Review the input parameter list and determine what attributes are to be altered. Correct the invocation and submit the request again.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01081T NO ATTRIBUTES SPECIFIED TO BE ALTERED

Explanation: The system found an ALTER request that does not contain any attributes to alter.

System action: Processing of the current invocation is ended.

System programmer response: Review the input parameter list and determine what attributes are to be altered. Correct the invocation and submit the request again.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01083S INTERNAL LOGIC ERROR IN PROCESSING *attr*

Explanation: An internal logic error occurred while processing an alter request for the specified attribute.

In the message text:

attr The name of the attribute being processed.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error. Contact the IBM Support Center.

Source: DFSMSdfp and File and Attribute Management Services.

IGW01084E • IGW01088E

Routing code: 11

Descriptor code: 6

IGW01084E EXIT FOR *product_name* ATTRIBUTES NOT FOUND. UNABLE TO PROCESS ATTRIBUTES

Explanation: Unable to process attributes supported by the exit specified in product name because the address of the exit is unavailable.

System action: Processing of attributes supported by the exit is skipped.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: DFSMSDfp and File and Attribute Management Services.

IGW01085E FAMS EXIT ADDRESS TABLE UNAVAILABLE. UNABLE TO PROCESS ATTRIBUTES REQUIRING EXIT

Explanation: Unable to process attributes supported by the exit because the exit address table is unavailable.

System action: Processing of attributes supported by the exit is skipped.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: DFSMSDfp and File and Attribute Management Services.

IGW01086E UNEXPECTED RESULTS FROM AN ATTRIBUTE EXIT REQUEST. RETURN CODE IS *return-code* AND REASON CODE IS *reason-code*

Explanation: While an attribute exit was processing attributes, an error was encountered.

System action: Processing of attributes involved in the error are skipped.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: DFSMSDfp and File and Attribute Management Services.

IGW01087T ON ALTER REQUEST WHEN ALTICTGN FIELD IS NON-ZERO, DDNAME MUST BE PROVIDED ONLY FOR ATTRIBUTES ADDVOL, DSEXDT2, EXCPEXIT AND REMVOL

Explanation: The user did not supply a ddname on an alter request that included an alternate catalog name pointer and requested altering of attributes ADDVOL, DSEXDT2, EXCPEXIT and/or REMVOL.

System action: Processing of the current invocation is ended.

System programmer response: Examine the calling parameter list and verify that the ddname has been supplied.

Source: DFSMSDfp and File and Attribute Management Services.

IGW01088E INPUT PDSE CONTAINS ALIAS NAMES LONGER THAN 8 CHARACTERS. ONLY DIRECTORY ENTRIES WITH NAMES 8 CHARACTERS OR LESS ARE RETURNED

Explanation: At least one long alias name exists in the input PDSE. The requestor of the attribute information requested that the name be returned in PDS directory format. Long names are not compatible with the PDS directory format.

System action: Processing of the current request continues.

Source: DFSMSDfp and File and Attribute Management Services.

IGW01103S RESTORE COULD NOT FIND ATTRIBUTE 'HURPN' AMONG THE *count* AFPLS WHICH WERE DUMPED PRECEDING THE DATA SET

Explanation: The data set was determined to be a correct dump format, but information necessary to restore the data set was not found in the data set.

In the message text:

count The number of AFPLs dumped and searched.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01104S CASE TYPE HAS BEEN SET TO = *casenumber*

Explanation: An internal logic error occurred while processing a COPY request.

In the message text:

casenumber
The internal logic code error number.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01106S FMBATREC = *reccnt*, FMBATRBA(1) = *recaddr*, FMBATRBL(1) = *reclen*

Explanation: BAT for CDM attributes should have FMBATREC =1, FMBATRBA(1) > 0, FMBATRBL(1) > 0.

In the message text:

reccnt The record count.
recaddr The record address.
reclen The record length.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSdfp and File and Attribute Management Services.

IGW01107S • IGW01109T

Routing code: 11

IGW01107S INVALID BAT. FMBATREC =*reccnt*, FMBATRBL(1) = *length*

Explanation: BAT for CDM data should have FMBATREC > 0, FMBATRBL(1) > 0.

In the message text:

reccnt The record count.

length The specified length.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01108S THE OUTPUT BAT FOR A DUMP OPERATION REQUIRES MORE THAN *recmax* ENTRIES, WHICH IS CURRENTLY THE MAXIMUM

Explanation: An internal logic error has occurred.

In the message text:

recmax The maximum number of entries.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01109T BLOCKSIZE *size* SPECIFIED FOR OUTPUT DATA SET IS INVALID. IT MUST BE A MULTIPLE OF 4096 FOR A BACKUP DATA SET

Explanation: A COPY operation with an output exit and a output format type of dump (CPYODUMP was set) was requested, but the output data set blocksize (CPYOBKSZ) was not a multiple of 4096.

In the message text:

size The specified block size.

System action: Processing of the current invocation is ended.

System programmer response: Examine the input parameter list for the correct blocksize. Change the value of the CPYOBKSZ field to be a value from 4096 to 28872 that is a multiple of 4096.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01121T RESTORE BLOCKSIZE *size* IS NOT A MULTIPLE OF 4096

Explanation: A COPY operation with an input exit and an input format type of dump (FMHIFD was set) was requested, but the input data set blocksize (CPYIBKSZ) was not a multiple of 4096.

In the message text:

size The specified block size.

System action: Processing of the current invocation is ended.

System programmer response: Examine the input parameter list for the correct blocksize. Change the value of the CPYIBKSZ field to be a value from 4096 to 28872 that is a multiple of 4096.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01122T RESTORE FILE IS NOT HAVE PROPER IDENTIFIER FOR AN IGWAFMS0-PRODUCED DUMP

Explanation: The identification strings located in the dump header record for the dump data set are not correct for a dump of a PDSE.

System action: Processing of the current invocation is ended.

System programmer response: Ensure that the restore data set supplied represents a dump of a PDSE.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01123S RESTORE: *count* IS THE MAXIMUM NUMBER OF RECORDS WHICH CAN BE ACCOMMODATED BY A BAT USED FOR OUTPUT. THIS MAXIMUM HAS BEEN EXCEEDED

Explanation: During a restore operation the number of entries in the BAT used for output is insufficient.

In the message text:

count The maximum number of records that can be accommodated by a BAT used for output.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01125T RESTORE BLOCKSIZE *blksize* OF INPUT FILE DOES NOT EQUAL BLOCKSIZE *size* RECORDED INTERNALLY IN THE DUMP HEADER RECORD

Explanation: The blocksize used for the restore does not equal the blocksize used when the data set was dumped.

In the message text:

blksize The restored block size of the input file.

size The block size recorded in the dump header record.

System action: Processing of the current invocation is ended.

IGW01129S • IGW01150T

System programmer response: Examine the input parameter list and ensure the proper blocksize is supplied for the restore. Change the value of the CPYIBKSZ field to match the blocksize of the dump header record (as specified by the "blksz" in the message).

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01129S INVALID CONTROL BLOCK IDENTIFICATION FOR THE BAT. FOUND = "data", EXPECTED = "IGWAMBAT"

Explanation: An internal logic error has occurred.

In the message text:

data The data found.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01130T THE REQUEST FOR COPYING PDS TO PDS IS AN INVALID REQUEST TYPE FOR IGWFAMS

Explanation: In a copy request, IGWFAMS requires that at least the input or output data set be a PDSE. IGWFAMS will not copy a PDS to PDS.

System action: Processing of the current invocation is ended.

User response: Verify that both the input and output data sets are not PDS.

Source: DFSMSdftp and File and Attribute Management Services.

IGW01150T STOW FAILED FOR MEMBER *memname*, RETURN CODE = *return-code*. REASON CODE = *reason-code*

Explanation: An attempt was made to add or replace a member in a PDS and the STOW failed. The return and reason code of the STOW failure are displayed.

In the message text:

memname
 The specified member name.

return-code
 The STOW return code.

reason-code
 The STOW reason code.

System action: Processing of the current invocation is ended.

Operator response: Take appropriate action as indicated in the reference.

System programmer response: Refer to *z/OS DFSMS Macro Instructions for Data Sets* for a description of STOW return and reason codes.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01151S MEMBER *memname* EXPECTED RECORD ID OF *rid1* BUT RECEIVED RECORD ID OF *rid2*

Explanation: An internal logic error occurred while loading the indicated member from an unloaded PDSE. An expected record is not received.

In the message text:

memname

The name of the member being processed.

rid1 The id of the expected record.

rid2 The id of the received record.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error. Contact the IBM Support Center.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01152T INVALID RECORD LENGTH FOR VARIABLE LENGTH RECORD. RECORD IN ERROR AT TTR *ttr*

Explanation: The Record Descriptor Word of a variable length record shows a negative value or a value greater than the block length of the data set.

System action: Processing of the current invocation is ended.

Operator response: Take appropriate action based on the state of the data set.

System programmer response: Dump the data set to verify that the data set has not been damaged.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01153T INCORRECT FORMAT FOR VARIABLE LENGTH SPANNED RECORD. RECORD IN ERROR AT TTR *ttr*

Explanation: The control byte of the first segment does not indicate "first" or "complete" or the control byte of a subsequent segment does not indicate "middle" or "last."

System action: Processing of the current invocation is ended.

Operator response: Take appropriate action based on the state of the data set.

System programmer response: Dump the data set to verify that the data set has not been damaged.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01155T INPUT DATA SET *dsname* CONTAINS DATA MEMBERS WHILE OUTPUT DATA SET *dsname* CONTAINS LOAD MODULE MEMBERS OR PROGRAM OBJECTS

Explanation: In a copy (conversion) request of a PDS to PDSE or a PDSE to PDS, an attempt was made to copy from an input data set containing one or more data members into an output data set containing only load module members or program objects.

System action: Processing of the current invocation is ended.

System programmer response: Examine the input JCL for the intended input and output data set names.

User response: Provide the correct input and output data set names and resubmit the request.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01156W RECORDS WERE TRUNCATED OR PADDED

Explanation: A COPY operation has resulted in truncation of records, or padding of records due to a mismatch of the data set attributes between the input and output data sets.

System action: Processing of the current request continues.

Operator response: Verify that the action taken is correct.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01157T INPUT DATA SET *dsname* CONTAINS LOAD MODULE MEMBERS OR PROGRAM OBJECTS WHILE OUTPUT DATA SET *dsname* CONTAINS DATA MEMBERS

Explanation: In a copy (conversion) request of a PDSE to PDS or PDS to PDSE, an attempt was made to copy from an input data set containing only load module members or program objects into an output data set containing one or more data members.

System action: Processing of the current invocation is ended.

System programmer response: Examine the input JCL for the intended input and output data set names.

User response: Provide the correct input and output data set names and resubmit the request.

Source: DFSMSdfp and File and Attribute Management Services.

IGW01159T UNABLE TO OBTAIN EXCLUSIVE CONTROL OF INPUT DATA SET. RERUN WITH DISP=OLD

Explanation: In an unload operation, DISP=SHR for the input data set prevented a valid output from being created due to contention.

System action: Processing of the current invocation is ended.

Operator response: Resubmit the job. However, if DISP=SHR is used, the job may succeed or may receive the same message. To ensure exclusive control of the input data set, submit the job with DISP=OLD.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01160T Non-program object member encountered during load processing of a program library. Member *dsname* was not loaded

Explanation: During the load operation to a PDSE program library, the loader detected that the name input data set member was not a valid program object. The severity is 8.

In the message text:

dsname The name from the input PDSE data set.

System action: Processing of the current system invocation is ended.

System programmer response: Verify that member is supposed to be a program object.

Programmer response: If the unloaded PDSU is a PDSE or PDS that contains data members, the load operation should be directed to an output PDSE with a compatible RECFM and LRECL specification. If the unloaded PDSU is a PDS load module library, the load operation should be directed to an output PDS load module library.

Source: DFSMSdfp FAMS

Module: IGWAMCV0

IGW01161E DIRECTORY SERVICES FAILED FOR MEMBER *name* WITH RETURN CODE *return-code* AND REASON CODE *reason-code*

Explanation: During the load operation an error was encountered by Directory Services. The return and reason code are displayed.

System action: Processing of the current request continues.

System programmer response: For a description of Directory Services return and reason codes, see *z/OS DFSMSdfp Advanced Services*.

User response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: DFSMSdfp and File and Attribute Management Services.

IGW01162E DIRECTORY ENTRY CONVERSION FAILED FOR MEMBER *name* WITH RETURN CODE *return-code* AND REASON CODE *reason-code*

Explanation: During a load or unload operation, a conversion of a directory entry from or to tape format failed. Return and reason code are displayed.

System action: Processing of the current request continues.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: DFSMSdfp and File and Attribute Management Services.

IGW01163E UNEXPECTED RESULTS *loading|unloading* MEMBER ATTRIBUTES FOR MEMBER *member* WITH RETURN CODE *return-code* AND REASON CODE *reason-code*. ATTRIBUTES MAY HAVE BEEN LOST

Explanation: During the load or unload operation, an error was encountered loading or unloading member attributes. One or more attributes for the member may have been lost.

System action: Processing of the current request continues.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: DFSMSdfp and File and Attribute Management Services.

IGW01164E UNEXPECTED RESULTS *loading|unloading* **DATASET ATTRIBUTES WITH RETURN CODE**
return-code **AND REASON CODE** *reason-code*. **ATTRIBUTES MAY HAVE BEEN LOST**

Explanation: During the load or unload operation, an error was encountered loading or unloading data set attributes. One or more attributes for the dataset may have been lost.

System action: Processing of the current request continues.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: DFSMSdftp and File and Attribute Management Services.

IGW01165T I/O ERROR DETECTED WHILE READING MEMBER *name*

Explanation: A permanent read error was encountered while processing a member. The member was not copied.

In the message text:

name Member name

System action: Processing of the current invocation is ended.

System programmer response: Contact the IBM Support Center if further assistance is required.

User response: If possible, do not include the member name listed in the error message and resubmit the copy request.

Source: DFSMSdftp and File and Attribute Management Services.

IGW01170W UNABLE TO CREATE MEMBER *memname*.

Explanation: The specified member could not be created. A possible reason would be the member already existed and the request indicated a no-replace option.

In the message text:

memname

The name of the member that failed.

System action: Processing of the current request continues.

User response: Verify that the results are as intended.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01171S INTERNAL LOGIC ERROR WHILE PROCESSING MEMBER *memname*, **WITH REASON CODE**
reason-code

Explanation: An internal logic error occurred while processing the indicated member.

In the message text:

memname

The name of the member being processed.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error. Contact the IBM Support Center.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01172T OUT OF SPACE CONDITION ENCOUNTERED DURING *process* PROCESSING FOR MEMBER *name*, WITH REASON CODE = *reason-code*

Explanation: While processing a PDSE member, the system detected an out of space condition.

In the message text:

process One of the following:

- MEMBER CREATE
- DIRECTORY UPDATE
- MEMBER COPY

name The specified member name.

reason-code

Either X'D37' or X'E37'.

System action: The system ends processing of PDSE to PDSE copy.

User response: Refer to *z/OS MVS System Codes* for a description of the System Code returned as *reason-code*.

Source: DFSMSdftp and File and Attribute Management Services.

IGW01173S UNEXPECTED RESULTS FROM AN SMSX SERVICE. RETURN CODE WAS *return-code* AND REASON CODE WAS *reason-code*

Explanation: An error was detected while copying PDSE to PDSE. The SMSX return and reason code associated with the error are listed.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

System programmer response: Examine the return code and reason code and perform a RETAIN search. Save the output from the failing job, the SVC dump and any logrec data set records for the error.

User response: Notify the System Programmer.

Source: DFSMSdftp and File and Attribute Management Services.

IGW01174T A DATA CHECK ERROR OCCURRED DURING *process* PROCESSING FOR MEMBER *name*, WITH REASON CODE = *reason-code*

Explanation: A media device error occurred while copying PDSE to PDSE.

System action: Processing of the current invocation is ended.

System programmer response: Contact the IBM Support Center if further assistance is required.

User response: If possible, do not include the member name listed in the error message and resubmit the copy request.

Source: DFSMSdftp and File and Attribute Management Services.

In the message text:

process One of the following:

- MEMBER CREATE
- DIRECTORY UPDATE
- MEMBER COPY

name The specified member name.

IGW01175T AN IO ERROR OCCURRED DURING *process* PROCESSING FOR MEMBER *name*, WITH REASON CODE = *reason-code* AND CCHHR *cchhr*

Explanation: An I/O error occurred while copying PDSE to PDSE.

In the message text:

process One of the following:

- MEMBER CREATE
- DIRECTORY UPDATE
- MEMBER COPY

cchhr CCHHR of member

System action: Processing of the current invocation is ended.

System programmer response: Contact the IBM Support Center if further assistance is required.

User response: If possible, do not include the member name listed in the error message and resubmit the copy request.

Source: DFSMSdftp and File and Attribute Management Services.

IGW01176T OUT OF ECSA CONDITION ENCOUNTERED DURING *process* PROCESSING FOR MEMBER *name*, WITH REASON CODE = *reason-code*

Explanation: While copying PDSE to PDSE, an out of ECSA condition was encountered.

In the message text:

process One of the following:

- MEMBER CREATE
- DIRECTORY UPDATE
- MEMBER COPY

System action: Processing of the current invocation is ended.

System programmer response: To determine the action needed to alleviate the out of ECSA condition, see *z/OS MVS Initialization and Tuning Guide*

User response: Contact the System Programmer.

Source: DFSMSdftp and File and Attribute Management Services.

IGW01177T OUT OF SPACE CONDITION ENCOUNTERED DURING *process* PROCESSING FOR MEMBER *member*, WITH REASON CODE = *reason-code*. PROVIDE SECONDARY ALLOCATION FOR THE OUTPUT DATASET AND RERUN THE COPY JOB

Explanation: While a job was copying a PDSE to another PDSE, the output PDSE ran out of space.

In the message text:

process Function in which out of space condition occurred.

member The member being processed when the abnormal end occurred.

reason-code
The MVS System Code.

System action: The system abnormally ends (system completion code D37) the copy job and continues processing. This message is normally followed by message IGW01550I, containing the number of successfully copied members.

User response: Allocate secondary extents to the output PDSE and rerun the copy job. Refer to *z/OS MVS System Codes* for a description of the MVS System Code returned as *reason-code*.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01178T INSUFFICIENT REGION TO PROCESS COPY REQUEST

Explanation: Storage to process copy request was unavailable due to insufficient region size.

System action: Processing of the current invocation is ended.

User response: Supply or increase the value of the REGION parameter in the JCL.

Source: DFSMSDfp and File and Attribute Management Services.

IGW01181T *process* **PROCESSING ENCOUNTERED AN OUT OF SPACE CONDITION. THE SMSX REASON CODE IS** *reason-code*

Explanation: While processing a PDSE member, the system detected an out of space condition.

In the message text:

process Name of process that failed. It will be one of the following:

- DUMP PAGE
- RESTORE PAGE

reason-code

The SMSX reason code.

System action: Processing of the current invocation is ended.

System programmer response: Contact the IBM Support Center if further assistance is required.

User response: Allocate a larger output data set and resubmit the copy job.

Source: DFSMSDfp and File and Attribute Management Services.

IGW01182T OUTPUT RECORD LENGTH, LRECL, IS NOT EQUAL TO THE INPUT RECORD LENGTH

Explanation: When fixed length format (RECFM=F) PDS or PDSEs are copied, the logical record length (LRECL) of the output PDS or PDSE must be the same size as the input PDS or PDSE logical record length. Variable length records can be copied from an input with equal or shorter length logical records than the output.

System action: Processing of the current invocation is ended.

User response: Correct the conflicting LRECL value on the output data set.

Source: DFSMSDfp and File and Attribute Management Services.

IGW01183T OUTPUT RECORD LENGTH, LRECL, IS LESS THAN THE INPUT RECORD LENGTH

Explanation: When variable length format (RECFM=V) PDS or PDSEs are copied, the logical record length (LRECL) of the output PDS or PDSE must be equal to or greater than the size of the input PDS or PDSE logical record length. Fixed length records must be copied with logical record lengths that are equal to the logical records of the output.

System action: Processing of the current invocation is ended.

User response: Correct the conflicting LRECL value on the output data set.

Source: DFSMSDfp and File and Attribute Management Services.

IGW01184W SECONDARY EXTENT QUANTITY TEMPORARILY SET TO ONE *space-unit* **SINCE SECONDARY EXTENT OF OUTPUT DATASET WAS SPECIFIED AS ZERO FOR PDS TO PDSE COPY**

Explanation: When the secondary extent is specified as zero for a PDS to PDSE copy, the secondary extent is set to one unit of the space unit that is specified as the primary allocation, to allow the copy to proceed. A PDSE is likely to run slightly larger than a PDS, and the user might not have allocated the PDSE any larger. At the end of processing, the secondary extent is set back to zero.

In the message text:

IGW01200W • IGW01203E

space-unit

The space unit (cylinder or track).

System action: Processing of the current request continues.

Source: DFSMSdfp and File and Attribute Management Services

IGW01200W LOAD MODULE MEMBER OR PROGRAM OBJECT *name* COPIED BUT MAY NOT BE EXECUTABLE DUE TO ERROR ENCOUNTERED BY BINDER. BINDER RETURN CODE = *return-code* AND REASON CODE = *reason-code*

Explanation: An error was encountered converting the PDSE program library to a load module or vice versa. The data set was copied but may not be executable.

System action: Processing of the current request continues.

System programmer response: Refer to *z/OS MVS Program Management: Advanced Facilities* for a description of binder return and reason codes.

User response: Use the binder to relink the input module and examine the resultant output binder messages.

Source: DFSMSdfp and File and Attribute Management Services.

IGW01201E MEMBER *name* OF INPUT DATA SET IS NOT A LOAD MODULE MEMBER or a program object. BINDER RETURN CODE = *return-code* AND REASON CODE = *reason-code*

Explanation: An attempt was made to copy a member which either contains control statements, is not a load module, is not a program object, is a load module or program object but contains insufficient information to be copied.

System action: Processing of the current request continues.

User response: If possible, recreate the module in error and rerun the copy job. Refer to *z/OS MVS Program Management: Advanced Facilities* for a description of binder return and reason codes.

Source: DFSMSdfp and File and Attribute Management Services.

Module: IGWAMLM0

IGW01202W MEMBER *name* OF INPUT DATA SET DOES NOT HAVE A VALID ENTRY POINT. BINDER RETURN CODE = *return-code* AND REASON CODE = *reason-code*

Explanation: The load module or program object in the input data set does not have a valid entry point.

System action: Processing of the current request continues.

System programmer response: Refer to *z/OS MVS Program Management: Advanced Facilities* for an explanation of the Binder return code and reason code.

Source: DFSMSdfp and File and Attribute Management Services.

IGW01203E MEMBER *name* EXCEEDS LIMITATIONS FOR PDS LOAD MODULES. BINDER RETURN CODE = *return-code* AND REASON CODE = *reason-code*

Explanation: The PDSE program object exceeded the limitations for PDS load modules and could not be copied (converted) into the specified PDS library.

System action: Processing of the current request continues.

System programmer response: Refer to *z/OS MVS Program Management: Advanced Facilities* on limits of converting between program objects to and from load modules.

Source: DFSMSdfp and File and Attribute Management Services.

IGW01204T BINDER ENCOUNTERED AN I/O ERROR WHILE PROCESSING MEMBER *name*. BINDER RETURN CODE = *return-code* REASON CODE = *reason-code*

Explanation: An I/O error was encountered while attempting to read or write the load module or program object. The member was not copied.

System action: Processing of the current invocation is ended.

System programmer response: Refer to *z/OS MVS Program Management: Advanced Facilities* for a description of binder return and reason codes.

Source: DFSMSdfp and File and Attribute Management Services.

IGW01205E BINDER ENCOUNTERED A FORMAT ERROR IN MEMBER *name*. BINDER RETURN CODE = *return-code* REASON CODE = *reason-code*

Explanation: A format error has been encountered in a PDS load module member. The member was not copied.

System action: Processing of the current request continues.

System programmer response: Refer to *z/OS MVS Program Management: Advanced Facilities* for a description of binder return and reason codes.

Source: DFSMSdfp and File and Attribute Management Services.

IGW01207E BINDER DETECTED AN ERROR WHILE PROCESSING MEMBER *name*. BINDER RETURN CODE = *return-code* REASON CODE = *reason-code*

Explanation: An error was encountered while attempting to copy a load module member or program object. The return and reason codes returned by the binder are displayed.

System action: Processing of the current request continues.

System programmer response: See *z/OS MVS Program Management: Advanced Facilities* for a description of binder return and reason codes. The linkage editor and loader do not support PDSEs.

Source: DFSMSdfp and File and Attribute Management Services.

IGW01208E BINDER DETECTED AN ERROR. BINDER RETURN CODE = *return-code* REASON CODE = *reason-code*

Explanation: An error was encountered while attempting to create, end or reset the environment to copy one or more load module members or program objects. The return and reason codes from the binder are displayed.

System action: Processing of the current request continues.

System programmer response: Refer to *z/OS MVS Program Management: Advanced Facilities* for a description of binder return and reason codes.

Source: DFSMSdfp and File and Attribute Management Services.

IGW01209T DDNAME NOT PROVIDED FOR INPUT DATA SET

Explanation: Input data set not allocated by user or IGWFAMS.

System action: Processing of the current invocation is ended.

System programmer response: The ddname for the input data set should have been provided by either:

- The calling parameter list in the FMHIDD field.
- IGWFAMS using DYNALLOC.

User response: If possible, resubmit the request providing a ddname representing the input data set in the JCL, otherwise, contact the System Programmer.

Source: DFSMSdfp and File and Attribute Management Services.

IGW01210T DDNAME NOT PROVIDED FOR OUTPUT DATA SET

Explanation: Output data set not allocated by user or IGWFAMS.

System action: Processing of the current invocation is ended.

System programmer response: The ddname for the output data set should have been provided by either:

- The calling parameter list in the CPYODD field.
- IGWFAMS using DYNALLOC.

User response: If possible, resubmit the request providing a ddname representing the output data set in the JCL, otherwise, contact the System Programmer.

Source: DFSMSdfp and File and Attribute Management Services.

**IGW01211T BINDER Encountered A TERMINATING ERROR (WHILE PROCESSING MEMBER *member-name*).
BINDER RETURN CODE = *return-code* REASON CODE = *reason-code***

Explanation: An attempt was made to copy a load module or program library. The return and reason codes of the binder failure are displayed. The member name is returned in case binder failure occurred during processing of a particular member.

System action: Processing of the current invocation is ended.

System programmer response: Refer to *z/OS MVS Program Management: Advanced Facilities* for a description of binder return and reason codes.

Source: DFSMSdfp and File and Attribute Management Services.

**IGW01213T OUTPUT DATA SET IS NOT A LOAD MODULE OR PROGRAM LIBRARY. BINDER RETURN
CODE = *return-code* REASON CODE = *reason-code***

Explanation: The output data set is not a load module or program library. The copy request is rejected.

System action: Processing of the current invocation is ended.

System programmer response: Examine the JCL for the intended output data set name. Refer to *z/OS MVS Program Management: Advanced Facilities* for a description of binder return and reason codes.

User response: Provide the correct output data set name and resubmit the request.

Source: DFSMSdfp and File and Attribute Management Services.

**IGW01214T MORE THAN *cnt* MEMBERS OF INPUT DATA SET ARE NOT LOAD MODULES. BINDER
RETURN CODE = *return-code* REASON CODE = *reason-code***

Explanation: An attempt was made to copy more than *cnt* members containing control statements. Because a PDS can have both load modules and files containing control statements, this condition is tolerated by a limited number of times indicated in message variable *cnt*.

System action: Processing of the current invocation is ended.

System programmer response: Examine the input data set for files with control statements. Refer to *z/OS MVS Program Management: Advanced Facilities* for a description of binder return and reason codes.

User response: Remove the files with control statements from the list of member names to be copied and resubmit the request.

Source: DFSMSdfp and File and Attribute Management Services.

**IGW01215W A MEMBER OF THE SAME NAME *name* EXISTS IN THE LIBRARY BUT REPLACE WAS NOT
SPECIFIED. BINDER REASON CODE = *reason-code***

Explanation: The member indicated will not be copied because an existing member of the same name already exists in the output data set. Options were not specified which permit replacement.

System action: Processing of the current request continues.

System programmer response: Refer to *z/OS MVS Program Management: Advanced Facilities* for a description of binder reason codes.

User response: Verify that the results are as intended.

Source: DFSMSdftp and File and Attribute Management Services.

IGW01216E WORKMOD *name* MARKED NOT-EXECUTABLE AND CANNOT REPLACE EXECUTABLE VERSION. BINDER REASON CODE = *reason-code*

Explanation: An error was encountered converting the PDSE program library to a PDS load module or vice versa. The data set was not copied.

System action: Processing of the current request continues.

System programmer response: Refer to *z/OS MVS Program Management: Advanced Facilities* for a description of binder reason codes.

User response: Use the binder to relink the input module and examine the resultant output binder messages.

Source: DFSMSdftp and File and Attribute Management Services.

IGW01217E ALIAS NAME *name* LONGER THAN 8 BYTES ON A SAVE TO PDS LOAD MODULE. BINDER REASON CODE = *reason-code*

Explanation: Alias name exceeds the eight byte limitation for a PDS load module.

System action: Processing of the current request continues.

System programmer response: Examine the specified alias name for exceeding the eight byte length limitation. Refer to *z/OS MVS Program Management: Advanced Facilities* for a description of binder reason codes.

User response: Specify a PDSE program object for the output of the copy operation and resubmit the request.

Source: DFSMSdftp and File and Attribute Management Services.

IGW01218E ALIAS *name* IS A DUPLICATE OF AN EXISTING ALIAS OR MEMBER NAME AND REPLACE WAS NOT SPECIFIED. BINDER REASON CODE = *reason-code*

Explanation: The name indicated will not be processed because an existing alias or member name already exists in the output data set. Options were not specified which permit replacement.

System action: Processing of the current request continues.

System programmer response: Refer to *z/OS MVS Program Management: Advanced Facilities* for a description of binder reason codes.

User response: Verify that the results are as intended.

Source: DFSMSdftp and File and Attribute Management Services.

IGW01219T INSUFFICIENT VIRTUAL STORAGE FOR STOW OF MEMBER *name*. BINDER REASON CODE = *reason-code*

Explanation: Binder encountered insufficient virtual storage available to perform the STOW function for the specified member or alias name. The name was not added, replaced or changed in the directory.

System action: Processing of the current invocation is ended.

User response: Provide a larger region size and resubmit the request. Refer to *z/OS MVS Program Management: Advanced Facilities* for a description of binder reason codes.

Source: DFSMSdftp and File and Attribute Management Services.

IGW01220E BINDER ENCOUNTERED AN I/O ERROR WHEN ATTEMPTING TO ACCESS DIRECTORY WHILE PROCESSING MEMBER *name*. BINDER REASON CODE = *reason-code*

Explanation: A permanent I/O error was encountered while attempting to access to the directory.

System action: Processing of the current request continues.

System programmer response: Refer to *z/OS MVS Program Management: Advanced Facilities* for a description of binder reason codes.

Source: DFSMSdfp and File and Attribute Management Services.

IGW01221T BINDER ENCOUNTERED AN OUT OF SPACE CONDITION IN DIRECTORY WHILE PROCESSING MEMBER *name*. BINDER REASON CODE = *reason-code*

Explanation: Binder encountered an out of space condition in the directory while processing the specified member of a PDS. The name was not added, replaced or changed in the directory.

System action: Processing of the current invocation is ended.

System programmer response: Refer to *z/OS MVS Program Management: Advanced Facilities* for a description of binder reason codes.

User response: Reallocate the directory for the output data set with a larger number of directory blocks and resubmit the request. Review other messages from this run to determine which members were copied.

Source: DFSMSdfp and File and Attribute Management Services.

IGW01222E MEMBER OR ALIAS NAME *name* NOT PROCESSED. BINDER REASON CODE = *reason-code*

Explanation: The name specified was not processed due an error processing another name. Specific messages will usually identify the other member name(s) involved.

System action: Processing of the current request continues.

System programmer response: Review other messages from this run to determine the origin of the problem and refer to *z/OS MVS Program Management: Advanced Facilities* for a description of binder reason codes.

Source: DFSMSdfp and File and Attribute Management Services.

IGW01223E BINDER DETECTED AN ERROR CONDITION WHILE PROCESSING MEMBER *name*. BINDER REASON CODE = *reason-code*

Explanation: An error was encountered while attempting to copy a load module member or a program object. The return and reason codes returned by the binder are displayed.

System action: Processing of the current request continues.

System programmer response: Refer to *z/OS MVS Program Management: Advanced Facilities* for a description of binder reason codes.

Source: DFSMSdfp and File and Attribute Management Services.

IGW01224S BINDER INPUT PARAMETER LIST INVALID. BINDER RETURN CODE = *return-code* REASON CODE = *reason-code*

Explanation: An incorrect parameter list has been passed to the binder.

System action: An SVC dump will be scheduled and the error will be logged in the LOGREC data set.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SVC dump and the LOGREC data set error entries. Refer to *z/OS MVS Program Management: Advanced Facilities* for a description of binder return and reason codes.

User response: Save the output from the failing job.

Source: DFSMSdfp and File and Attribute Management Services.

IGW01251W EXCLUDE MEM HAS AFPL

Explanation: A MEM that indicates members to be excluded from COPY processing cannot specify any AFPLs.

System action: The AFPL specifications will be ignored and normal processing will continue.

System programmer response: Ensure the MEMACNT and MEMAFPL fields are zero for each entry in the MEM.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01252T EXCLUDE MEM HAS NEW NAME

Explanation: A MEM that indicates members to be excluded from COPY processing (MEMFEXCL is set) cannot specify any new names for the members (field MEMNAMEO must be zero).

System action: Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: Examine the MEM for new name(s).

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01253T AN EXCLUDED MEMBER SPECIFIES THE LENGTH OF A NEW NAME. MEANING UNCLEAR

Explanation: A MEM that indicates members to be excluded from COPY processing (MEMFEXCL is set) cannot specify any new names for the members (field MEMNAMOL must be zero).

System action: Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: Examine the MEM for new name length(s).

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01254E SPECIFIED MEMBER *memname* WAS NOT FOUND

Explanation: The member specified in the current request was not found in the source data set. This message may be issued for the following reasons:

- The member never existed in the source data set.
- The member existed at the beginning of processing of the request but not when an attempt was made to copy it to the target data set. This could happen when the JCL specified DISP=SHR and another user has deleted the member.

In the message text:

memname

The name of the member being processed.

System action: Processing of the current request continues.

User response: Verify that the results are as intended.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01255T THE NUMBER OF DIRECTORY ENTRIES EXCEEDS MAXIMUM

Explanation: The maximum number of directory entries allowed in a PDSE would be exceeded if this request were processed.

This message is issued only in MVS/DFP release 3.2.0.

System action: Processing of the current invocation is ended.

System programmer response: Examine the input data set and determine the number of member names that were requested.

User response: Verify that the number of members in the input or output data set is less than the maximum allowed for a PDSE.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01256T INSUFFICIENT SPACE IN OUTPUT AREA FOR A MEMBER LIST AND FOR THE BASIC ATTRIBUTES OF A MEMBER

Explanation: Insufficient space was provided for the output area.

System action: Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: Ensure the FMO is large enough for all of the structures and data that must be constructed for return to the caller.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01257S STORAGE FOR BUILDING A MEM -ESTIMATED FROM DIRECTORY BLOCK COUNT- HAS BEEN EXCEEDED

Explanation: An internal logic error occurred while building a member list.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: Save the output from the failing job, the SVC dump and any set records for the error. Contact the IBM Support Center.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01258W DURING COPY PROCESSING POINT MACRO DETECTED MEMBER(S) DELETED

Explanation: At least one member existed at the beginning of processing of the request but not when an attempt was made to copy it to the target data set. This could happen when the JCL specified DISP=SHR and another user has deleted the member.

System action: Processing of the current request continues.

User response: Verify that the results are as intended.

Source: DFSMSdfp and File and Attribute Management Services.

IGW01260T END OF FILE REACHED IN DIRECTORY FOR INPUT FILE BEFORE THE LAST DIRECTORY ENTRY

Explanation: A logical error has been detected while reading a directory. The physical end of the directory was reached before the logical end was found.

This message is issued only in DFP Release 3.2.0.

System action: Processing of the current invocation is ended.

Operator response: Produce a dump of the directory of the input data set and ensure that it contains a member entry with a name of X'FFFFFFFFFFFFFFFF'.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01261T END OF FILE REACHED IN DIRECTORY FOR OUTPUT FILE BEFORE THE LAST DIRECTORY ENTRY

Explanation: A logical error has been detected while reading a directory. The physical end of the directory was reached before the logical end was found.

This message is issued only in DFP Release 3.2.0.

System action: Processing of the current invocation is ended.

Operator response: Produce a dump of the directory of the output data set and ensure that it contains a member entry with a name of X'FFFFFFFFFFFFFFFF'.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01262E INVALID FORMAT FOR FILTER DATA: <name> MEMBER NOT SELECTED

Explanation: The input data set member name contains unsupported data when passed to Common Filter Service.

System action: The member is not selected and the next control statement is sought.

System programmer response: Correct the specified IEBCOPY filter masking to avoid the unsupported characters. See DFSMSdftp Utilities for information about the supported IEBCOPY masking characters.

Source: Data Facility Product (DFP)

IGW01263E ERROR DURING A CFS FILTERING CALL, RETURN='yy' REASON='zz'

Explanation: An unexpected program error occurred in the DFSMS FAMS component or in common filter services.

System action: The operation is ended and the next control statement is sought.

System programmer response: Contact DFSMS customer service.

Source: Data Facility Product (DFP)

IGW01264E TOTAL PRIMARY NAMES, 'name count', FILTER PATTERN MATCHES: 'selected count'

Explanation: When member filter pattern matching is used with COPYGROUP this informational message will provide a count of the total primary member names and the count of primary names that matched one of the filter patterns provided in the SELECT MEMBER= list

System action: The copy operation continues.

System programmer response: None, beyond awareness.

Source: Data Facility Product (DFP)

IGW01300W A TOLERATED I/O ERROR WAS DETECTED. *synad*

Explanation: An I/O error occurred and the request has set the tolerate I/O error flag (FMHTOLIO).

In the message text:

synad The SYNADAF text accompanying the message.

System action: Processing of the current request continues.

Operator response: Perform the action indicated to correct the problem.

System programmer response: Examine the SYNADAF text returned and determine from the SYNADAF macro description in *z/OS DFSMS Macro Instructions for Data Sets* the cause of the problem.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01301S INVALID REQUEST CODE *reqcode* PASSED TO IGWAMDI0

Explanation: An internal logic error occurred calling the input manager.

In the message text:

reqcode The request code.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01302S IGWAMLA0 RETURNED RETURN CODE *return-code* AND REASON CODE *reason-code*

Explanation: An internal logic error occurred when calling IGWAMLA0.

In the message text:

return-code

The return code.

reason-code

The reason code.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01303T INVALID DIRECTORY BLOCK LENGTH *length* READ

Explanation: When reading directory blocks, a length other than 256 is received.

In the message text:

length The specified directory block length.

System action: Processing of the current invocation is ended.

System programmer response: Determine the organization of the data set.

User response: Ensure that the data set to be processed is a PDS or a PDSE.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01304S READ OPERATION WAS ATTEMPTED AFTER END OF FILE WAS DETECTED

Explanation: A READ error has been detected after an end of file was found.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01306T A NON-TOLERATED I/O ERROR WAS DETECTED. *synad*

Explanation: An I/O error was encountered.

In the message text:

synad The SYNADAF text accompanying the message.

System action: Processing of the current invocation is ended.

Operator response: Perform the action indicated to correct the problem.

System programmer response: Examine the SYNADAF text returned and determine from the SYNADAF macro description in *z/OS DFSMS Macro Instructions for Data Sets* the cause of the problem.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01307W A FIND REQUEST FOR MEMBER *member* FAILED WITH RETURN CODE *return-code* AND REASON CODE *reason-code*

Explanation: The specified member is not in the data set being processed.

In the message text:

member The specified member.

return-code

The return code.

IGW01308S • IGW01310T

reason-code

The reason code.

System action: Processing is ended for this member and continued for any remaining members.

System programmer response: Verify that the data set indicated is the intended data set.

User response: Provide the correct data set.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01308S INTERNAL LOGIC ERROR. THE NUMBER OF BAT ENTRIES IS GREATER THAN NCP

Explanation: An internal logic error was detected. The number of BAT entries is greater than NCP.

System action: The system schedules an SVC dump. The system logs the error in the logrec data set. The system ends processing of the current invocation.

Operator response: Notify the System Programmer.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error. Contact the IBM Support Center.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01309T USER EXIT ROUTINE ISSUED RETURN CODE *return-code* AND REASON CODE *reason-code* ON A READ REQUEST

Explanation: The user read exit returned the codes indicated in the message.

In the message text:

return-code

The return code.

reason-code

The reason code.

System action: Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: If the user exit returned a code of 12, an SVC dump will be scheduled and the error will be logged in the logrec data set.

Preserve the job output from the job that encountered this error. Contact the IBM Support Center.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01310T USER EXIT ROUTINE ISSUED RETURN CODE *return-code* AND REASON CODE *reason-code* ON A CHECK REQUEST

Explanation: The user read exit returned the codes indicated in the message.

In the message text:

return-code

The return code.

reason-code

The reason code.

System action: Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: If the user exit returned a code of 12, an SVC dump will be scheduled and the error will be logged in the logrec data set.

Preserve the job output from the job that encountered this error. Contact the IBM Support Center.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01311T USER EXIT ROUTINE DID NOT RETURN A DIRECTORY ENTRY WHEN ONE WAS EXPECTED

Explanation: The user exit fails to return a directory block.

System action: Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: If the user exit returned a code of 12, an SVC dump will be scheduled and the error will be logged in the logrec data set.

Preserve the job output from the job that encountered this error. Contact the IBM Support Center.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01312T READ OF PDSE PAGES FAILED WITH RETURN CODE *return-code* AND REASON CODE *reason-code*

Explanation: A copy request with input from a PDSE and output to a user exit failed in reading the PDSE pages.

In the message text:

return-code

The return code.

reason-code

The reason code.

System action: PDSE Services will have scheduled an SVC dump, logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01313T USER EXIT HAS SET FIELD FMBATREC TO A VALUE GREATER THAN THE NUMBER OF ENTRIES IN THE BAT

Explanation: The user exit has provided incorrect data.

System action: Processing of the current invocation is ended.

IGW01314T • IGW01331S

Operator response: Notify the System Programmer.

System programmer response: Review the user exit code.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01314T USER EXIT HAS SET INVALID VALUES INTO THE BLOCK ADDRESS OR BLOCK LENGTH FIELD OF THE BAT

Explanation: The user exit has provided incorrect data.

System action: Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: Review the user exit code.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01317T USER EXIT RETURNED A ZERO OR NEGATIVE FMBATREC

Explanation: The user exit has provided incorrect data.

System action: Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: Review the user exit code.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01330T PROCESSING ERROR. DESERV RETURNED *return code = return-code* and *reason code = reason-code*

Explanation: An error was encountered while attempting to obtain directory entries for a PDSE. The return and reason codes returned by Directory Services are displayed.

System action: Processing of the current invocation is ended.

System programmer response: Refer to *z/OS DFSMS Macro Instructions for Data Sets* for a description of Directory Services return and reason codes.

Source: DFSMSDfp and File and Attribute Management Services.

IGW01331S INVALID DESB IDENTIFIER *identifier* FOUND. EXPECTED DESB EYECATCHER CONSTANT

Explanation: A error was encountered while validating a directory services control block.

System action: An SVC dump will be scheduled, and the error will be logged in the logrec data set. Processing of the current invocation is ended.

System programmer response: Save the output from the failing job, the SVC dump, and any logrec data set records for the error.

User response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: DFSMSDfp and File and Attribute Management Services.

IGW01332S INVALID SMDE IDENTIFIER *identifier* FOUND. EXPECTED SMDE EYECATCHER CONSTANT

Explanation: A error was encountered while validating a directory services control block.

System action: An SVC dump will be scheduled, and the error will be logged in the logrec data set. Processing of the current invocation is ended.

System programmer response: Save the output from the failing job, the SVC dump, and any logrec data set records for the error.

User response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: DFSMSdftp and File and Attribute Management Services.

IGW01333S FDER ENTRIES COUNT INCORRECT

Explanation: An internal logic error has occurred while calculating the number of directory entries.

System action: An SVC dump will be scheduled and the error will be logged in the LOGREC data set.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide any output from the failing job, the SVC dump and any LOGREC error entries.

Source: DFSMSdftp and File and Attribute Management Services.

IGW01334S FDER_PRIMX INDEX INCORRECT

Explanation: An internal logic error has occurred while calculating the index to the primary member entry in a control block.

System action: An SVC dump will be scheduled and the error will be logged in the LOGREC data set.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide any output from the failing job, the SVC dump, and any LOGREC error entries.

Source: DFSMSdftp and File and Attribute Management Services.

IGW01335T DIRECTORY SERVICES MEMBER COUNT INCORRECT

Explanation: A count of the directory entries indicates zero members exist while the reason code returned by Directory Services did not state zero members exist.

System action: Processing of the current invocation is ended.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: DFSMSdftp and File and Attribute Management Services.

IGW01336E INPUT PDSE CONTAINS NAMES LONGER THAN 8 CHARACTERS. ONLY PRIMARY AND ALIAS NAMES WITH 8 CHARACTERS OR LESS ARE COPIED TO THE OUTPUT PDS

Explanation: A member or alias name in the source PDSE exceeds the eight byte limitation for a PDS load module.

System action: Processing of the current request continues.

System programmer response: Examine the source data set for the name exceeding the eight byte length limitation.

User response: Specify a PDSE for the target data set of the copy operation and resubmit the request.

Source: DFSMSdftp and File and Attribute Management Services.

IGW01337S INVALID UNLOADED LONG NAME IDENTIFIER *identifier* FOUND. EXPECTED
unloaded_long_name_eyecatcher_ constant

Explanation: A error was encountered while validating an unloaded data set's long name control block.

System action: An SVC dump will be scheduled, and the error will be logged in the logrec data set. Processing of the current invocation is ended.

System programmer response: Save the output from the failing job, the SVC dump, and any logrec data set records for the error.

User response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: DFSMSdftp and File and Attribute Management Services.

IGW01338E *input\output* DATA SET CONTAINS LONG NAMES. LONG NAMES WERE NOT PROCESSED

Explanation: The specified data set contains program objects with long names and is not supported on current DFSMSdftp release. Using a release prior to DFSMSdftp 1.3.0 results in skipping long names.

System action: Processing of the current request continues.

Source: DFSMSdftp and File and Attribute Management Services.

IGW01339E *input\output* PDSE MEMBER COUNTS UNEQUAL. THE PDSE ATTRIBUTE DIRECTORY INDICATES THE NUMBER OF PRIMARY MEMBERS IS *attribute directory member count* WHILE THE COUNT OF PRIMARY NAMES RETURNED FROM THE NAME DIRECTORY IS *name directory member count*.

Explanation: A Copy Operation encountered a PDSE with inconsistent member counts. The PDSE is most likely broken. The member count field in the PDSE Attribute Directory does not equal the number of members in the PDSE Name Directory.

In the message text:

attribute directory member count

The count of members in the attribute directory.

name directory member count

The number of members in the name directory.

System action: Processing of the current request continues. If this is a full data set Copy Operation, all members found in the name directory will be copied. If this is a Copy Exclude Operation, all members found in the name directory that are not specified in the Exclude Member List will be copied.

User response: You should consider restoring a back up copy of the data set.

Source: DFSMSdftp and File and Attribute Management Services.

IGW01350W A TOLERATED I/O ERROR WAS DETECTED. *synad*

Explanation: An I/O error occurred and the request has set the tolerate I/O error flag (FMHTOLIO).

In the message text:

synad The SYNADAF text accompanying the message.

System action: Processing of the current request continues.

Operator response: Perform the action indicated to correct the problem.

System programmer response: Examine the SYNADAF text returned and determine from the SYNADAF macro description in *z/OS DFSMS Macro Instructions for Data Sets* the cause of the problem.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01351S INVALID REQUEST CODE *reqcode* PASSED TO IGWAMDO0

Explanation: An internal logic error occurred calling the input manager.

In the message text:

reqcode The specified request code.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec records for the error.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01352T A NON-TOLERATED I/O ERROR WAS DETECTED. *synadinfo*

Explanation: An I/O error was encountered.

In the message text:

synadinfo
The SYNAD data accompanying the message.

System action: Processing of the current invocation is ended.

Operator response: Perform the action indicated to correct the problem.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01354T USER EXIT ISSUED RETURN CODE *return-code* AND REASON CODE *reason-code* ON A CHECK REQUEST

Explanation: The user read exit returned the codes indicated in the message.

System action: Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: If the user exit returned a code of 12, an SVC dump will be scheduled and the error will be logged in the logrec data set.

Preserve the job output from the job that encountered this error. Contact the IBM Support Center.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01355S IGWAMLA0 RETURNED A RETURN CODE OF *return-code* AND A REASON CODE OF *reason-code*

Explanation: An internal logic error occurred when calling IGWAMLA0.

In the message text:

return-code
The return code.

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reason-code

The reason code.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01356T USER EXIT ISSUED A RETURN CODE OF *return-code* AND A REASON CODE OF *reason-code* ON A WRITE REQUEST

Explanation: The user write exit returned the codes indicated in the message.

In the message text:

return-code

The return code.

reason-code

The reason code.

System action: Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: If the user exit returned a code of 12, an SVC dump will be scheduled and the error will be logged in the logrec data set.

Preserve the job output from the job that encountered this error. the IBM Support Center.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01357T WRITE OF PDSE PAGES FAILED WITH RETURN CODE *return-code* AND REASON CODE *reason-code*

Explanation: PDSE Services failed to write pages during a COPY request with an input exit supplying DUMP format data. See *z/OS DFSMSdfp Diagnosis* for an explanation of the reason code.

In the message text:

return-code

The return code.

reason-code

The reason code.

System action: PDSE Services may have scheduled an SVC dump and logged in the logrec data set, depending on the type and severity of the error. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error if they were produced.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01360T PDSE WRITE FAILED - ALL AVAILABLE EXTENTS FULL

Explanation: There was not enough space to complete the copy request. This message may be issued for the following reasons:

- The output data set has no secondary allocation and the primary extent has been exhausted.
- There was no more space on the volume.
- All the extents have been used.

System action: Processing of the current invocation is ended.

Operator response: Change the space allocation and/or provide a volume with sufficient space.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01421T CATALOG DATA SET NAME *dsname* IS TOO LONG. LENGTH SUPPLIED *length*

Explanation: A DSND pointed to by either the ALTICTGN (for an ALTER request) or the GETICTGN (for a GETATTR request) specified a length in the first halfword that was longer than the maximum data set name length allowed, which is 44 bytes.

In the message text:

dsname The data set name.

System action: The first 44 bytes of the data set name will be displayed in the message. Processing of the current invocation is ended.

System programmer response: Verify that the pointer to the catalog DSND points to a DSND beginning with a halfword containing a value up to 44 bytes.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01422T DATA SET NAME REQUIRED FOR CATALOG CALL NOT PROVIDED

Explanation: A FASTLOC call was made but no data set name was provided in the FMHINP field.

System action: Processing of the current invocation is ended.

System programmer response: Verify that the pointer to the catalog DSND points to a DSND beginning with a halfword containing a value up to 44 bytes.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01423T DATA SET *dsname* IS AN HFS. ONLY A GETATTR, FASTLOC, ALTER, DUMP OR RESTORE FOR AN HFS IS ALLOWED

Explanation: A unsupported function was requested of an hierarchical file system (HFS) file.

System action: Processing of the current invocation is ended.

System programmer response: Verify the data set is an HFS requesting the function.

Source: DFSMSDfp and File and Attribute Management Services.

IGW01450T INSUFFICIENT STORAGE TO COMPLETE REQUEST

Explanation: A conditional request to MVS for storage during the current invocation failed.

System action: Processing of the current invocation is ended.

Operator response: Rerun the job in a larger region.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01451S INVALID STORAGE SUBPOOL REQUESTED

Explanation: An internal logic error has occurred in the storage manager.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01452S INVALID STORAGE AREA REQUESTED

Explanation: An internal logic error occurred using the storage manager.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01453S ATTEMPT TO FREE A FREE STORAGE AREA THAT IS ALREADY FREE

Explanation: An internal logic error occurred using the storage manager.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01454S ATTEMPT TO FREE PART OF A STORAGE AREA

Explanation: An internal logic error occurred using the storage manager.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01455S ATTEMPT TO FREE PART OF A STORAGE AREA

Explanation: An internal logic error occurred using the storage manager.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01456S ATTEMPT TO FREE AREA NOT OBTAINED BY IGWAMGST

Explanation: An internal logic error occurred using the storage manager.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01460T THE DATA SET ORGANIZATION OF THE BACKUP DATA SET SPECIFIED IN DD NAME *ddname* IS NOT PHYSICAL SEQUENTIAL (PS)

Explanation: A backup request must provide a physical sequential data set as the target. A restore request must provide a physical sequential data set as the source.

In the message text:

ddname The ddname pointing to the data set.

System action: Processing of the current invocation is ended.

Operator response: Submit the request again and provide the appropriate physical sequential data set.

IGW01461T • IGW01463W

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01461T THE DATA SET ORGANIZATION OF THE LIBRARY DATA SET SPECIFIED IN DD NAME *ddname* IS NOT PARTITIONED ORGANIZATION (PO)

Explanation: Although the data set was previously marked as PO by IGWFAMS the DSCB indicator specifies the data set is not PO.

In the message text:

ddname The ddname of the data set.

System action: Processing of the current invocation is ended.

User response: Verify the data set is PO. Submit the request again and provide the appropriate library data set.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01462W MISMATCH BETWEEN DATA SET CHARACTERISTICS SPECIFIED IN PARAMETER LIST FOR DD NAME *ddname* AND IN VTOC. THE VTOC CHARACTERISTIC OF PDSE IS USED

Explanation: The VTOC indicates that the data set is a PDSE and the Catalog indicates a PDS. The data set is used as a PDSE.

In the message text:

ddname The ddname pointing to the data set.

System action: Processing of the current request continues.

Operator response: Verify that the results are as intended.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01463W MISMATCH BETWEEN DATA SET CHARACTERISTICS SPECIFIED IN PARAMETER LIST FOR DD NAME *ddname* AND IN VTOC. THE VTOC CHARACTERISTIC OF PDS IS USED

Explanation: The VTOC indicates that the data set is a PDS and the Catalog indicates a PDSE. The data set is used as a PDS.

In the message text:

ddname The ddname pointing to the data set.

System action: Processing of the current request continues.

Operator response: Verify that the results are as intended.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01467E CALLER DOES NOT HAVE AUTHORIZATION TO READ DATA SET *dsname*

Explanation: A request to access the indicated data set for input has failed a RACF authorization check.

In the message text:

return-code

The return code.

reason-code

The reason code.

System action: Access to the data set will be disallowed for this request. Additional messages may follow this message.

Operator response: Permit the caller to have RACF READ access to the indicated data set, or if the caller is authorized, they may set the bit FMHBYSEC in the parameter list.

Setting the bypass bit will not be honored if the data set must be OPENed to complete processing.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01468E CALLER DOES NOT HAVE AUTHORIZATION TO ALTER DATA SET *dsname*

Explanation: A request to access the indicated data set for alteration has failed a RACF authorization check.

In the message text:

return-code

The return code.

reason-code

The reason code.

System action: Access to the data set will be disallowed for this request. Additional messages may follow this message.

Operator response: Permit the caller to have RACF UPDATE access to the indicated data set, or if the caller is authorized, they may set the bit FMHBYSEC in the parameter list.

Setting the bypass bit will not be honored if the data set must be OPENed to complete processing.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01469T PDSE DIRECTORY ACCESS REQUEST FOR DATA SET *dsname* **FAILED WITH RETURN CODE =** *return-code*, **REASON CODE =** *reason-code*

Explanation: An error was detected while attempting to access the directory information for the PDSE indicated.

In the message text:

return-code

The return code.

reason-code

The reason code.

dsname The data set.

System action: Processing of the current invocation is ended.

System programmer response: Examine the return code and reason code and perform a RETAIN search. Save the output from the failing job and any logrec data set records for the error.

IGW01470T • IGW01500S

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01470T AN I/O MANAGEMENT EXIT WAS PROVIDED BY AN UNAUTHORIZED CALLER

Explanation: I/O exits are only supported for authorized callers. The input parameter list has either the flag FMHIFE or CPYOFEXT set, but the caller is not supervisor state, system key, or APF authorized.

System action: Processing of the current invocation is ended.

System programmer response: Verify that the calling program is properly authorized, or that it does not need to supply an I/O exit for processing.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01471T INPUT IS IN DUMP FORMAT AND OUTPUT *dsname* IS A PDS

Explanation: An unsupported operation is requested. An input in dump format may be copied to an output that is a PDSE.

In the message text:

dsname The data set name.

System action: Processing of the current invocation is ended.

Operator response: Use a PDSE as the output data set and resubmit the request.

System programmer response: Verify the output data set is the intended data set.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01500S INVALID REQUEST CODE PASSED TO IGWAMOP0. CODE = *code*

Explanation: An internal logic error has occurred.

In the message text:

code The specified request code.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01503S INVALID DSNL INDEX. VALUE = *value*

Explanation: An incorrect value was passed to one of the IGWAFMS0 modules.

In the message text:

value The incorrect value.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01504E DYNAMIC ALLOCATION ERROR IN IGWAMOP0 FOR DATA SET *dsname*. RETURN CODE = *return-code*. REASON CODE = *reason-code*

Explanation: An unexpected error was encountered while attempting to allocate or deallocate the data set indicated in the message.

In the message text:

return-code
The DYNALLOC return code.

reason-code
The DYNALLOC reason code.

dsname The data set name.

System action: The data set will not be accessible for the remainder of this invocation. Additional messages may follow this one.

System programmer response: Examine the return and reason code. Refer to *z/OS MVS Programming: Authorized Assembler Services Reference ALE-DYN* for a description of DYNALLOC return and reason codes.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01505W SEQUENTIAL INPUT SPECIFIED FOR BACKUP. DDNAME = *ddname*

Explanation: The VTOC indicates that the data set is a sequential data set, but the request is not marked as a backup request. A backup request is assumed.

In the message text:

ddname The ddname pointing to the data set.

System action: Processing of the current request continues.

User response: Verify that the results are as intended.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01506E UNABLE TO CLOSE DATA SET *dsname* RETURN CODE = *return-code*, REASON CODE = *reason-code*

Explanation: A failure occurred while attempting to close the data set. This occurs during abnormal end processing for the current invocation.

In the message text:

return-code

The return code.

reason-code

The reason code.

dsname The data set name.

System action: Processing of the current request continues.

Operator response: None.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01507T DDNAME *ddname* POINTS TO DATA SET *dsname1* INSTEAD OF DATA SET *dsname2*

Explanation: When the data set is specified by a DD statement and by a DSND, the names should match but in this case they do not.

In the message text:

ddname The specified DD name.

dsname1

The data set name specified by the DD statement.

dsname2

The data set name provided in the DSND.

System action: Processing of the current invocation is ended.

System programmer response: Verify that the data set specified is the intended data set.

User response: Specify the same data set name in both cases or supply the name by only one method.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01508T DATA SET *dsname* NOT FOUND ON VOLUME

Explanation: An attempt was made to read the DSCBs for the indicated data set, but the data set was not found on the volume indicated in the catalog, or on the DD statement for the data set.

In the message text:

dsname The data set name.

System action: Processing of the request continues. This message may be accompanied by message IGW01074E, in the event it was an error in CVAF rather than failure to locate the DSCBs.

System programmer response: Examine a listing of the catalog that contains the named data set (if a catalogued data set name was passed to IGWAFMS0), or the listing of the VTOC of the volume specified in the DD statement for the data set (if a DD statement was passed to IGWAFMS0).

User response: Verify that the data set exists on the volume the catalog points to, or if a *ddname* was supplied for the named data set that the proper name or volume serial was supplied.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01509T SUPPLIED WORKAREA WAS TOO SMALL TO COMPLETE REQUEST

Explanation: The space available in the FMO was exhausted before processing could be completed.

System action: Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: Ensure the FMO is large enough for all of the structures and data that must be constructed for return to the caller.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01511E DATA SET *dsname* NOT FOUND IN THE CATALOG

Explanation: The user supplied a data set name for the request, and when IGWAFMS0 tried to dynamically allocate the data set, it was not found.

In the message text:

dsname The data set name.

System action: Processing of the request continues; however, any subsequent references to the indicated data set in this invocation will fail.

System programmer response: Obtain a listing of the catalog; the data set must be catalogued when the user supplies a data set name.

User response: Either catalog the data set, supply the name of the catalog that contains the entry for the data set (for a GETATTR or ALTER request), or supply a DD name and ensure the DD statement contains a data set name and volume serial number.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01512T *reason* IN DATA SET SPECIFIED IN DD NAME *ddname* IS NOT SUPPORTED

Explanation: The specified data set has an unsupported attribute, which is either track overflow or a non-zero key length.

In the message text:

reason The specific unsupported attribute.

ddname The specified DD name.

System action: Processing of the current request continues.

System programmer response: Verify that the data set specified is the intended data set.

User response: Use a data set that does not have unsupported attributes.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01513T RECFM INCOMPATIBLE — INPUT RECFM = iii OUTPUT RECFM = ooo

Explanation: The record format (RECFM) of the output data set is not compatible with the record format of the input data set. FAMS cannot copy from either a fixed length record format to a variable length record format or to the opposite. Additionally, undefined record format data sets can only be copied to data sets with that same record format.

In the message text:

iii The record format of the input data set.

ooo The record format of the output data set.

System action: The system ends processing of the current invocation.

Operator response: Invoke FAMS with compatible record format combination.

Programmer response: Correct the conflicting RECFM specification on the output data set.

Source: DFSMSDfp and File and Attribute Management Services (FAMS).

Routing code: 11

Descriptor code: 6

IGW01514E THE DUMP REQUEST FOR *dsname* FAILED BECAUSE THE DATA SET WAS OPENED FOR OUTPUT WHILE BEING DUMPED

Explanation: While the dump was in progress, another user opened for output the data set being dumped. The dump request was ended to avoid creating an incorrect output.

In the message text:

dsname The data set name.

System action: Processing of the current invocation is ended.

Operator response: Submit the request again later.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01515T OPEN FAILED FOR DATA SET *dsname* BECAUSE DATA SET CURRENTLY OPEN FOR OUTPUT

Explanation: A dump request is rejected if the data set to be dumped is already open for output.

In the message text:

dsname The data set name.

System action: Processing of the current invocation is ended.

User response: Submit the request again later.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01516T OPEN FAILED FOR DATA SET *dsname* BECAUSE DATA SET CURRENTLY BEING RESTORED

Explanation: The data set could not be opened while it was being restored.

In the message text:

dsname The data set name.

System action: Processing of the current invocation is ended.

User response: Submit the request again later.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01517T UNABLE TO ACCESS DATA SET *dsname* BECAUSE IT HAS NO PRIMARY EXTENT

Explanation: The data set could not be opened because it has no space allocated to it.

In the message text:

dsname The data set name.

System action: Processing of the current invocation is ended.

User response: Submit the request specifying a data set with valid space allocation.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 6

Descriptor code: 6

IGW01518T RESTORE FAILED FOR *dsname* BECAUSE THE DATA SET IS CURRENTLY OPEN

Explanation: The data set could not be restored because it is currently open.

In the message text:

dsname The data set name.

System action: Processing of the current invocation is ended.

User response: Submit the request again later.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01519E *dsname* HAS INVALID RECFM OF *recfm*

Explanation: The specified data set has no record format information and cannot be accessed. The RECFM must have at least the "fixed," "variable," or "undefined" bit set for the data set to be used as input.

In the message text:

dsname The data set name.

recfm The record format.

System action: Processing of the current invocation is ended.

User response: Submit the request with a valid input data set.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01520T *dsname* HAS INCOMPATIBLE LRECL AND BLOCKSIZE FOR VARIABLE RECFM

Explanation: For variable format data set and not spanned, then BLKSIZE must exceed LRECL by a minimum of 4.

System action: Processing of the current invocation is ended.

User response: Examine BLOCKSIZE and LRECL. Take appropriate action as indicated in explanation.

IGW01521E • IGW01524T

Source: DFSMSdfp and File and Attribute Management Services.

IGW01521E UNEXPECTED RESULTS FROM AN OBTAIN REQUEST FOR DATA SET *dsname*. RETURN CODE = *return-code*

Explanation: An OBTAIN error occurred while attempting to read the DSCBs for the indicated data set. The OBTAIN return code is displayed.

In the message text:

dsname The data set name.

return-code

The DADSM Obtain Function return code.

System action: Processing of the DSCBs for the indicated data set is ended.

System programmer response: Examine the return code. Refer to *z/OS DFSMSdfp Diagnosis* for a description of DADSM Obtain Function return codes.

Source: DFSMSdfp and File and Attribute Management Services.

IGW01522T *dsname* HAS INCOMPATIBLE LRECL AND BLOCKSIZE FOR FIXED RECFM

Explanation: For fixed unblocked format data set, when LRECL is non-zero, BLKSIZE must equal LRECL.

System action: Processing of the current invocation is ended.

User response: Examine BLOCKSIZE and LRECL. Take appropriate action as indicated in explanation.

Source: DFSMSdfp and File and Attribute Management Services.

IGW01523T *dsname* HAS INCOMPATIBLE LRECL AND BLOCKSIZE FOR FIXED BLOCKED RECFM

Explanation: For fixed blocked format data set, BLOCKSIZE must be a multiple of LRECL.

System action: Processing of the current invocation is ended.

User response: Examine BLOCKSIZE and LRECL. Take appropriate action as indicated in explanation.

Source: DFSMSdfp and File and Attribute Management Services.

IGW01524T QUIESCE|UNQUIESCE OF FILESYSTEM FAILED WITH RETURN CODE *return-code* AND REASON CODE *reason-code*. TRY THE BACKUP OR RESTORE LATER

Explanation: The Quiesce or Unquiesce of the hierarchical file system (HFS) file failed because of an EBUSY return code indicating that the file system is either being unmounted or has already been quiesced.

In the message text:

return-code

The QUIESCE or UNQUIESCE return code.

reason-code

The QUIESCE or UNQUIESCE reason code.

System action: Processing of the current invocation is ended.

User response: Examine the return code and reason code. Refer to the appropriate information in *z/OS UNIX System Services Messages and Codes* for a description of return and reason codes.

The HFS file is '*busy*'. Try the backup or restore later.

Source: DFSMSdfp and File and Attribute Management Services.

IGW01525T QUIESCE|UNQUIESCE OF FILESYSTEM FAILED WITH RETURN CODE *return-code* AND REASON CODE *reason-code*. CALLER HAS INSUFFICIENT PERMISSION

Explanation: The Quiesce or Unquiesce of the hierarchical file system (HFS) file failed because of an EPERM return code indicating that the caller has insufficient permission.

In the message text:

return-code

The QUIESCE or UNQUIESCE return code.

reason-code

The QUIESCE or UNQUIESCE reason code.

System action: Processing of the current invocation is ended.

User response: Examine the return code and reason code. Refer to the appropriate information in *z/OS UNIX System Services Messages and Codes* for a description of return and reason codes.

Verify the permissions of the caller and retry the backup or restore of the HFS file later.

Source: DFSMSdftp and File and Attribute Management Services.

IGW01526S QUIESCE|UNQUIESCE OF FILESYSTEM FAILED WITH RETURN CODE *return-code* AND REASON CODE *reason-code*

Explanation: The Quiesce or Unquiesce of the hierarchical file system (HFS) file failed, resulting in the dump or restore of the HFS file to be abended.

In the message text:

return-code

The QUIESCE or UNQUIESCE return code.

reason-code

The QUIESCE or UNQUIESCE reason code.

System action: The processing of the current invocation is abended.

Operator response: Notify the System Programmer.

System programmer response: Examine the return and reason code. Refer to the appropriate information in *z/OS UNIX System Services Messages and Codes* for a description of return and reason codes.

Source: DFSMSdftp and File and Attribute Management Services.

IGW01527T ENQUEUE|DEQUEUE OF FILESYSTEM|DATASET FAILED WITH RETURN CODE *return-code*

Explanation: The Enqueue or Dequeue of the Hierarchical File System (HFS) or PDSE dataset failed, resulting in the dump or restore the HFS or PDSE dataset to be terminated.

In the message text:

return-code

The ENQ or DEQ return code.

System action: Processing of the current invocation is ended.

System programmer response: Examine the return and reason code. Refer to *z/OS MVS Programming: Authorized Assembler Services Reference ALE-DYN* for a description of DEQ return codes and *z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG* for a description of ENQ return codes.

Source: DFSMSdftp and File and Attribute Management Services.

IGW01528I CONNECTION REQUEST FAILED DUE TO A SHARING CONFLICT FOR DATA SET *dsname*.

Explanation: The system could not obtain a latch during data set connect processing because of enqueue sharing conflict. Another job or task is using this data set.

In the message text:

IGW01529T • IGW01535T

dsname The name of the data set.

System action: The system stops processing the current request.

Operator response: Submit the request again after the other job or task has finished using the data set.

Source: DFSMSDfp and File and Attributes Management Services

IGW01529T REQUEST TERMINATED BECAUSE QUIESCE|UNQUIESCE OF FILESYSTEM FAILED WITH RETURN CODE *return-code* AND REASON CODE *reason-code*

Explanation: Backup or Restore of an hierarchical file system (HFS) file is terminated because the QUIESCE or UNQUIESCE callable service failed with the return code and reason code shown.

In the message text, QUIESCE or UNQUIESCE is the callable service

return-code

The QUIESCE or UNQUIESCE return code.

reason-code

The QUIESCE or UNQUIESCE reason code.

System action: Processing of the current invocation is ended.

System programmer response: Examine the return and reason code. Refer to the appropriate information in *z/OS UNIX System Services Messages and Codes* for a description of return and reason codes.

User response: Notify the System Programmer.

Source: DFSMSDfp and File and Attribute Management Services.

IGW01530T {QUIESCE|UNQUIESCE} CALL CANNOT BE ISSUED BECAUSE UNIX System Services/MVS IS NOT UP AND AVAILABLE

Explanation: If UNIX System Services/MVS callable services are not installed, then IGWFAMS will not be able to issue the necessary calls to the callable services to process an hierarchical file system (HFS) file. The request will be terminated.

In the message text:

QUIESCE or UNQUIESCE

The callable service that is not installed.

System action: Processing of the current invocation is ended.

System programmer response: Check the system configuration to see if UNIX System Services callable services are installed.

Source: DFSMSDfp and File and Attribute Management Services.

IGW01535T PDSE MEMBER COUNTS UNEQUAL. THE PDSE ATTRIBUTE DIRECTORY PRIMARY MEMBER COUNT DIFFERS FROM THE NAME DIRECTORY MEMBER COUNT FOR DATA SET *data set name*.

Explanation: A Dump Operation encountered a PDSE with inconsistent member counts. The PDSE is most likely broken. The member count field in the PDSE Attribute Directory does not equal the number of members in the PDSE Name Directory.

In the message text:

data set name

The name of the data set.

System action: Processing of the current invocation is ended.

System programmer response: None.

User response: A back up copy of the data set may need to be restored. Use IEBCOPY to copy all the members found in the name directory.

Source: DFSMSDfp and File and Attribute Management Services.

IGW01536T SMS MANAGED DATASET *dataset name* UNCATALOGED IN VOLUME *volume1* IS CATALOGED IN VOLUME *volume2*.

Explanation: FAMS was called to access a PDSE data set *dataset name* on a targeted SMS-managed DASD volume *volume1*, but a data set of the same name was found to be cataloged on a different DASD volume *volume2*. The PDSE DSCB on the original target *volume1* has incomplete supporting structures. The call to FAMS is terminated.

System action: Processing of the data set request is terminated.

System programmer response: Examine the volume table of contents (VTOC) for *volume1*. If there is an orphaned format 1 DSCB for the PDSE data set, you need to repair the VTOC.

Source: DFSMSDfp and File and Attribute Management Services.

IGW01550I *count1* OF *count2* MEMBERS WERE {COPIED|LOADED|UNLOADED} --or-- *count1* OF *count2* SPECIFIED MEMBERS WERE {COPIED|LOADED|UNLOADED}

Explanation: This message indicates the results of the current COPY request. The first form applies when the entire data set was copied without member selection; the second form applies when specific members to be processed were specified.

If *count1* is less than *count2*, then specific messages will usually explain why members were not copied. If the output data set contains member names which match input data set member names and if replacement is not specified, then specific messages identifying any not-copied members will appear if specified members were copied, but not if the entire data set was copied without member selection.

System action: Processing of the current request continues unless terminal errors or greater were encountered.

Operator response: Verify that the results are as intended.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01551I MEMBER *name* HAS BEEN {COPIED|LOADED|UNLOADED}

Explanation: The named member was copied, loaded, or unloaded. The member was not renamed and the member did not replace any members or alias names in the output data set.

In the message text:

name The specified member name.

System action: Processing of the current request continues.

Operator response: Verify that the results are as intended.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01552I (*form 1*) MEMBER *name* HAS BEEN {COPIED|LOADED|UNLOADED} AND RENAMED FROM *name1* or(*form 2*) MEMBER *name* HAS BEEN {COPIED|LOADED|UNLOADED} AND REPLACED or(*form 3*) MEMBER *name* HAS BEEN {COPIED|LOADED|UNLOADED} AND REPLACED A PRIMARY WITH ALIASES or(*form 4*) MEMBER *name* HAS BEEN {COPIED|LOADED|UNLOADED} AND REPLACED A PRIMARY WITH SECOND PRIMARY *<name>* or(*form 5*) MEMBER *name* HAS BEEN {COPIED|LOADED|UNLOADED} AND REPLACED AN ALIAS OF MEMBER *name2* or(*form 6*) MEMBER *name* HAS BEEN {COPIED|LOADED|UNLOADED} AND REPLACED AN ALIAS OF REPLACED MEMBER *name* or(*form 7*) MEMBER *name* HAS BEEN {COPIED|LOADED|UNLOADED} AND REPLACED AN ALIAS WITH NO VALID PRIMARY

IGW01553I

Explanation: This message is similar to IGW01551I by reporting that a member was successfully copied. Furthermore, the member was either renamed, or it replaced something in the output data set, or both.

Form 1 applies when the member was renamed; it may appear alone or combined with any one of the other forms of this message.

Forms 2 through 7 may appear alone or combined with Form 1; they apply when the member replaced a member or when its name replaced an alias name in the output data set.

Form 2 applies when the member replaced a correct member which had no aliases; it is the most common replacement situation.

Form 3 applies when the member replaced a correct member in the output data set and the replaced member did have aliases. Any aliases of the replaced member which were also replaced will be identified in the message for the member or alias which replaced it. Any aliases of the replaced member which were not replaced will be identified in messages which appear somewhere prior to this message. If the output data set is a PDSE, any not-replaced aliases will be deleted. If the output is a PDS, they will not be deleted.

Form 4 applies only when the output data set is a PDS which had a very rare, incorrect data situation: there was another member with the same TTR number as the replaced member, but neither was identified in its directory entry as an alias.

Form 5 applies when the member replaced an alias name of a correct member which was not replaced.

Form 6 applies when the member replaced an alias name of a correct member which was also replaced.

Form 7 applies only when the output data set is a PDS which had an incorrect data situation which can occasionally occur in a PDS with aliases. The member replaced an alias name, but there was no correct primary for that alias. The situation may have been created in the past during a copy operation if the primary was replaced, but the alias was not (such as form 3 of this message).

In the message text:

form Indicates which form of the message applies.

name A specified member name.

System action: Processing of the current request continues.

Operator response: Verify that the results are as intended.

Note: If the same output data set is used for a rerun, it will already include successfully copied members.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01553I ALIAS *name* OF COPIED PRIMARY *pname* HAS BEEN { COPIED | LOADED | UNLOADED}

Explanation: An alias name of the member has been successfully processed. The primary member was also successfully processed. Neither the primary nor the alias were renamed. The alias name did not replace any name in the output data set.

In the message text:

name The specified alias name.

pname The specified primary name.

System action: Processing of the current request continues.

Operator response: Verify that the results are as intended.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01554I (form 1) ALIAS *name* OF COPIED PRIMARY *pname* (WHICH WAS RENAMED FROM *pname2*) HAS BEEN {COPIED | LOADED | UNLOADED} or (form 2) ALIAS *name* OF COPIED PRIMARY *pname* HAS BEEN {COPIED | LOADED | UNLOADED} AND RENAMED FROM *name2*
 or (form 3) ALIAS *name* OF COPIED PRIMARY *pname* HAS BEEN {COPIED | LOADED | UNLOADED} AND REPLACED or (form 4) ALIAS *name* OF COPIED PRIMARY *pname* HAS BEEN {COPIED | LOADED | UNLOADED} AND REPLACED A PRIMARY WITH NO ALIASES
 or (form 5) ALIAS *name* OF COPIED PRIMARY *pname* HAS BEEN {COPIED | LOADED | UNLOADED} AND REPLACED A PRIMARY WITH ALIAS(ES) or (form 6) ALIAS *name* OF COPIED PRIMARY *pname* HAS BEEN {COPIED | LOADED | UNLOADED} AND REPLACED A PRIMARY IN AN INVALID GROUP WITH SECOND PRIMARY *pname2* or (form 7) ALIAS *name* OF COPIED PRIMARY *pname* HAS BEEN {COPIED | LOADED | UNLOADED} AND REPLACED AN ALIAS OF NOT-REPLACED PRIMARY *pname2* or (form 8) ALIAS *name* OF COPIED PRIMARY *pname* HAS BEEN {COPIED | LOADED | UNLOADED} AND REPLACED AN ALIAS OF A PRIMARY BEING REPLACED BY *rname* or (form 9) ALIAS *name* OF COPIED PRIMARY *pname* HAS BEEN {COPIED | LOADED | UNLOADED} AND REPLACED AN ALIAS WITH NO VALID PRIMARY

Explanation: This message is similar to IGW01553I in which the alias *name* of primary member *pname* has been successfully processed and the primary member was also successfully processed. This message always includes additional information: either the alias replaced something in the output data set, or renaming occurred during the copy operation.

Form 1 applies when the primary member was renamed; it may appear alone or combined with form 2 (alias renamed). Additionally it may be combined with any one of forms 3-9 (replacement).

Form 2 applies when the alias was renamed; it may appear alone or combined with form 1 (primary renamed). Additionally it may be combined with any one of forms 3-9 (replacement).

Forms 3-9 apply when the alias name replaced a member name or another alias name in the output data set. Forms 3-9 may appear alone or combined with Form 1 (primary rename), or with Form 2 (alias rename), or with both Forms 1 and 2.

Form 3 applies when an alias and its primary both replace their counterparts in the output data set; the alias *name* replaced an alias, and the replaced alias had a primary which was also replaced by the primary *pname*.

Form 4 applies when the alias *name* replaced a primary member name in the output data set which had no aliases. The replaced primary is no longer available.

Form 5 applies when the alias *name* replaced a primary member name in the output data set which did have aliases. The replaced primary is no longer available. Any aliases for this replaced primary which are also replaced in the output data set (by any alias or member from the input data set) will be identified in the message for the member or alias which replaced it. If any aliases of the replaced primary were not replaced, they will be identified in messages which appear somewhere prior to this one. If the output data set is a PDSE, any not-replaced aliases will be deleted. If the output is a PDS, they will not be deleted.

Form 6 applies only when the output data set is a PDS which had a very rare, incorrect data situation: there was another member with the same TTR number as the replaced member, but neither was identified in its directory entry as an alias.

Form 7 applies when the alias replaced an alias name of a correct member which WAS NOT replaced. That is, even though the names of the replaced and replacing aliases are the same, the names of their respective primary names are not the same.

Form 8 applies when the alias replaced an alias name of a correct member which WAS replaced. However, the replaced member was not replaced by the primary *pname* specified in this message. It was replaced by some other primary or alias name *rname*.

Form 9 applies only when the output data set is a PDS which had an incorrect data situation which can occasionally occur in a PDS with aliases. The alias replaced an alias name, but there was no correct primary for that alias. The situation may have been created in the past during a copy operation if the primary was replaced, but the alias was not (such as form 5 of this message).

In the message text:

form The specified form that applies to the message.

name The specified alias name.

IGW01555I

pname The specified primary name.

System action: Processing of the current request continues.

Operator response: Verify that the results are as intended.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01555I (form 1) ALIAS *name* OF NOT-REPLACING PRIMARY *pname* (WHICH WAS RENAMED FROM *pname2*) HAS BEEN {COPIED | LOADED | UNLOADED} or(form 2) ALIAS *name* OF NOT-REPLACING PRIMARY *pname* HAS BEEN {COPIED | LOADED | UNLOADED} AND RENAMED FROM *name2* or(form 3) ALIAS *name* OF NOT-REPLACING PRIMARY *pname* HAS BEEN {COPIED | LOADED | UNLOADED} AND REPLACED A PRIMARY WITH NO ALIASES or(form 4) ALIAS *name* OF NOT-REPLACING PRIMARY *pname* HAS BEEN {COPIED | LOADED | UNLOADED} AND REPLACED A PRIMARY WITH ALIAS(ES) or(form 5) ALIAS *name* OF NOT-REPLACING PRIMARY *pname* HAS BEEN {COPIED | LOADED | UNLOADED} AND REPLACED A PRIMARY IN AN INVALID GROUP WITH SECOND PRIMARY *pname2* or(form 6) ALIAS *name* OF NOT-REPLACING PRIMARY *pname* HAS BEEN {COPIED | LOADED | UNLOADED} AND REPLACED AN ALIAS OF NOT-REPLACED PRIMARY *pname2* or(form 7) ALIAS *name* OF NOT-REPLACING PRIMARY *pname* HAS BEEN {COPIED | LOADED | UNLOADED} AND REPLACED AN ALIAS OF A PRIMARY BEING REPLACED BY *rname* or(form 8) ALIAS *name* OF NOT-REPLACING PRIMARY *pname* HAS BEEN {COPIED | LOADED | UNLOADED} AND REPLACED AN ALIAS WITH NO VALID PRIMARY or(form 9) ALIAS *name* OF NOT-REPLACING PRIMARY *pname* HAS BEEN {COPIED | LOADED | UNLOADED} AND IS NOW PRIMARY or(form 10) ALIAS *name* OF NOT-REPLACING PRIMARY *pname* HAS BEEN {COPIED | LOADED | UNLOADED} AND IS ALIAS OF *newpname* (THE NEW PRIMARY) or(form 11) ALIAS *name* OF NOT-REPLACING PRIMARY *pname* HAS BEEN {COPIED | LOADED | UNLOADED} AND IS ALIAS OF *newpname* (THE NEW PRIMARY) WHICH WAS RENAMED FROM *oldpname*

Explanation: An alias *name* of primary member *pname* has been successfully processed. The primary member, however, was NOT successfully processed because it conflicted with a member or an alias name in the output data set and replace was not specified for that primary member. Replacing and/or renaming of the copied alias may have occurred also. Form 1 applies only when the primary member was specified with a new (renamed) name, but was not copied due to no-replace. Form 1 may appear combined with form 2 (alias rename); additionally it may be combined with any one of forms 3-8 (replacement). Finally, it must be combined with one of the forms 9-11 (new primary identification).

Form 2 applies only when the alias was renamed; it may appear combined with form 1 (primary rename), and may also be combined with any one of forms 3-8 (replacement). Finally, it must be combined with one of the forms 9-11 (new primary identification).

Forms 3-8 apply only when the alias name replaces a member name or another alias name in the output data set. These forms tell the nature of that replacement. They may appear combined with Form 1 (primary rename), or with Form 2 (alias rename), or with both Forms 1 and 2. Finally, they must be combined with one of the forms 9-11 (new primary identification).

Form 3 applies when the alias *name* replaced a primary member name in the output data set. That primary had no aliases. The replaced primary is no longer available in the output data set.

Form 4 applies when the alias *name* replaced a primary member name in the output data set which did have aliases. The replaced primary is no longer available. Any aliases for this replaced primary which are also replaced in the output data set (by any alias or member from the input data set) will be identified in the message for the member or alias which replaced it. If any aliases of the replaced primary were not replaced, they will be identified in messages which appear somewhere prior to this one. If the output data set is a PDSE, any not-replaced aliases will be deleted. If the output is a PDS, they will not be deleted.

Form 5 applies only when the output data set is a PDS which had a very rare, incorrect data situation: there was another member with the same TTR number as the replaced member, but neither was identified in its directory entry as an alias.

Form 6 applies when the alias replaced an alias name of a correct member which WAS NOT replaced.

Form 7 applies when the alias replaced an alias name of a correct member which WAS replaced. However, the replaced member was not replaced by the primary *pname* specified in this message. It was replaced by some other primary or alias name *rname*.

Form 8 applies only when the output data set is a PDS which had an incorrect data situation which can occasionally occur in a PDS with aliases. The alias replaced an alias name, but there was no correct primary for that alias. The situation may have been created in the past during a copy operation if the primary was replaced, but the alias was not (such as form 4 of this message).

Forms 9-11, one of which is always required for this message, can appear alone or in combination with forms 1, 2 and 3-8. Forms 9-11 describes the new primary in the output data set (since the old primary was not copied). If specific names were identified to be copied (rather than the entire data set), then the first successfully copied name in a group of alias names in the order specified became the new primary. If specific names were not identified (and the entire data set was being copied), then the first successfully copied name in a group of alias names in collating sequence became the new primary. Form 9 applies when the alias named first in this message became the new primary.

Form 10 applies when another alias became the new primary and was NOT renamed during the copy operation.

Form 11 applies when another alias became the new primary and WAS renamed during the copy operation.

In the message text:

form The specified form that applies to the message.

name The specified alias name.

pname The specified primary name.

System action: Processing of the current request continues.

Operator response: Verify that the results are as intended.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01556I (form 1) ALIAS *name* OF NOT-SPECIFIED PRIMARY *pname* HAS BEEN {COPIED | LOADED | UNLOADED} AND RENAMED FROM *name2* or(form 2) ALIAS *name* OF NOT-SPECIFIED PRIMARY *pname* HAS BEEN {COPIED | LOADED | UNLOADED} AND REPLACED A PRIMARY WITH NO ALIASES or(form 3) ALIAS *name* OF NOT-SPECIFIED PRIMARY *pname* HAS BEEN {COPIED | LOADED | UNLOADED} AND REPLACED A PRIMARY WITH ALIAS(ES) or(form 4) ALIAS *name* OF NOT-SPECIFIED PRIMARY *pname* HAS BEEN {COPIED | LOADED | UNLOADED} AND REPLACED A PRIMARY IN AN INVALID GROUP WITH SECOND PRIMARY *pname2* or(form 5) ALIAS *name* OF NOT-SPECIFIED PRIMARY *pname* HAS BEEN {COPIED | LOADED | UNLOADED} AND REPLACED AN ALIAS OF NOT-REPLACED PRIMARY *pname2* or(form 6) ALIAS *name* OF NOT-SPECIFIED PRIMARY *pname* HAS BEEN {COPIED | LOADED | UNLOADED} AND REPLACED AN ALIAS OF A PRIMARY BEING REPLACED BY *rname* or(form 7) ALIAS *name* OF NOT-SPECIFIED PRIMARY *pname* HAS BEEN {COPIED | LOADED | UNLOADED} AND REPLACED AN ALIAS WITH NO VALID PRIMARY or(form 8) ALIAS *name* OF NOT-SPECIFIED PRIMARY *pname* HAS BEEN {COPIED | LOADED | UNLOADED} AND IS NOW PRIMARY or(form 9) ALIAS *name* OF NOT-SPECIFIED PRIMARY *pname* HAS BEEN {COPIED | LOADED | UNLOADED} AND IS ALIAS OF *newpname* (THE NEW PRIMARY) or(form 10) ALIAS *name* OF NOT-SPECIFIED PRIMARY *pname* HAS BEEN {COPIED | LOADED | UNLOADED} AND IS ALIAS OF *newpname* (THE NEW PRIMARY) WHICH WAS RENAMED FROM *oldpname*

Explanation: An alias *name* of primary member *pname* has been successfully processed. The primary member, however, was NOT processed because it was not specified in the list of names provided for the copy operation. Replacing and/or renaming may have occurred also.

Form 1 applies only when the alias was renamed. It may be combined with any one of forms 2-7 (replacement), and it will always be combined with one of the forms 8-10 (new primary identification).

Forms 2-7 apply only when the alias name replaces a member name or another alias name in the output data set; these forms tell the nature of that replacement. These forms may appear combined with form 1 (alias rename), and if

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they do appear they must be combined with one of the forms 8-10 (new primary identification).

Form 2 applies when the alias *name* replaced a primary member name in the output data set which had no aliases. The replaced primary is no longer available.

Form 3 applies when the alias *name* replaced a primary member name in the output data set which did have aliases. The replaced primary is no longer available. Any aliases for this replaced primary which were also replaced in the output data set (by any alias or member from the input data set) will be identified in the message for the member or alias which replaced it. If any aliases of the replaced primary were not replaced, they will be identified in messages which appear somewhere prior to this one. If the output data set is a PDSE, these not-replaced aliases will be deleted. If the output is a PDS, they will not be deleted.

Form 4 applies only when the output data set is a PDS which had a very rare, incorrect data situation: there was another member with the same TTR number as the replaced member, but neither was identified in its directory entry as an alias.

Form 5 applies when the alias replaced an alias name of a correct member which WAS NOT replaced.

Form 6 applies when the alias replaced an alias name of a correct member which WAS replaced. However, the replaced member was not replaced by the primary *pname* specified in this message. It was replaced by some other primary or alias name *rname*.

Form 7 applies only when the output data set is a PDS which had an incorrect data situation which can occasionally occur in a PDS with aliases. The alias replaced an alias name, but there was no correct primary for that alias. The situation may have been created in the past during a copy operation if the primary was replaced, but the alias was not (such as form 3 of this message).

Forms 8-10, one of which is always required for this message, can appear alone or in combination with forms 1 and 2-7. Forms 8-10 describes the new primary in the output data set (since the old primary was not copied). If specific names were identified to be copied, then the first successfully copied name in a group of alias names in the order specified became the new primary. If specific names were not identified (and the entire data set was being copied), then the first successfully copied name in a group of alias names in collating sequence became the new primary. Form 8 applies when the alias named first in this message became the new primary.

Form 9 applies when another alias became the new primary and was NOT renamed during the copy operation.

Form 10 applies when another alias became the new primary and WAS renamed during the copy operation.

In the message text:

form The specified form that applies to the message.

name The specified alias name.

pname The specified primary name.

System action: Processing of the current request continues.

Operator response: Verify that the results are as intended.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01557W MEMBER *name* NOT {COPIED|LOADED|UNLOADED} BECAUSE THE NAME ALREADY EXISTS
IN THE OUTPUT DATA SET CAUSING A COPY GROUP NO-REPLACE CONFLICT

Explanation: The member indicated was not copied because the name already exists in the target data set causing a copy group no-replace conflict. The entire source group in which the name is contained was not copied. This message is issued only for the first name in a group detected in the target data set. Options were not specified which permit replacement.

In the message text:

name A member or alias name in the source data set.

System action: Processing of the current request continues.

User response: Verify that the results are as intended. Refer to *z/OS DFSMSdfp Utilities* for a description of IEBCOPY copy group.

Source: DFSMSdfp and File and Attribute Management Services.

IGW01558W MEMBER *name* NOT {COPIED|LOADED|UNLOADED} BECAUSE IT BELONGS TO A GROUP IN WHICH A PREVIOUS NAME PROCESSED ENCOUNTERED COPY GROUP NO-REPLACE CONFLICT

Explanation: The member indicated was not copied because at least one name in the group already exists in the target data set causing a copy group no-replace conflict. The entire source group in which the name is contained was not copied. A previous IGWFAMS message was issued for the first name detected in the target data set; This message is issued for subsequent names in the source group whether or not they are present in the target data set. Options were not specified which permit replacement.

In the message text:

name A member or alias name in the source data set.

System action: Processing of the current request continues.

User response: Verify that the results are as intended. Refer to *z/OS DFSMSdfp Utilities* for a description of IEBCOPY copy group.

Source: DFSMSdfp and File and Attribute Management Services.

IGW01559E MEMBER *name* NOT {COPIED|LOADED|UNLOADED} BECAUSE OF COPY GROUP CONDITIONAL-REPLACE CONFLICT, SINCE AT LEAST ONE NAME IN THIS INPUT GROUP BELONGS TO A DIFFERENT OUTPUT GROUP

Explanation: The member indicated is part of a group in the source data set that encountered a copy group conditional-replace conflict because either:

- The primary in the source data set was found in the target data set but aliases of that primary exist in a different primary's group in the target data set. Aliases will not be stolen from other groups in target data set for copy group.
- The primary in the source data set was not found in the target data set but aliases of that primary exist in a different primary's group in the target data set. Aliases will not be stolen from other groups in target dataset for copy group.

In the message text:

name A member or alias name in the source data set.

System action: Processing of the current request continues.

User response: Verify that the results are as intended. Refer to *z/OS DFSMSdfp Utilities* for a description of IEBCOPY copy group.

Source: DFSMSdfp and File and Attribute Management Services.

IGW01560E COPYING A GENERATED PRIMARY WITHOUT THE ACCOMPANYING ALTERNATE PRIMARY IS INVALID. MEMBER *name* BELONGING TO PRIMARY GROUP *name* NOT {COPIED|LOADED|UNLOADED}

Explanation: An alternate primary must always accompany a generated primary on a copy request. Using copy group specifying the generated primary will automatically include the alternate primary in the copy request.

In the message text:

Generated primary

An 8-character name generated by the binder when the binder converts a long primary name into a specially-marked alias, known as an "alternate primary", and generates an 8-byte member name. This affects the replacement rules in that a member will never be copied without its alternate primary, and vice versa.

Alternate primary

See above definition of generated primary.

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System action: Processing of the current request continues.

User response: Use copy group specifying the generated primary name and resubmit the request. Refer to *z/OS DFSMSdftp Utilities* for a description of IEBCOPY copy group.

Source: DFSMSdftp and File and Attribute Management Services.

IGW01561E ALIAS *name* OF NOT-SPECIFIED PRIMARY *name* NOT {COPIED|LOADED|UNLOADED}
{BLANK|AND RENAMED FROM *new_name*} BECAUSE ITS PRIMARY WAS NOT SPECIFIED IN
THE COPY REQUEST

Explanation: An alias for a load module or program object cannot be copied without specifying the primary on the copy request.

In the message text:

name The name of the alias

System action: Processing of the current request continues.

User response: Resubmit the request by either:

- Specifying the primary and any desired alias names on the copy request.
- Specifying the primary name on the copy group request if all names for that group are to be copied.
- Not excluding the primary member without excluding all the primary member's aliases.

Refer to *z/OS DFSMSdftp Utilities* for a description of IEBCOPY copy group.

Source: DFSMSdftp and File and Attribute Management Services.

IGW01562S FRIT IS NOT SORTED. *name1* INCORRECTLY PRECEDES *name2*

Explanation: An internal logic error has occurred.

In the message text:

name1 name2
The specified names.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01563T *name* IS A DUPLICATE NAME

Explanation: The caller has selected a name more than once.

In the message text:

name The specified name.

System action: Processing of the current invocation is ended.

Operator response: Remove multiple specifications of the same name.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01564T RENAMED OUTPUT NAME *name1* OF INPUT NAME *name2* DUPLICATES AN INPUT NAME

Explanation: The caller has specified a member to be copied and renamed, but the renamed name is already specified as one of the members to be copied without rename, creating a duplicate output name.

In the message text:

name1 The specified output name.

name2 The specified input name.

System action: Processing of the current invocation is ended.

Operator response: Assure that no two names will be duplicated as output names.

Source: DFSMSDf and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01565T RENAMED OUTPUT NAME *name1* OF INPUT NAME *name2* DUPLICATES A RENAME OF INPUT NAME *name3*

Explanation: The caller has specified two members to be copied and renamed them both to the same output name.

In the message text:

name1 The specified output name.

name2 name3
The specified input names.

System action: Processing of the current invocation is ended.

Operator response: Assure that no two names will be duplicated as output names.

Source: DFSMSDf and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01566E ALIAS *name* CANNOT BE COPIED BECAUSE IT HAS NO PRIMARY NAME

Explanation: This message may occur for a PDS, but not for a PDSE. The alias name was requested to be copied, but there is no primary (i.e., non-alias) name that corresponds to this alias. One cause for this may have been a previous copy operation where this data set was the output data set and where the primary name was replaced but this alias was not replaced. (For example, see the explanation for message IGW1552I, form 3).

In the message text:

name The specified alias name.

System action: Processing continues with the next member.

Operator response: If it is necessary to use this name, reconstructing the alias using another copy of the data may be appropriate, or the alias bit in the directory entry (PDS2ALIS) can be turned off by using AMASPZAP to convert this to a primary member.

System programmer response: If the problem was created during a previous PDSE to PDS copy, then the messages for that copy will describe this situation. If necessary, the alias bit in the directory entry may be examined for this alias and any aliases with the same TTR number.

Source: DFSMSDf and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01567T (*form 1*) INVALID INPUT DATA SET. NOT COPIED BECAUSE THERE ARE MULTIPLE PRIMARY NAMES FOR THE SAME DATA. ALL PRIMARY NAMES FOR THE SAME DATA ARE DISPLAYED BELOW: *or(form 2)* INVALID INPUT DATA SET. NOT COPIED BECAUSE THERE ARE MULTIPLE PRIMARY NAMES FOR THE SAME DATA. ALL PRIMARY NAMES FOR THE SAME DATA ARE DISPLAYED BELOW (WITH ALL ALIAS NAMES):

Explanation: This message should never occur for a PDSE but may occur very rarely for a PDS. The input data set is incorrect because it contains more than one directory entry which has the same TTR number and two or more of these entries are not identified as aliases. This is incorrect because there must be at most one non-alias (primary member) associated with a TTR number. In form1 of this message, no aliases are involved at all. In form2, at least one alias also has the same TTR number as the one detected for the multiple primaries. This message will be followed by a series of messages (IGW01568T), which identifies the primary and alias names involved.

In the message text:

form The specified form that applies to the message.

System action: Processing of the current invocation is ended. No members whatsoever will be copied from this data set.

Operator response: By deleting any unwanted names, assure that there is exactly one directory entry with this TTR number for which the alias bit is off.

System programmer response: If necessary, examine the alias bit in the directory entries of the members identified in message IGW01568T.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01568T (*form 1*) PRIMARY NAME *pname* HAS MULTIPLE PRIMARIES *or(form 2)* ALIAS NAME *name* HAS MULTIPLE PRIMARIES *or(form 3)* NOT SPECIFIED PRIMARY NAME *pname* HAS MULTIPLE PRIMARIES *or(form 4)* NOT SPECIFIED ALIAS NAME *name* HAS MULTIPLE PRIMARIES

Explanation: This message itemizes the primary and alias names associated together with the same TTR number for the problem identified in message IGW01567T. Form 1 identifies those names for which the alias bit is not turned on in the directory entry (hence it is a primary name). Form 2 identifies those names for which the alias bit is turned on. Forms 3 and 4 apply only if selected members, rather than the entire data set, is being copied. The names identified in forms 3 and 4 were not specified for copy, but may contribute to the problem.

In the message text:

form The specified form that applies to the message.

name The specified alias name.

pname The specified primary name.

System action: Processing of the current invocation is ended. No members whatsoever will be copied from this data set.

Operator response: By deleting any unwanted names assure that there is exactly one directory entry with this TTR number for which the alias bit is off.

System programmer response: Examine the alias bit in the directory entries of the members identified in message IGW01568T.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01569W MEMBER *name* WAS SPECIFIED FOR {COPY | LOAD | UNLOAD} BUT ONLY *count1* OF *count2* ALIASES WERE SPECIFIED

Explanation: The indicated member was specifically requested to be copied, but not all of the aliases for the member were also specified.

In the message text:

name The specified member name.

count1 The number of aliases actually specified.

count2 The number of aliases scheduled to be specified.

System action: Processing continues with the next member.

Operator response: If the results are as desired, no action is required. Otherwise, rerun the job and specify all of the aliases for the member which should be copied.

If the same output data set is used for a re-run, it will already include successfully copied members and aliases.

System programmer response: Obtain and review a list of members for the complete input data set, the list of members selected for copy (if any), and other messages from this run.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01570W MEMBER *name* WAS NOT SPECIFIED FOR {COPY | LOAD | UNLOAD} BUT *count1* OF *count2* ALIASES WERE SPECIFIED

Explanation: Specific members were requested to be copied, but the indicated member was not specifically requested. However, since some of its aliases were requested, possibly the member and all aliases were intended in the copy request.

In the message text:

name The specified member name.

count1 The number of aliases actually specified.

count2 The number of aliases scheduled to be specified.

System action: Processing continues with the next member. The new primary in the output data set will be, according to the caller's specification sequence of alias names, the first successfully copied alias of the not copied primary member.

Operator response: If the results are as desired, no action is required. Otherwise, rerun the job and specify the member and all of the aliases for the member which should be copied.

Note: If the same output data set is used for a re-run, it will already include successfully copied members and aliases from this run.

System programmer response: Obtain and review a list of members for the complete input data set, the list of members selected for copy (if any), and other messages from this run.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01571W (*form 1*) MEMBER *name* WAS {COPIED | LOADED} BUT ONLY *count1* OF *count2* ALIASES WERE {COPIED | LOADED} or (*form 2*) MEMBER *name* WAS {COPIED | LOADED} BUT ONLY *count1* OF *count2* SPECIFIED ALIASES WERE {COPIED | LOADED} or (*form 3*) MEMBER *name* WAS {COPIED | LOADED} AND RENAMED FROM *name1* BUT ONLY *count1* OF *count2* ALIASES WERE {COPIED | LOADED} or (*form 4*) MEMBER *name* WAS {COPIED | LOADED} AND RENAMED FROM *name1* BUT ONLY *count1* OF *count2* SPECIFIED ALIASES WERE {COPIED | LOADED}

IGW01572W

Explanation: The primary member *name* was copied but not all of its aliases were also copied. The most likely cause is that one or more alias names had a name matching a name in the output data set and replace was not specified. Since replace can be specified at either the data set or member level, either (a) some aliases were not specified with the replace option, or (b) the replace option was not chosen for the entire data set. Another cause is that there was insufficient space in the directory of the output data set for all the alias names (message IGW1150T will also be issued if this occurs).

In forms 1 and 3, the entire input data set was being copied (members were not specified), while in forms 2 and 4, only certain members were specified for the copy. Forms 3 and 4 are used when the primary member was renamed during the copy operation.

In the message text:

form The specified form that applies to the message.

name The specified member name.

count1 The specified number of aliases.

count2 The specified number of aliases scheduled.

System action: Processing continues with the next member.

Operator response: Verify that results are as intended. If not and if the problem is due to no-replace, re-run the job using appropriate replace options.

If the same output data set is used for a re-run, it will already include successfully copied members and aliases from this run.

System programmer response: Review other messages from this run. If the caller provided a list of selected members and aliases, then specific messages will identify the aliases which were not copied due to no-replace. Obtain and review lists of members for the input and output data sets prior to the run. Also review the replacement options, and member selection if applicable.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01572W (*form 1*) MEMBER *name* WAS NOT {COPIED | LOADED} AND *count1* OF *count2* ALIASES WERE {COPIED | LOADED} or (*form 2*) MEMBER *name* WAS NOT {COPIED | LOADED} AND *count1* OF *count2* SPECIFIED ALIASES WERE {COPIED | LOADED} or (*form 3*) MEMBER *name* WAS NOT {COPIED | LOADED} AND RENAMED FROM *name2* AND *count1* OF *count2* ALIASES WERE {COPIED | LOADED} or (*form 4*) MEMBER *name* WAS NOT {COPIED | LOADED} AND RENAMED FROM *name1* AND *count1* OF *count2* SPECIFIED ALIASES WERE {COPIED | LOADED}

Explanation: The primary member *name* was not copied, but one or more aliases were copied. The most likely cause is that *name* already existed in the output data set and replace was not specified. However, some of the aliases for the member were copied because they did not exist in the output data set (aliases may also have been copied if they were specified individually and given the replace option in that specification). Another cause is that there may have been insufficient space in the directory of the output data set for all the alias names (message IGW1150T will also be issued if this occurs).

In forms 1 and 3, the entire input data set was being copied (members were not specified). In forms 2 and 4, only certain members were specified for the copy. Forms 3 and 4 are used when the primary member was renamed during the copy operation and the alias names in the input data set are associated with the original name *name1*.

In the message text:

form The specified form that applies to the message.

name The specified member name.

count1 The specified number of aliases.

count2 The specified number of aliases scheduled.

System action: Processing continues with the next member.

Operator response: Verify that results are as intended. If not, and if the problem is due to no-replace, re-run the job using appropriate replace options.

If the same output data set is used for a re-run, it will already include successfully copied members and aliases from this run.

System programmer response: If the caller provided a list of selected members and aliases, then specific messages will identify the aliases which were not copied, if any. Review other messages from this run and lists of members for the input and output data sets. Also review the replace options specified for this copy operation and member selection if applicable.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01573W ONLY *count1* OF *count2* SPECIFIED ALIASES OF NOT-SPECIFIED MEMBER *name* WERE {COPIED | LOADED}

Explanation: The member name was not specified to be copied, but at least two of its aliases were specified. However, not all aliases were copied. The most likely cause is that one or more aliases had a name matching a name in the output data set and replace was not specified. Since replace can be specified at either the data set or member level, either (a) some aliases were not specified with the replace option, or (b) the replace option was not chosen for the entire data set. Another cause is that there was insufficient space in the directory of the output data set for all the alias names (message IGW1150T will also be issued if this occurs).

In the message text:

name The specified member name.

count1 The number of aliases either copied or loaded.

count2 The number of aliases scheduled for either copying or loading.

System action: Processing continues with the next member.

Operator response: Verify that results are as intended. If not, re-run the job using appropriate replace options.

If the same output data set is used for a re-run, it will already include successfully copied members and aliases from this run.

System programmer response: Since the caller provided a list of selected members and aliases, specific messages will identify any aliases which were not copied due to no-replace. Review other messages from this run and lists of members for the input and output data sets. Also review the replace options specified for this copy operation and member selection if applicable.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01574W MEMBER *name* WAS REPLACED, BUT ONLY *count1* OF *count2* ALIASES WERE REPLACED

Explanation: This message applies to the output data set. Although a primary member was replaced, not all of its aliases were replaced. If the output data set is a PDSE, the not-replaced aliases will be deleted. If the output is a PDS, they will not be deleted.

In the message text:

name The specified member.

count1 The specified number of aliases replaced.

count2 The specified number of aliases scheduled for replacement.

System action: Processing continues with the next member.

Operator response: Verify that results are as intended. If not, re-run the job using appropriate member selection and replace options.

IGW01575W • IGW01576W

If the same output data set is used for a re-run, it will already include successfully copied members and aliases from this run.

System programmer response: Review other messages from this run and lists of members for the input and output data sets. Also review the replace options specified for this copy operation and member selection if applicable.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01575W MEMBER *name* WAS NOT REPLACED, BUT *count1* OF *count2* ALIASES WERE REPLACED

Explanation: This message applies to the output data set. A primary member was not replaced because (1) its name was not selected for copy, or (2) the replace option was not specified and there was a conflict in the output data set for *name*. At least one alias was replaced, however, by either a primary or alias name. One result is that at least one name which was once an alias of *name* in the output data set, now represents different data. Other results relate to partially copied groups of members described in messages IGW1569W-IGW1573W.

In the message text:

name The specified member.

count1 The specified number of aliases replaced.

count2 The specified number of aliases scheduled for replacement.

System action: Processing continues with the next member.

Operator response: Verify that results are as intended. If not, re-run the job using appropriate member selection and replace options.

If the same output data set is used for a re-run, it will already include successfully copied members and aliases from this run.

System programmer response: Review other messages from this run and lists of members for the input and output data sets. Also review the replace options specified for this copy operation and member selection if applicable.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01576W ALIAS *name* WAS DELETED IN THE OUTPUT DATA SET BECAUSE ITS PRIMARY NAME WAS REPLACED

Explanation: This action is taken when the output data set is a PDSE because its primary member was replaced, but the alias name was not. The name is removed to prevent inadvertent reference to obsolete data.

In the message text:

name The specified alias name.

System action: Processing continues with the next member.

Operator response: Verify that results are as intended. If not, re-run the job using appropriate member selection and replace options.

If the same output data set is used for a re-run, it will already include successfully copied members and aliases from this run.

System programmer response: Review other messages from this run and lists of members for the input and output data sets. Also review the replace options specified for this copy operation and member selection if applicable.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01577W ALIAS *name* WILL HAVE NO PRIMARY IN THE OUTPUT DATA SET BECAUSE ITS PRIMARY NAME WAS REPLACED

Explanation: The indicated alias no longer has a primary in the output data set (PDS) because its primary member was replaced, but the alias name was not.

In the message text:

name The specified alias name.

System action: Processing continues with the next member.

Operator response: Verify that results are as intended. If not, re-run the job using appropriate member selection and replace options.

If the same output data set is used for a re-run, it will already include successfully copied members and aliases from this run.

System programmer response: Review other messages from this run and lists of members for the input and output data sets. Also review the replace options specified for this copy operation and member selection if applicable.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: M6

IGW01578E MEMBER *name* PROGRAM OBJECT LEVEL IS NOT SUPPORTED ON DFSMSDFP RELEASE *rel*

Explanation: The specified program object was created on a higher release of DFSMS/MVS. The program object level is not supported on the current DFSMS/MVS release. The member will not be processed.

In the message text:

name The specified member or alias name.

rel The release number.

System action: Processing of the current request continues.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01579E ALIAS *name* IS A DUPLICATE OF AN EXISTING PRIMARY AND THEREFORE NOT REPLACED

Explanation: The specified alias is the duplicate of an existing primary name. Hence it was not replaced.

In the message text:

name The specified alias name.

System action: The current member is not replaced. The processing of the current request continues.

Source: DFSMSDfp and File and Attribute Management Services.

IGW01584W MEMBER *name* WILL NOT BE {COPIED | LOADED} DUE TO NO-REPLACE

Explanation: The member indicated will not be processed because an existing member of the same name already exists in the output data set. Options were not specified which permit replacement. This message is issued if certain members were specified for the copy operation, but will not be issued when the entire data set is being copied without member selection.

In the message text:

name The specified member name.

System action: Processing continues with the next member.

Operator response: Verify that the results are as intended.

Form 1 is used when neither the primary nor the alias were being renamed. Form 2 is used when the primary was renamed; form 3 is used when the not-replacing alias was being renamed. This message is issued if certain members were specified for the copy operation, but will not be issued when the entire data set is being copied without member selection.

In the message text:

form The specified form that applies to the message.

name The specified alias name.

pname The specified primary name.

System action: Processing continues with the next member.

Operator response: Verify that the results are as intended.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01588W (*form 1*) ALIAS *name* OF NOT-SPECIFIED PRIMARY *pname* WILL NOT BE {COPIED | LOADED} DUE TO NO-REPLACE or(*form 2*) ALIAS *name* OF NOT-SPECIFIED PRIMARY *pname* WILL NOT BE {COPIED | LOADED} AND RENAMED FROM *rname* DUE TO NO-REPLACE

Explanation: The alias name indicated was not copied because an existing member or alias of the same names already exists in the output data set. Options were not specified which permit replacement. The primary member for this alias was not selected as part of the copy operation. Form 1 is used when the alias was not being renamed; form 2 is used when it was being renamed.

In the message text:

form The specified form that applies to the message.

name The specified alias name.

pname The specified primary name.

System action: Processing continues with the next member.

Operator response: Verify that the results are as intended.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01589W SPECIFIED MEMBER *memname* WAS NOT COPIED DUE TO NO-REPLACE

Explanation: The member was not copied because the request indicated a no-replace option. This could happen when the JCL specified DISP=SHR and another user has created a member by the same name before this request tried to copy the member from the source data set.

Note that similar messages IGW01584W, IGW01586W, IGW01587W and IGW01588W are issued during conflict resolution, before the copy operation starts.

In the message text:

memname

The name of the member that was not copied.

System action: Processing of the current request continues.

Operator response: Verify that the results are as intended.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01590T ALTERNATE PRIMARY ENTRY IN *cbname* CONTROL BLOCK IS INVALID FOR MEMBER *name*

Explanation: The control structure named *cbname* is either missing a generated primary entry, missing an alternate primary entry or has an invalid count of generated primary and alternate primary entries. For each generated primary entry, there must be one and only one alternate primary entry and vice versa.

In the message text:

cbname The name of the control block.

name The member or alias name

System action: Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: Examine the named control block and ensure that for every generated primary entry, there is one and only one accompanying alternate primary entry.

Preserve the job output from the job that encountered this error. Contact the IBM Support Center.

Source: DFSMSdfp and File and Attribute Management Services.

IGW01591W {GENERATED PRIMARY|ALTERNATE PRIMARY|ALIAS} *name* NOT
{COPIED|LOADED|UNLOADED} BECAUSE THE ALTERNATE PRIMARY *name* ALREADY
EXISTS IN THE OUTPUT DATA SET CAUSING A NO-REPLACE CONFLICT

Explanation: The name indicated was not copied because the alternate primary name already exists in the target data set causing a no-replace conflict. Generated primaries cannot be copied without the associated alternate primary. Since alias names for a load module or program object cannot be copied without copying the primary, any aliases associated with the primary were not copied. Options were not specified which permit replacement.

In the message text:

Generated primary

An 8-character name generated by the binder when the binder converts a long primary name into a specially-marked alias, known as an "alternate primary", and generate an 8-byte member name. This affects the replacement rules in that a member will never be copied without its alternate primary, and vice versa.

Alternate primary

See above definition of generated primary.

System action: Processing of the current request continues.

User response: Verify that the results are as intended.

Source: DFSMSdfp and File and Attribute Management Services.

IGW01592W {ALIAS *name* NOT {COPIED|LOADED|UNLOADED} BECAUSE THE PRIMARY *name* ALREADY
EXISTS IN THE OUTPUT DATA SET CAUSING A NO-REPLACE CONFLICT

Explanation: The name indicated was not copied because the primary name already exists in the target data set causing a no-replace conflict. Since alias names for a load module or program object cannot be copied without copying the primary, any aliases associated with the primary were not copied. Options were not specified which permit replacement.

In the message text:

Generated primary

An 8-character name generated by the binder when the binder converts a long primary name into a specially-marked alias, known as an "alternate primary", and generate an 8-byte member name. This affects the replacement rules in that a member will never be copied without its alternate primary, and vice versa.

Alternate primary

See above definition of generated primary.

System action: Processing of the current request continues.

User response: Verify that the results are as intended.

Source: DFSMSDfp and File and Attribute Management Services.

IGW01593S INSUFFICIENT STORAGE CALCULATED FOR IGWFRIT -ESTIMATED FROM DIRECTORY BLOCK COUNT- FOR *type* DATASET

Explanation: An internal logic error occurred while processing an alter request for the specified attribute.

In the message text:

type INPUT or OUTPUT.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Notify the System Programmer.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error. Contact the IBM Support Center.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01594E SPECIFIED MEMBER *name* WAS NOT FOUND

Explanation: The member was specifically selected for processing in a COPY operation but it was not found in the input data set.

This message is issued only in DFP Release 3.2.0. It is replaced by IGW01254E in DFP Release 3.3.0.

In the message text:

name The specified member name.

System action: Processing of this member is skipped. Processing continues with the next member.

Operator response: Remove the member name from the list of members to be processed for the COPY operation.

If the same output data set is used for a re-run, it will already include successfully copied members and aliases from this run.

System programmer response: Obtain a listing of the input data set directory.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01595E (*form 1*) MEMBER *name* CANNOT BE COPIED BECAUSE IT HAS NOTELISTS OR OTHER USER-TTRS or(*form 2*) MEMBER *name* CANNOT BE COPIED BECAUSE ALIAS *aname* HAS NOTELISTS OR OTHER USER-TTRS

Explanation: A PDS is being copied to a PDSE and some of the PDS members or aliases have user TTRS (which are incorrect for a PDSE) indicated by the directory entry. Members that contain User TTRs in the directory entry are not supported for PDSEs.

In the message text:

form The specified form that applies to the message.

name The specified member name.

aname The specified alias name.

System action: Processing of this member is skipped. Processing continues with the next member.

Operator response: If it is acceptable to not copy the identified members or aliases, then no action is required. Otherwise, run another copy job specifying only those members or aliases which do not have user TTRs.

IGW01596E • IGW01598S

If the same output data set is used again, it will already include successfully copied members and aliases.

System programmer response: The most likely cause is accidentally copying a load module library to a PDSE. All load modules contain User TTRs in the directory entry.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01596E *(form 1)* ALIAS *name* OF *aname* CANNOT BE COPIED BECAUSE IT HAS NOTELISTS OR OTHER USER-TTRS *or(form 2)* ALIAS *name* OF *aname* CANNOT BE COPIED BECAUSE THE PRIMARY MEMBER HAS NOTELISTS OR OTHER USER TTRS *or(form 3)* ALIAS *name* OF *aname* CANNOT BE COPIED BECAUSE ANOTHER ALIAS HAS NOTELISTS OR OTHER USER TTRS

Explanation: A PDS is being copied to a PDSE and some of the PDS members or aliases have user TTRS (which are incorrect for a PDSE) indicated by the directory entry. User TTRs are not supported for PDSEs.

In the message text:

form The specified form that applies to the message.

name The specified alias name.

aname The total number of alias names.

System action: Processing of this member is skipped. Processing continues with the next member.

Operator response: If it is acceptable to not copy the identified members or aliases, then no action is required. Otherwise, run another copy job specifying only those members or aliases which do not have user TTRs.

If the same output data set is used again, it will already include successfully copied members and aliases.

System programmer response: The most likely cause is attempting to copy a load module library to a PDSE.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

IGW01597S FRIT HAS ALREADY BEEN BUILT

Explanation: An internal logic error has occurred.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSdftp and File and Attribute Management Services.

IGW01598S NO FRIT ADDRESS TO SORT

Explanation: An internal logic error has occurred.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01599S NO FRIT ADDRESS TO SEARCH

Explanation: An internal logic error has occurred.

System action: An SVC dump will be scheduled and the error will be logged in the logrec data set. Processing of the current invocation is ended.

Operator response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

System programmer response: Save the output from the failing job, the SVC dump and any logrec data set records for the error.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 15

Descriptor code:

IGW01600T CPYOPTNS VALUE *option* IS NOT A VALID VALUE

Explanation: The value specified by the caller in the CPYOPTNS field is incorrect.

In the message text:

option The specified option.

System action: Processing of the current invocation is ended.

System programmer response: Ensure the value set in CPYOPTNS prior to calling IGWAFMS0 is one of the correct values defined in the COPY parameter list.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01601T MEMOPTNS VALUE *option* IS INVALID FOR MEMBER *name* IN ENTRY NUMBER *num*

Explanation: The value specified by the caller in the MEMOPTNS field of the indicated member name is incorrect.

In the message text:

option The specified option.

name The specified member name.

num The entry number.

System action: Processing of the current invocation is ended.

System programmer response: Ensure the value set in MEMOPTNS prior to calling IGWAFMS0 is one of the correct values defined in the MEM parameter list.

Source: DFSMSdfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01610T I/O ERROR CLEARING DIRECTORY: *ecb, csw, iobsens, iobseek*

Explanation: The caller requested that the output directory of a PDS be reset prior to copying any members (CPYOPFDL was set). During the process of rewriting the directory, an I/O error was detected.

In the message text:

IGW01611T • IGW01613T

ecb The failing event control block (ECB).
csw The failing common status word (CSW).
iobsens Represents the two input/output block (IOB) sense bytes.
iobseek The IOB seek field.

System action: The output data set has probably been destroyed and is no longer usable. Processing of the current invocation is ended.

Operator response: Correct the error indicated by the ECB and IOB sense information.

System programmer response: Obtain a dump of the output data set and save the output from the failing job.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01611T UNABLE TO OPEN FILE *ddname* TO CLEAR THE DIRECTORY

Explanation: The caller requested that the output directory be reset prior to copying any members (CPYOPFDL was set). The attempt to open the data set to rewrite the directory failed. The failing *ddname* associated with the data set is in the message.

In the message text:

ddname The specified *ddname*.

System action: The output data set has not been modified. Processing of the current invocation is ended.

Operator response: Examine the job log for any other messages relating to the OPEN failure.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01612T STOW INITIALIZE FAILURE DURING RESET OF DIRECTORY. RC = *return-code*

Explanation: The caller requested that the output directory be reset prior to copying any members (CPYOPFDL was set). A STOW INITIALIZE was issued against the output data set (which was a PDSE). The STOW completed with a nonzero return code.

In the message text:

return-code
The STOW return code.

System action: The output data set may or may not be correct. Processing of the current invocation is ended.

Operator response: Examine the job log for any other messages relating to the STOW failure. Refer to *z/OS DFSMS Macro Instructions for Data Sets* for a description of STOW return codes.

Source: DFSMSdftp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01613T FIRST EXTENT TOO SMALL TO CONTAIN PDS DIRECTORY. *trksreq* REQUIRED, *trksalloc* AVAILABLE

Explanation: The caller requested that the output directory be reset prior to copying any members (CPYOPFDL was set). The number of directory blocks to be written on the output data set (which is a PDS) would not fit in the first extent allocated to the data set. A PDS directory must be located in the first extent of the data set.

In the message text:

trksreq The specified number of tracks required.

trksalloc The specified number of tracks available.

System action: The output data set has not been modified. Processing of the current invocation is ended.

User response: Reallocate the data set with a larger primary extent. The message indicates how many tracks must be in the primary to satisfy this request.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01651T IN MODULE *modname* END OF FILE WAS REACHED IN THE DIRECTORY FOR *type* FILE BEFORE THE LAST DIRECTORY ENTRY

Explanation: The directory did not contain the last directory entry.

In the message text:

modname

The name of the module issuing the message.

type INPUT or OUTPUT.

System action: Processing of the current invocation is ended.

User response: Verify that the data set is a valid partitioned data set.

Source: DFSMSDfp and File and Attribute Management Services.

Routing code: 11

Descriptor code: 6

IGW01680I *product* DEREGISTRATION FAILED

Explanation: The DFSMS OS390 De-registration callable service has determined that an attempt to de-register the specified DFSMS/MVS product was not successful because the product was not currently registered. The product probably tried to de-register twice.

In the message text:

product The DFSMS/MVS product.

System action: None.

System programmer response: Notify IBM support.

Source: DFSMSDfp and File and Attribute Management Services.

IGW01681E DFSMSHSM REQUIRES DFSMSDSS AS A PREREQUISITE, REGISTRATION TERMINATED

Explanation: The DFSMS OS390 Registration callable service has determined that an attempt to start DFSMSHsm was unsuccessful because DFSMSDss was not registered. DFSMSHsm registration has terminated because DFSMSDss is a required prerequisite product for DFSMSHsm.

System action: DFSMSHsm initialization has terminated.

System programmer response: Ensure that DFSMSDss is defined in the IFAPRDxx parmlib member before starting DFSMSHsm.

Source: DFSMSDfp and File and Attribute Management Services.

IGW10020I *jobname stepname* TRANSACTIONAL VSAM OPEN OF DATA SET *dsn* FAILED. THE LOG PARAMETER IS ALL, BUT LOGSTREAMID {IS NOT SPECIFIED | SPECIFIES THE NAME OF A TRANSACTIONAL VSAM SYSTEM LOG}

Explanation: While opening the data set *dsn*, DFSMStvs detected that LOG(ALL) was specified, but the LOGSTREAMID attribute either was not specified or specifies the name of a DFSMStvs system log.

In the message text:

jobname

The name of the job that received the error.

stepname

The name of the step within the job.

dsn

The name of the data set that failed to open.

System action: DFSMStvs continues processing with the data set *dsn* closed.

Operator response: None

System programmer response: If forward recovery is required, use the access method services (IDCAMS) ALTER command to add or change the LOGSTREAMID value for the sphere. Ensure that the specified log stream name does not conflict with a DFSMStvs system log. If forward recovery is not required, set the LOG parameter to UNDO.

Problem determination: None

Source: DFSMSdfp

Module: IGW8OODS

Routing code: 11

Descriptor code: -

IGW10022I *jobname stepname* TVS OPEN OF DATA SET *dsn* FAILED. {RECOVERY ATTRIBUTES IN THE CATALOG HAVE CHANGED AND THE SPHERE IS STILL OPEN | THE REQUEST TO WRITE A TIE UP RECORD TO THE FORWARD RECOVERY LOGSTREAM FAILED RETURN CODE *rc* REASON CODE *rsnc* | THE REQUEST TO WRITE A TIE UP RECORD TO THE TRANSACTIONAL VSAM SYSTEM LOG STREAM FAILED RETURN CODE *rc* REASON CODE *rsnc* RLS ACCESS IS DISABLED}

Explanation: While opening the data set *dsn*, DFSMStvs detected that the recovery attributes in the catalog have changed. The sphere is currently open using the previous recovery attributes. Further opens will fail until all access control blocks (ACBs) for the sphere are closed or the recovery attributes are returned to their previous settings. Before changing recovery attributes in the catalog, you should first quiesce the sphere on all DFSMStvs systems that use it.

In the message text:

jobname

The name of the job that received the error.

stepname

The name of the step within the job.

dsn

The name of the data set that failed to open.

rc A reason code.

rsnc

A return code.

System action: DFSMStvs continues processing with the data set *dsn* closed.

Operator response: None

System programmer response: Either restore the recovery attributes of the data set to their former values, or quiesce the sphere and start again with the new settings.

Problem determination: None

Source: DFSMSdfp

Module: IGW8OODS

Routing code: 11

Descriptor code: -

IGW10023I *jobname stepname* OPEN FAILED FOR DATA SET *dsn*. THE ICF CATALOG INDICATES THAT DATA SET NEEDS TO BE [RESTORED AND] FORWARD RECOVERED

Explanation: While attempting to open the data set *dsn*, DFSMSStvs detected that the data set needs to be forward recovered, and possibly restored, before DFSMSStvs can open it.

In the message text:

jobname

The name of the job that received the error.

stepname

The name of the step within the job.

dsn

The name of the data set that failed to open.

System action: DFSMSStvs continues processing with the data set *dsn* closed.

Operator response: None

System programmer response: Take the following steps:

1. Prevent access to the data set by quiescing it, using the VARY SMS command.
2. If the message says that the data set needs to be restored, restore it from a backup copy.
3. Forward recover the data set.
4. Reallow access to the data set by unquiescing it.
5. Retry the open.

Problem determination: None

Source: DFSMSdfp

Module: IGW8OODS

Routing code: 11

Descriptor code: -

IGW10024I *jobname stepname* TRANSACTIONAL VSAM FAILED TO WRITE A RECORD TO THE {FORWARD RECOVERY LOG | LOG OF LOGS} STREAM *logstream* {DUE TO AN I/O ERROR. | THE LOG STATUS IS QUIESCED. | THE LOG STATUS IS DISABLED.} DATA SET *dsn*

Explanation: Either the log is experiencing I/O errors, or it has been quiesced or disabled.

In the message text:

jobname

The name of the job being processed.

stepname

The name of the job step being processed.

logstream

The name of the forward recovery log stream being processed.

dsn

The name of the data set being processed.

System action: DFSMSStvs continues processing the data set *dsn* without the log to allow existing transactions to continue to syncpoint.

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Operator response: None

System programmer response: Do one of the following tasks:

- If the log is a forward recovery log, forward recovery might not be possible. Back up all data sets that have used the forward recovery log since the last backup. If the cause was a log I/O error, refer to previous DFSMStvs logger or system logger messages to determine why the request failed and follow your installation's log recovery procedures.
- If the log is the log of logs and that log is required to perform forward recovery, forward recovery might not be possible. Back up all data sets that have used the forward recovery log since the last backup. If the cause was a log I/O error, refer to previous DFSMStvs logger or system logger messages to determine why the request failed, and follow your installation's log recovery procedures.
- If the log is a DFSMStvs system log, units of recovery that needed to be backed out might have been lost. The contents of data sets that might have been used by these units of recovery should be manually verified or have forward recovery performed before being used again.

Problem determination: None

Source: DFSMSdfp

Module: IGW8OLOG

Routing code: 11

Descriptor code: -

IGW10043I *date time* LOG RECORD FOR JOB *jobname* STEP *stepname* UNIT OF RECOVERY *urid* DATA SET *dsn*
TOO LONG FOR BLOCK. RECORD SIZE *reclen* BYTES. BLOCK SIZE *blksize* BYTES. LOG
STREAM *logstream*

Explanation: DFSMStvs detected an attempt to write a log record to a log stream for which the log record is too long to fit in the maximum block size allowed. The message indicates the size of the log record and the maximum size of a block for that log stream. The size of the log record includes a DFSMStvs record header (up to 200 bytes for system log, or 56 bytes otherwise). There must also be enough room in the block for a DFSMStvs block header (52 bytes for system log, 40 bytes otherwise).

In the message text:

date

The current date.

time

The current time.

jobname

The name of the job.

stepname

The name of the step within the job.

urid

The unit of recovery identifier that resource recovery services (RRS) assigned.

dsn

The name of the data set.

reclen

The length of the log record.

blksize

The size of the log block.

logstream

The name of the log stream.

System action: The DFSMStvs request fails.

Operator response: None

System programmer response: Establish whether a log record of the indicated size is expected, or if the program

invoking DFSMStvs services is in error. If the log record is correct, you should increase the block size for the system logger log stream by defining a larger block size for the structure that the log stream will use.

Problem determination: None

Source: DFSMSdfp

Module: IGW9LMEC

Routing code: 11

Descriptor code: -

IGW10070I *jobname stepname urid* A REQUEST TIMED OUT WAITING FOR A LOCK. THERE ARE *nn* UNITS OF RECOVERY HOLDING THIS LOCK. [THE OWNER OF THIS LOCK IS UNKNOWN]

Explanation: This message and the following IGW10071I message are issued to assist in problem determination when units of recovery fail because they are unable to obtain locks.

Unit of recovery *urid* attempted to update a data set that is open in DFSMStvs mode, but the request timed out waiting to obtain a lock on a record. VSAM record-level sharing (RLS) detected that the request waited for more than the timeout interval. However, RLS was unable to detect any deadlock. There might be a deadlock between VSAM RLS requests and requests to other resource managers, such as DB2® or DBCTL. When the timeout occurred, *nn* other units of recovery were holding the required lock.

In the message text:

jobname

The name of the job that received the error.

stepname

The name of the step within the job.

urid

The unit of recovery identifier that resource recovery services (RRS) assigned.

nn The number of units of recovery holding the requested lock.

System action: The application request that encountered the error fails.

DFSMStvs displays message IGW10070I to identify the failing unit of recovery and the number of owners of the lock. DFSMStvs also issues message IGW10071I once for each lock owner.

Operator response: None

System programmer response: Examine the subsequent IGW10071I messages to determine why the units of recovery that are holding the required lock are not releasing it. Possible reasons follow:

- The units of recovery might be holding locks and waiting for some external event to occur.
- The units of recovery might be trying to access resources from both DFSMStvs and another resource manager, creating an interresource manager deadlock.

Problem determination: None

Source: DFSMSdfp

Module: IGW8FLAI, IGW8FMMSG

Routing code: 11

Descriptor code: -

IGW10071I {UNIT OF RECOVERY *urid* | SUBSYSTEM NAME *subsys* TRANSACTION ID *tranid*} RUNNING IN JOB *jobname* HOLDS {ADD TO END LOCK | EXCLUSIVE LOCK ON KEY | SHARED LOCK ON KEY} IN BASE CLUSTER NAME *cluster* [PATH NAME *path*] CAUSING {TRUE | FALSE} CONTENTION. [KEY VALUE = *key*]

Explanation: This message and the preceding message IGW10070I or IGW10077I are issued to assist in problem determination when units of recovery fail because they are unable to obtain a requested lock. Normally, this message appears after a timeout occurs. However, it might also appear when a deadlock occurs as a result of a failure to

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promote a lock. When this message is associated with a timeout, it is preceded by message IGW10070I. When this message is associated with a deadlock, it is preceded with message IGW10077I.

There is one occurrence of message IGW10071I for each unit of recovery currently owning the required lock. The message identifies whether the lock is held as an exclusive lock or a shared lock:

- A lock is exclusive if it can only have one holder. For example, exclusive locks are used to protect update operations.
- A lock is shared if it can have many holders. Shared locks are used to protect repeatable and consistent read operations.

A lock causes TRUE contention if the request was for a lock against the locked key. A lock causes FALSE contention if the request was for a lock against a different key, but the lock requests clashed because of the key-hashing algorithm that the VSAM record-level sharing (RLS) uses when the key length exceeds 16 characters.

In the message text:

urid

The unit of recovery identifier that resource recovery services (RRS) assigned.

subsys

The name of the subsystem being used to process the data.

tranid

The transaction identifier.

jobname

The name of the job that received the error.

cluster

The name of the VSAM cluster.

path

The name of the path by which the cluster is being accessed.

key

The key, in hexadecimal format, of the record for which the lock was requested.

System action: The application request that encountered the error fails.

Before message IGW10071I, DFSMStvs issues message IGW10070I or message IGW10077I to identify the failing unit of recovery and the number of owners of the lock. DFSMStvs issues message IGW10071I once for each lock owner.

Operator response: None

System programmer response: See the explanation of message IGW10070I or IGW10077I for a description of the system programmer responses that are associated with this message.

Problem determination: None

Source: DFSMSdfp

Module: IGW8FLAI

Routing code: 11

Descriptor code: -

IGW10072I *jobname stepname urid* VSAM RLS DETECTED A DEADLOCK. THERE ARE *nn* UNITS OF RECOVERY IN THE DEADLOCK CHAIN

Explanation: This message and the following IGW10073I messages are issued to assist in problem determination when units of recovery fail due to a deadlock being detected.

An attempt made by the unit of recovery *urid* to update a data set that is open in DFSMStvs mode failed because VSAM record-level sharing (RLS) detected that this request would have caused a deadlock with other units of recovery.

In the message text:

jobname

The name of the job that received the error.

stepname

The name of the step within the job

urid

The unit of recovery identifier that resource recovery services (RRS) assigned.

nn The number of units of recovery involved in the deadlock chain.

System action: The application request that encountered the error fails.

DFSMSStvs issues message IGW10072I to identify the failing unit of recovery and the number of units of recovery in the deadlock chain. DFSMSStvs also issues message IGW10073I once for each unit of recovery involved in the deadlock chain. IGW10073I identifies the resource that the unit of recovery is holding and the resource for which the unit of recovery is waiting.

Operator response: None

System programmer response: Examine the units of recovery in the deadlock chain to determine why deadlock arose. If necessary, correct the programming logic to avoid situations that create deadlocks.

Problem determination: None

Source: DFSMSDfp

Module: IGW8FLAI

Routing code: 11

Descriptor code: -

IGW10073I {UNIT OF RECOVERY *urid* | SUBSYSTEM NAME *subsys* TRANSACTION ID *tranid*} RUNNING IN JOB *jobname* HOLDS {ADD TO END LOCK | EXCLUSIVE LOCK ON KEY | SHARED LOCK ON KEY} ON BASE CLUSTER NAME *cluster* [ALTERNATE INDEX NAME *altindex*] AND IS WAITING FOR {ADD TO END LOCK | EXCLUSIVE LOCK ON KEY | SHARED LOCK ON KEY} ON BASE CLUSTER NAME *cluster2* [ALTERNATE INDEX NAME *altindex2*] [HOLDING KEY VALUE = *key1* WAITING KEY VALUE = *key2*]

Explanation: This message and message IGW10072I are issued to assist in problem determination when units of recovery fail due to deadlocks. The preceding message IGW10072I reports that a deadlock has been detected and includes how many units of recovery exist in the deadlock chain. Message IGW10073I is issued once for each unit of recovery in the deadlock chain and includes the resource that that unit of recovery holds and which resource it is waiting for.

In the message text:

urid

The unit of recovery identifier that resource recovery services (RRS) assigned.

subsys

The name of the subsystem being used to process the data.

tranid

The transaction identifier.

jobname

The name of the job that received the error.

cluster

The name of the VSAM cluster containing the record for which the lock is held.

altindex

The name of the alternate index by which the cluster is being accessed.

cluster2

The name of the VSAM cluster containing the locked record.

altindex2

The name of the alternate index by which the VSAM cluster containing the locked record is being accessed.

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key1

The key, in hexadecimal format, of the record for which the lock is held.

key2

The key, in hexadecimal format, of the record for which the unit of recovery is trying to obtain a lock.

System action: The application request that encountered the error fails.

Operator response: None

System programmer response: See the explanation of message IGW10072I.

Problem determination: None

Source: DFSMSdfp

Module: IGW8FLAI

Routing code: 11

Descriptor code: -

IGW10074I JOB *jobname* UNIT OF RECOVERY *urid* HAS REQUESTED *nnn* LOCKS. SYSTEM MAXIMUM IS *mmm*

Explanation: This message is based on the MAXLOCKS parameter in the IGDSMSxx member of SYS1.PARMLIB. This message is issued to alert the installation that an application might be requesting an excessive number of locks, which might cause it to interfere with other applications.

In the message text:

jobname

The name of the job.

urid

The identifier of the unit of recovery that resource recovery services (RRS) assigned.

nnn

The number of locks that the unit of recovery requested.

mmm

The maximum value specified in the MAXLOCKS parameter in the IGDSMSxx member of SYS1.PARMLIB.

System action: The system continues processing.

Operator response: None

System programmer response: Determine if the application should be allowed to request the number of locks it has requested. If so, allow it to continue processing. Otherwise, cancel the job and wait for backout to complete.

Problem determination: None

Source: DFSMSdfp

Module: IGW8FTSK

Routing code: 11

Descriptor code: -

IGW10075I *jobname stepname* UNIT OF RECOVERY *urid1* ENCOUNTERED AN RLS RETAINED LOCK HELD ON BASE CLUSTER NAME *cluster* [PATH NAME *path*] BY {TRANSACTIONAL VSAM INSTANCE IDENTIFIER *tosname* UNIT OF RECOVERY *urid2* | SUBSYSTEM NAME *subsys* TRANSACTION ID *tranid*}

Explanation: An attempt was made to update a record that is currently locked by a retained lock.

In the message text:

jobname

The name of the job that received the error.

stepname

The name of the step within the job.

urid1

A unit of recovery identifier that resource recovery services (RRS) assigned.

cluster

The name of the VSAM cluster that contains the locked record.

path

The name of the path by which the VSAM cluster was accessed.

tvsname

The identifier that uniquely identifies the instance of DFSMStvs.

urid2

A unit of recovery identifier that RRS assigned.

subsys

The name of the subsystem being used to process the data.

tranid

The transaction identifier.

System action: The application request fails.

Operator response: None

System programmer response: If repeated retained lock failures are causing a problem, note the identifier of the unit of recovery and attempt to find why this unit of recovery is holding a retained lock. A unit of recovery can hold a retained lock for any of these reasons:

- The unit of recovery was running when the instance of DFSMStvs on the system failed. When the instance of DFSMStvs is restarted, the lock is normally released.
- The unit of recovery became indoubt. Indoubt failures occur as a result of a failure in communication among instances of a distributed syncpoint resource manager (DSRM). DFSMStvs is not a DSRM. Determine what other resource managers are interested in the unit of recovery and attempt to reestablish communication.
- The unit of recovery failed backout. Attempt to determine why the unit of recovery failed backout while processing the data set *dsn*. There are several reasons why a unit of recovery can fail backout.
- The unit of recovery was running when the instance of RRS on the system failed. When RRS restarts, DFSMStvs goes through its restart processing, and the lock is normally released.
- The unit of recovery closed a data set while the unit of recovery was in-flight. If this was the last close of this data set on this system, VSAM record-level sharing (RLS) converts the locks from active to retained.

Problem determination: None

Source: DFSMSdfp

Module: IGW8FLAI

Routing code: 11

Descriptor code: -

IGW10077I *jobname stepname urid* A DEADLOCK OCCURRED AS A RESULT OF A LOCK PROMOTE FAILURE.
THERE ARE *nn* UNITS OF RECOVERY HOLDING THIS LOCK

Explanation: This message and the following IGW10071I message are issued to assist in problem determination when units of recovery fail due to a deadlock.

The unit of recovery *urid* attempted to update a data set that is open in DFSMStvs mode. The request failed because VSAM detected a deadlock while attempting to promote a shared lock to an exclusive lock. This type of deadlock seems like a timeout to VSAM, and, therefore, the information returned to DFSMStvs is like the information returned after a timeout. This message is followed by one or more IGW10071I messages instead of the IGW10073I messages that follow other types of deadlocks. When the deadlock occurred, *nnn* other units of recovery were holding the required lock.

In the message text:

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jobname

The name of the job that received the error.

stepname

The name of the step within the job.

urid

The unit of recovery identifier that resource recovery services (RRS) assigned.

nn The number of units of recovery that hold the lock.

System action: The application request that encountered the error fails.

DFSMSStvs displays message IGW10077I to identify the failing unit of recovery and the number of owners of the lock. DFSMSStvs also issues message IGW10071I once for each lock owner.

Operator response: None

System programmer response: The following IGW10077I messages identify the units of recovery that are holding the required lock and their associated jobs and steps. Examine these units of recovery to determine why they are not releasing the locks. Examine other resources that they acquire in order to determine if this could cause a deadlock with the failing unit of recovery.

Problem determination: None

Source: DFSMSDfp

Module: IGW8FLAI

Routing code: 11

Descriptor code: -

IGW10080I *jobname stepname* AN ATTEMPT TO SWITCH THE CONTEXT WAS DISALLOWED.
OUTSTANDING ASYNCHRONOUS REQUESTS WERE FOUND

Explanation: A context switch was requested for a context in which DFSMSStvs had expressed interest. In the context switch exit, DFSMSStvs discovered that there were outstanding asynchronous record management requests that had not completed.

In the message text:

jobname

The name of the job that received the error.

stepname

The name of the step within the job.

System action: Processing continues.

Operator response: None

System programmer response: Check the application to ensure that all asynchronous DFSMSStvs requests have been checked before calling a function that could switch the context away from the current task.

Problem determination: None

Source: DFSMSDfp

Module: IGW8RCSE

Routing code: 11

Descriptor code: -

IGW10102I *jobname stepname urid* ERROR HAS OCCURRED DURING BACKOUT FOR DATA SET *dsn*.
{RETURN CODE *rc* REASON CODE *rsnc* | FAILCODE *failcode*}
{VSAM OPERATION = *opname* KEY VALUE = *key*}

Explanation: Backout was unable to back out an uncommitted change that was made by the unit of recovery *urid* to

the VSAM data set *dsn*. For additional diagnostic information, see the descriptions of the return and reason codes or the failure code in *z/OS DFSMStvs Administration Guide*.

In the message text:

jobname

The name of the job that received the error, or if this error occurred during restart processing, the name of the DFSMStvs instance.

stepname

The name of the step within the job, or if this error occurred during restart processing, the name of the DFSMStvs instance.

urid

The unit of recovery identifier that resource recovery services (RRS) assigned.

dsn

The name of the data set.

rc The return code.

rsnc

The reason code.

failcode

The failure code.

opname

The name of a VSAM operation, such as GET UPD, GET NUP, PUT UPD, PUT NUP, ERASE, or ENDREQ.

key

A key value, on one to eight lines.

System action: The system continues normally. Backing out of the unit of recovery continues for any other data sets that the unit of recovery updated, but no further attempts are made to back out updates that were made to the data set *dsn*. The unit of recovery is then deferred (shunted) until the backout can be retried.

It is possible for other work to continue to access the data set, but the records in that data set that were changed by this unit of recovery are locked by retained locks. Any attempt to access these records results in a LOCKED response being returned to the application. To preserve data integrity, the records must remain locked until the backout has been successfully retried.

If the backout fails again when it is retried, DFSMSdfp does not reissue this message. The access method services (IDCAMS) PURGE or RETRY command or the automatic retry mechanism produces output that indicates the nature of the failure.

Operator response: Inform the system programmer, or see the system programmer response.

System programmer response: This message indicates a possible error in DFSMStvs or VSAM record-level sharing (RLS) code. The severity of its impact depends on whether the backout can be successfully retried. If the reason and return codes or failure code in the message text indicates that an unexpected error occurred, it might be due to corruption of storage or an error within DFSMStvs code. It might also indicate an error within VSAM. For information on VSAM diagnostics, see *z/OS DFSMSdfp Diagnosis*.

A lock error indicates that backout processing encountered a LOCKED response while attempting to acquire a lock on a record on which another unit of recovery holds a retained lock. If this error occurs, it might indicate an error in the SMSVSAM server. For assistance, contact the IBM Support Center.

A timeout error indicates that backout processing has timed out while attempting to acquire a lock. If this error occurs, it might indicate an error in the SMSVSAM server. For assistance, contact the IBM Support Center.

You might decide to leave the data set online for any of these errors, especially if you think that the backout failure could have been due to a temporary situation and that the backout might succeed if retried. You can retry the backout by using the SHCDS RETRY command. As a last resort, and at the cost of losing data integrity, you can bypass the deferred backout of uncommitted changes to this data set by using the SHCDS PURGE command.

Many return and reason code combinations are possible. For descriptions of the return and reason codes, see *z/OS DFSMStvs Administration Guide*. A few, specific error situations follow:

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1. The data set ran out of space. Reallocate the data set with more space, and then retry the backout by using the SHCDS RETRY command. Do not forward recover the data set.
2. An I/O error occurred. It is possible that the data set needs to be restored, especially if a large number of these messages have referred to the same data set or if I/O errors have been issued during request processing for the data set. If you decide to restore the data set, take the following steps:
 - a. Prevent access to the data set by quiescing it, using the VARY SMS command.
 - b. Restore a backup copy and forward recover the data set.
 - c. Reallow access to the data set by unquiescing it.
 - d. Retry deferred backouts by using the SHCDS RETRY command.
3. A DFSMSdss non-backup-while-open backup is in progress for the data set. The backout is shunted and will be retried either automatically or by use of the IDCAMS SHCDS command when the backup completes.
4. A failure of the VSAM RLS server was detected, or the server is currently unavailable. DFSMStvs restart processing automatically retries the backout when the server becomes available again.
5. The VSAM RLS cache structure to which the data set was bound either failed or lost connectivity, and VSAM has been unable either to rebuild the failed cache structure or to bind the data set to an alternative cache structure in the cache set. The backout is shunted and can be retried by using the IDCAMS SHCDS command when the cache structure becomes available again.
6. VSAM returned a response indicating that the RLS lock structure in the coupling facility is full. Allocate a larger lock structure, rebuild into it, and retry the backout by using the SHCDS RETRY command. See *z/OS MVS Setting Up a Sysplex* and *z/OS DFSMSdftp Storage Administration* for further information on how to allocate and build into larger lock structures.
7. There was no space to add another alternate key value to a non-unique alternate index. Rebuild the data set with a larger alternate index data control interval (CI) size (unless you are already at the maximum), and then retry the backout by using the SHCDS RETRY command. Do not forward recover the data set.
8. An error occurred in opening the data set for backout. Determine why the data set could not be opened. If possible, correct the problem, and then issue the SHCDS RETRY command to retry the backout.
9. An unexpected error occurred during backout. Message IGW10102I is issued and a memory dump is created; use these to determine the cause of the error. You can also retry the backout, using the SHCDS RETRY command, because the problem could have been due to a temporary condition that has since cleared.

Problem determination: None

Source: DFSMSdftp

Module: IGW8RIOM

Routing code: 11

Descriptor code: -

IGW10103I {JOB *jobname* STEP *stepname* UR *urid* FAILED. | THE APPLICATION INITIATED A BACKOUT FOR JOB *jobname* STEP *stepname* UR *urid*.} BACKOUT WAS SUCCESSFUL

Explanation: The unit of recovery *urid* was backed out either because a failure caused DFSMStvs to vote "no" during prepare processing or because the application implicitly or explicitly invoked backout.

In the message text:

jobname

The name of the job that received the error.

stepname

The name of the step within the job.

urid

The unit of recovery identifier that resource recovery services (RRS) assigned.

System action: The unit of recovery is purged.

Operator response: None

System programmer response: Resubmit the unit of recovery.

Problem determination: None

Source: DFSMSdfp
Module: IGW8RBOS
Routing code: 11
Descriptor code: -

IGW10104I RRS FAILURE OCCURRED WHILE PROCESSING JOB *jobname* STEP *stepname*. RRS FUNCTION *function* RETURN CODE *rc* REASON CODE *rsnc*

Explanation: An error occurred while DFSMStvs was invoking a function of its syncpoint manager, resource recovery services (RRS).

In the message text:

jobname

The name of the job that received the error.

stepname

The name of the step within the job.

function

The RRS function that DFSMStvs was invoking.

rc The RRS return code.

rsnc

The RRS reason code.

System action: If the error occurred while a unit of recovery was in process, DFSMStvs restart processing backs out the unit of recovery.

Operator response: None

System programmer response: Examine the RRS function, return code and reason code. See *z/OS MVS Programming: Resource Recovery*. If appropriate, resubmit the job.

Problem determination: None

Source: DFSMSdfp

Module: IGW8FEXP

Routing code: 11

Descriptor code: -

IGW10105I A {COMMIT | BACKOUT | ERASE | GET UPD | PUT UPD | PUT NUP} FAILURE OCCURRED FOR JOB *jobname* STEP *stepname* UNIT OF RECOVERY *urid*. THE UNIT OF RECOVERY WILL BE SHUNTED.

Explanation: Unit of recovery *urid* could not be backed out. This message generally follows another message that indicates the reason why the backout failed (such as message IGW10102I, IGW10111I, IGW10114I, or IGW10115I).

In the message text:

jobname

The name of the job that received the error.

stepname

The name of the step within the job.

urid

The unit of recovery identifier that resource recovery services (RRS) assigned.

System action: The unit of recovery is shunted.

Operator response: None

System programmer response: Resolve the error and use the access method services (IDCAMS) PURGE or RETRY command to complete processing for this unit of recovery.

IGW10110I • IGW10111I

Problem determination: None

Source: DFSMSdfp

Module: IGW8RIOM

Routing code: 11

Descriptor code: -

IGW10110I *jobname stepname urid* A VSAM ERROR HAS OCCURRED DURING {COMMIT | BACKOUT} WHILE PROCESSING THE RPL CHAIN FOR DATA SET *dsn*, RETURN CODE *rc*, REASON CODE *rsnc*.

Explanation: A VSAM error occurred during commit or backout. This error occurred while issuing ENDREQ or POINT requests during syncpoint processing. The return and reason codes are the VSAM Record Management return code and RPL feedback code. Use them to determine the source of the problem. The work is shunted until the problem can be corrected, and should then be retried using the IDCAMS SHCDS RETRY command.

In the message text:

jobname

The name of the job that received the error, or the name of the DFSMStvs instance if this occurred during restart processing.

stepname

The name of the step within the job, or the name of the DFSMStvs instance if this occurred during restart processing.

urid

The unit of recovery identifier that resource recovery services (RRS) assigned.

dsn

The name of the data set.

rc The return code from VSAM record that is returned as a result of an ENDREQ or POINT request.

rsnc

The reason code from VSAM record that is returned as a result of an ENDREQ or POINT request.

System action: The system continues processing, and the unit of recovery is backed out.

Operator response: None

System programmer response: For information on VSAM diagnostics, see *z/OS DFSMSdfp Diagnosis*. For descriptions of the return and reason codes, see *z/OS DFSMStvs Administration Guide*.

Problem determination: None

Source: DFSMSdfp

Module: IGW8RCHN

Routing code: 11

Descriptor code: -

IGW10111I *jobname stepname urid* FAILURE OCCURRED DURING {COMMIT | BACKOUT | RESTART} PROCESSING WHILE TRYING TO {WRITE A {COMMIT | SHUNT} RECORD TO THE UNDO LOG. | MOVE A LOG CHAIN TO THE SHUNT LOG.} LOGGER RETURN CODE *rc* LOGGER REASON CODE *rsnc*. THIS UR WILL BE SHUNTED

Explanation: An error occurred during commit, backout, or restart in an attempt to write a commit record or a shunt to the undo log or in an attempt to move a log chain from the undo log to the shunt log. The return and reason codes identify the exact nature of the problem.

In the message text:

jobname

The name of the job that received the error, or the name of the DFSMStvs instance if this occurred during restart processing.

stepname

The name of the step within the job, or the name of the DFSMStvs instance if this occurred during restart processing.

urid

The unit of recovery identifier that resource recovery services (RRS) assigned.

rc The return code from DFSMStvs logging services.

rsnc

The reason code from DFSMStvs logging services.

System action: The unit of recovery is shunted. Processing continues.

Operator response: None

System programmer response: Correct the problem with the undo log, and then retry or purge the unit of recovery that was shunted.

Problem determination: None

Source: DFSMSdfp

Module: IGW8RBID, IGW8RCID, IGW8RCMS, IGW8RIOM, IGW8RRTS

Routing code: 11

Descriptor code: -

IGW10112I *jobname stepname urid* FAILURE OCCURRED DURING {COMMIT | BACKOUT} PROCESSING WHILE TRYING TO DESTROY A CHAIN ON THE UNDO LOG. LOGGER RETURN CODE *rc* LOGGER REASON CODE *rsnc*.

Explanation: An error occurred during commit or backout in an attempt to destroy the undo log chain that represents the unit of recovery (*urid*).

In the message text:

jobname

The name of the job that received the error, or the name of the DFSMStvs instance if this occurred during restart processing.

stepname

The name of the step within the job, or the name of the DFSMStvs instance if this occurred during restart processing.

urid

The unit of recovery identifier that resource recovery services (RRS) assigned.

rc The return code from DFSMStvs logging services.

rsnc

The reason code from DFSMStvs logging services.

System action: The unit of recovery was successfully committed or backed out, and locks were released.

Operator response: None

System programmer response: Investigate the problem that prevented the undo log chain from being destroyed to prevent a buildup of records on the undo log. In the meantime, normal processing can continue.

Problem determination: None

Source: DFSMSdfp

Module: IGW8RBID, IGW8RBOS, IGW8RCID, IGW8RCMS, IGW8RRTS

Routing code: 11

IGW10113I • IGW10114I

Descriptor code: -

IGW10113I *jobname stepname urid* FAILURE OCCURRED DURING {COMMIT | BACKOUT} PROCESSING WHILE TRYING TO FORCE {THE UNDO LOG | FORWARD RECOVERY LOG *logstream*}.
LOGGER RETURN CODE *rc* LOGGER REASON CODE *rsnc*. [THIS UR WILL BE SHUNTED]

Explanation: An error occurred during commit or backout in an attempt to force the undo log. The return and reason codes identify the exact nature of the problem.

In the message text:

jobname

The name of the job that received the error, or the name of the DFSMStvs instance if this occurred during restart processing.

stepname

The name of the step within the job, or the name of the DFSMStvs instance if this occurred during restart processing.

urid

The unit of recovery identifier that resource recovery services (RRS) assigned.

rc The return code from DFSMStvs logging services.

rsnc

The reason code from DFSMStvs logging services.

System action: The unit of recovery is shunted. Processing continues.

Operator response: None

System programmer response: Correct the problem with the undo log, and then retry or purge the unit of recovery that was shunted.

Problem determination: None

Source: DFSMSdfp

Module: IGW8RBOS, IGW8RIOM, IGW8RPR1, IGW8RRTS, IGW8SRBC, IGW8SRUR

Routing code: 11

Descriptor code: -

IGW10114I *jobname stepname urid* FAILURE OCCURRED DURING BACKOUT PROCESSING WHILE TRYING TO START A BROWSE OF THE UNDO LOG. LOGGER RETURN CODE *rc* LOGGER REASON CODE *rsnc*. THIS UR WILL BE SHUNTED

Explanation: An error occurred during backout in an attempt to start a browse of the undo log. The return and reason codes identify the exact nature of the problem.

In the message text:

jobname

The name of the job that received the error, or the name of the DFSMStvs instance if this occurred during restart processing.

stepname

The name of the step within the job, or the name of the DFSMStvs instance if this occurred during restart processing.

urid

The unit of recovery identifier that resource recovery services (RRS) assigned.

rc The return code from DFSMStvs logging services.

rsnc

The reason code from DFSMStvs logging services.

System action: The unit of recovery is shunted. Processing continues.

Operator response: None

System programmer response: Correct the problem with the undo log, and then retry or purge the unit of recovery that was shunted.

Problem determination: None

Source: DFSMSdfp

Module: IGW8RBOS, IGW8RPRI, IGW8RRTS

Routing code: 11

Descriptor code: -

IGW10115I *jobname stepname urid* FAILURE OCCURRED DURING BACKOUT PROCESSING WHILE TRYING TO READ FROM THE UNDO LOG. LOGGER RETURN CODE *rc* LOGGER REASON CODE *rsnc*. THIS UR WILL BE SHUNTED

Explanation: An error occurred during backout in an attempt to read a record from the undo log. The return and reason codes identify the exact nature of the problem.

In the message text:

jobname

The name of the job that received the error, or the name of the DFSMStvs instance if this occurred during restart processing.

stepname

The name of the step within the job, or the name of the DFSMStvs instance if this occurred during restart processing.

urid

The unit of recovery identifier that resource recovery services (RRS) assigned.

rc The return code from DFSMStvs logging services.

rsnc

The reason code from DFSMStvs logging services.

System action: The unit of recovery is shunted. Processing continues.

Operator response: None

System programmer response: Correct the problem with the undo log, and then retry or purge the unit of recovery that was shunted.

Problem determination: None

Source: DFSMSdfp

Module: IGW8RIOM

Routing code: 11

Descriptor code: -

IGW10117I DYNAMIC {ALLOCATION | DEALLOCATION} OF DATA SET *dsn* FAILED. RETURN CODE *rc* REASON CODE *rsnc*

Explanation: While dynamically allocating or deallocating the data set *dsn*, DFSMStvs issued a supervisor call instruction (SVC) 99 process. SVC 99 processing failed with return code *rc* and reason code *rsnc*.

In the message text:

dsn

The name of the data set being dynamically allocated or deallocated.

rc The SVC 99 return code.

rsnc

The SVC 99 reason code.

IGW10118I • IGW10119I

System action: DFSMStvs continues processing. If the error occurred during allocation, DFSMStvs is unable to complete restart recovery for the data set. As a result, all units of recovery against the data set that restart processing encounters are shunted. If the error occurred during deallocation, DFSMStvs continues with the data set closed but still allocated.

Operator response: None

System programmer response: For the meaning of the SVC 99 return codes, see *z/OS MVS Programming: Authorized Assembler Services Guide*.

Problem determination: None

Source: DFSMSdfp

Module: IGW8RCLS, IGW8ROP2

Routing code: 2, 10

Descriptor code: -

IGW10118I {OPEN | CLOSE} OF DATA SET *dsn* FAILED. RETURN CODE *rc* REASON CODE *rsnc*

Explanation: While opening or closing the data set *dsn*, DFSMStvs issued an OPEN or CLOSE. The OPEN or CLOSE failed with return code *rc* and reason code *rsnc*.

In the message text:

dsn

The name of the data set being opened or closed.

rc The OPEN or CLOSE return code.

rsnc

The OPEN or CLOSE reason code.

System action: DFSMStvs continues processing. If the error occurred during OPEN, DFSMStvs is unable to complete restart recovery for the data set. As a result, all units of recovery against the data set that restart processing encounters are shunted. If the error occurred during CLOSE, DFSMStvs continues with the data set still open and allocated.

Operator response: None

System programmer response: For the meaning of the OPEN and CLOSE return codes, see *z/OS DFSMSStvs Administration Guide*.

Problem determination: None

Source: DFSMSdfp

Module: IGW8RCLS, IGW8ROP2

Routing code: 2, 10

Descriptor code: -

IGW10119I JOBNAME *jobname* STEPNAME *stepname* UNIT OF RECOVERY *urid* WAS SUCCESSFULLY RETRIED

Explanation: A unit of recovery that had been shunted was successfully retried. It was either committed or backed out.

In the message text:

jobname

The name of the job.

stepname

The name of the step.

urid

The unit of recovery identifier.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMSdfp

Module: IGW8QSHN

Routing code: 2, 10

Descriptor code: -

IGWRH messages

IGWRH0101I VSAMRLS_DIAG_CONTENTION ran successfully and found no exceptions.

Explanation: It determined that there is no VSAM RLS contention in this system, which implies that there is no hang or dead-lock in relation to VSAM RLS contention.

System action: The system continues processing.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: DFSMS VSAM RLS

Module: IGWRDRDS

Routing code: N/A

Descriptor code: N/A

Automation: N/A

Reference Documentation: N/A

IGWRH0102E Check VSAMRLS_DIAG_CONTENTION detected contention by registered resources.

Explanation: IGWRH0103I has been placed in the message buffer to provide details on VSAMRLS latch contention. If a hang or deadlock is indicated, take appropriate steps to resolve the problem.

System action: The system continues processing.

Operator response: N/A

System programmer response: See Problem Determination to determine which resources should be released to resolve the deadlock.

Problem determination: If the resource holder is a cross memory thread, you can determine if that thread or ASID should be terminated. If it is a SMSVSAM (VSAM RLS) thread, you can decide to restart the server.

If the holder of a resource that is hanging other waiters is a cross memory task from a client address space (such as a CICS transaction or batch job), you can then cancel that task or job. However, if the holder is a very important job, and the waiters are not as important, you might decide to wait for the busy shift to finish and cancel the job during the off-shift.

If the holder of a resource is itself waiting for an ENQ that is held in another system, then consider issuing the command DISPLAY SMS,SMSVSAM,DIAG(CONTENTION) or run this check again on the other system to see if there is a problem there.

If the holder of a resource is itself waiting for I/O or any other system resource, then you should investigate why that resource is not available or slow to respond. If the holder of a resource is an SMSVSAM thread, then you might need to restart the SMSVSAM address space. Before doing this, however, you should consider the consequences of restarting the server immediately versus waiting for the off-shift. Even though some work might be stalled, there

IGWRH0103I

could be some other more important work that is still in progress.

Source: DFSMS VSAM RLS

Module: IGWRDRDS

Routing code: See note 35.

Descriptor code: 11 is the default set by this check. See note 1.

Automation: N/A

Reference Documentation: For additional information, see VSAM RLS Latch Contention in *z/OS DFSMSdfp Diagnosis*.

IGWRH0103I Check VSAMRLS_DIAG_CONTENTION detected contention by registered resources.
The list of contention is shown in the contention table below.

```
=====
                          Contention Table
=====
|---RESOURCE---||  ----- WAITER -----||--HOLDER--| ELAPSED
  TYPE          ID   JOB NAME ASID  TASK  ASID  TASK    TIME
-----|-----|-----|-----|-----|-----|-----|-----|
LATCH   7F0C7158 SMSVSAM  0037 008D8CF0 0037 008DC0D0 00:06:03
LATCH   7F0C7158 SMSVSAM  0037 009C4CF0 0037 008DC0D0 00:40:32
LATCH   7F0C7158 SMSVSAM  0037 007A3670 0037 008DC0D0 00:03:15
LATCH   7F0C7158 SMSVSAM  0037 00599110 0037 008DC0D0 00:00:50
LATCH   7F0C7158 SMSVSAM  0037 00303C20 0037 008DC0D0 00:00:17
=====
```

Explanation: If latch contention is indicated, take appropriate actions to resolve the hang or deadlock.

In the message text:

Resource Type

The type of the resource in contention.

Resource ID

The ID of the resource in contention.

Waiter Job Name

The name of waiter job in contention.

Waiter ASID

The ASID of the waiter job in contention.

Waiter Task

The ID of the waiter task in contention.

Holder ASID

The ASID of the holder job in contention.

Holder Task

The ID of the holder task in contention.

Elapsed Time

The elapsed time in contention.

System action: The system continues processing.

Operator response: N/A

System programmer response: See IGWRH0102E.

Problem determination: See IGWRH0102E.

Source: DFSMS VSAM RLS

Module: IGWRDRDS

Routing code: N/A

Descriptor code: N/A

Automation: N/A

Reference Documentation: See IGWRH0102E.

IGWRH0105I The default value for the maximum number of rows to be displayed in the contention table is 20. You can change the default display row value by issuing the following command: F
 HZSPROC,UPDATE,
 CHECK=(IBMVVSAMRLS,VVSAMRLS_DIAG_CONTENTION),PARM('ROWS(128)')
 where 128 is the maximum display row value.

Explanation: N/A

System action: The system continues processing.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: DFSMS VSAM RLS

Module: IGWRDRDS

Routing code: N/A

Descriptor code: N/A

Automation: N/A

Reference Documentation: N/A

IGWRH0110I SMSVSAM address space must be active in order to run this check. Currently, SMSVSAM address space is down. Please activate the address space by issuing the following console command:
 V SMS,SMSVSAM,ACTIVE

Explanation: N/A

System action: The system continues processing.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: DFSMS VSAM RLS

Module: IGWRDRDS

Routing code: N/A

Descriptor code: N/A

Automation: N/A

Reference Documentation: N/A

IGWRH0111I An error occurred accessing the SMSVSAM address space. The state of the check has been changed to error and it has been disabled. HZS1002E was issued and placed in the message buffer to provide diagnostic detail.

Explanation: N/A

System action: If an abend is indicated a record is written to LOGREC.

Operator response: N/A

System programmer response: When the error is not an installation problem, run the check again. If the problem still persists, the error might be in the check itself. Search problem reporting databases for a fix for the problem. If a

IGWRH0120I • IGWRH0121I

fix does not exist, call the IBM Support Center. Provide the messages, the logrec data set record, the syslog output for the check, and the dump, if one was taken.

Problem determination: N/A

Source: DFSMS VSAM RLS

Module: N/A

Routing code: N/A

Descriptor code: N/A

Automation: N/A

Reference Documentation: N/A

IGWRH0120I The VSAM RLS CF cache size meets or exceeds IBM's recommended minimum CF cache size for the current sysplex buffer pool configuration.

The IBM recommended minimum cache size for your current sysplex buffer pool configuration is: *CacheMinSize*MB.

The current total CF cache structure size is: *CacheTotSize* MB.

The check ran successfully and found no exceptions.

Explanation: In the message text:

CacheMinSize

The minimum size of VSAM RLS CF cache for the sysplex.

CacheTotSize

The current total size of VSAM RLS CF cache for the sysplex.

System programmer response: MISSING INFO.

Source: DFSMS VSAM RLS

Module: IGWRDSCM

Routing code: See note 35.

Descriptor code: 3 is the default set by this check. See note 1.

Reference Documentation: For additional information about how to define CF caches, see "Defining CF Cache Structures" in *z/OS DFSMSdfp Storage Administration*.

IGWRH0121I The VSAM RLS CF cache size does not meet IBM's recommended minimum CF cache size for the current sysplex buffer pool configuration.

Explanation: CHECK (IBMVSAMRLS_VSAMRLS_CFCACHE_MINIMUM_SIZE found that the VSAM RLS CF cache structure size is less than the the IBM recommended minimum cache size. Please refer to IGWRH0122I for additional information.

System programmer response: See IGWRH0122I.

Source: DFSMS VSAM RLS

Module: IGWRDSCM

Routing code: See note 35.

Descriptor code: 3 is the default set by this check. See note 1.

Reference Documentation: For additional information about how to define CF caches, see "Defining CF Cache Structures" in *z/OS DFSMSdfp Storage Administration*.

IGWRH0122I The IBM recommended minimum cache size for your current sysplex buffer pool configuration is *CacheMinSize* MB. According to the current configuration of the VSAM RLS buffer pool in the sysplex, the VSAM RLS CF cache optimal size should be *CacheOptSize* MB. CF cache size should be at least *CacheMinPercent*% of the CF cache optimal size. Thus, the CF cache size for the sysplex should be at least *CacheMinSize* MB.

The current total CF cache size is *CacheTotSize* MB. This is calculated by adding the sizes of all of the CF cache structures that VSAM RLS is connected to at the time that this check was run. Thus, if VSAM RLS is not connected to any CF cache structures at the time this check is run, then it will show a value of 0.

Variables used in VSAM RLS CF cache optimal size calculation:

Maximum Pool Total: *MaxPoolTotal* MB

CI Size: *CISize* Bytes

Directory Size: *DirSize* Bytes

Data Size: *DataSize* Bytes

Total Optimal Size: *CacheOptSize* MB

CF cache structures must be defined to MVS using the administrative data utility IXCMIAPU, and also in the Storage Management configuration using the Interactive Storage Management Facility (ISMF). CF cache structures provide a level of storage hierarchy between local memory and DASD cache. They are also used as a system buffer pool for VSAM RLS data when that data is modified on other systems. Each CF cache structure is contained in a single CF. A sysplex may have multiple CFs and multiple CF cache structures.

In order to get the best performance for coupling facility (CF) caches, the cache structures should be large enough to hold the data that could be buffered on local systems plus the internal structures needed to maintain the data.

The VSAM RLS recommendation, based on your current buffer pool values, is *CacheMinSize* MB. This value was calculated using a 2K average CI size. Your current buffer pool is divided by the average CI size to get the number of records to be cached. The optimal cache size is then calculated by multiplying the number of records to the size for each record in CF cache, which consists of a data element and a directory element. Since the average CI size is 2K, the data element is also 2K in size. The average directory element size is 200 bytes.

Performance should improve when the CF cache is larger than the sum of the local VSAM RLS buffer pool sizes. When the CF cache is smaller, performance depends upon the dynamics of the data references among the systems involved.

Explanation: In the message text:

CacheMinSize

The minimum size of VSAM RLS CF cache for the sysplex.

CacheOptSize

The optimal size of VSAM RLS CF cache for the sysplex.

CacheTotSize

The current total size of VSAM RLS CF cache for the sysplex

CacheMinPercent

The recommended percent for CF cache computation.

MaxPoolTotal

The pool total for the whole sysplex.

CISize

CI size used in calculation.

DirSize

Average directory size for each record used to manage cached data.

DataSize

Data size for the cached record.

System programmer response: Verify that there is enough VSAM RLS CF cache for the sysplex to run VSAM RLS. The total size for VSAM RLS CF cache should be at least the value in the message text.

IGWRH0130I • IGWRH0131E

Source: DFSMS VSAM RLS

Module: IGWRDSCM

Routing code: See note 35.

Descriptor code: 3 is the default set by this check. See note 1.

Reference Documentation: For additional information about how to define CF caches, see "Defining CF Cache Structures" in *z/OS DFSMSdfp Storage Administration*.

IGWRH0130I VSAM RLS lock structure false contention rate is below the health check threshold of $ThRate.ThFrac\%$. The check ran successfully and found no exceptions.

Explanation: CHECK (VSAMRLS_CFLS_FALSE_CONTENTION_RATE) ran successfully and found no exceptions. It found the CF lock structure false contention rate was acceptable and would not degrade performance.

| In the message text:

| *ThRate.ThFrac*

| The false lock contention rate threshold.

System action: N/A

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: DFSMS VSAM RLS

Module: IGWRDLSC

Routing code: N/A

Descriptor code: N/A

Automation: N/A

Reference Documentation: N/A

IGWRH0131E False lock contention has been detected. The current false contention rate is $FCRate.FCFrac\%$.

Explanation: Check (VSAMRLS_CFLS_FALSE_CONTENTION_RATE) found that the system may experience performance degradation because the current false contention rate has exceeded the health check's false contention rate threshold of $ThRate.ThFrac\%$

In the message text:

FCRate.FCFrac

The false lock contention rate.

VSAM RLS assigns locked resources to an entry value in the lock table, and uses this entry value to quickly check whether a resource is already locked. If the lock structure (and thus the lock table) is too small, many locks can be represented by a single value, making 'false' lock contention possible. False lock contention occurs when two different locks on different resources attempt to use the same lock entry. The second lock requester is suspended until VSAM RLS determines that there is no real lock contention on the resource. False contention can be a problem for workloads with heavy R/W interests among systems.

For the best performance, you want to achieve the least possible amount of global lock contention, both real and false. The amount of real lock contention is application-dependent; it depends on record access patterns. False lock contention is almost entirely determined by the size of the lock table, with a larger lock table having less false lock contention than a smaller one. A good goal is to have total (real and false) global lock contention of less than one percent. The false contention component of the total global lock contention should be less than five percent, and ideally, should be substantially less than this. The documentation references one half of one percent as the false contention rate to be aware of. However, in some scenarios, a false contention rate of more than one half of one percent may be normal and will not cause performance degradation.

| *ThRate.ThFrac*
| The false lock contention rate threshold.

System action: The system continues processing.

System programmer response: If false contention becomes a problem, try the following ways:

- If possible, reduce the amount of real lock contention in your applications.
- Specify a larger size for the lock structure and manually rebuild it.
- Ensure that the MAXSYSTEM parameter of the couple data set utility is not too large for the number of members in the parallel sysplex.

Problem determination: You can determine the amount of false contention by using either the resource measurement facility (RMF) or the DISPLAY SMS,CFLS command.

Source: DFSMS VSAM RLS

Module: IGWRDLSC

Routing code: See note 35.

Descriptor code: 3 is the default set by this check. See note 1.

Reference Documentation: For additional information, see "Defining the CF Lock Structure" in *z/OS DFSMSdfp Storage Administration*.

| **IGWRH0132I The only valid parameter is THRESHOLD. Values for the THRESHOLD keyword must be an integer between 0 and 5000 inclusive.**

| **Explanation:** Update PARM to control the false contention rate at which the health checker will issue an error. This THRESHOLD value is specified in thousandths of a percent.

| The default value is PARM('THRESHOLD(5000)'), which sets the false contention rate at which the health check issues an error to 5%.

| **System action:** The check is stopped.

| **System programmer response:** Use the MODIFY hzsproc command to specify a valid value for the THRESHOLD parameter.

| **Source:** DFSMS VSAM RLS

| **Module:** IGWRDLSC

| **Reference Documentation:** For additional information, see "Syntax and Parameters for HZSPRMxx and MODIFY hzsproc command" in *IBM Health Checker for z/OS User's Guide*.

IGWRH0140I All SHCDSs have consistent allocation amounts. The check ran successfully and found no exceptions.

Explanation: CHECK (IBMVSAMRLS,VSAMRLS_SHCDS_CONSISTENCY) ran successfully and found no exceptions. All SHCDSs are allocated with consistent values for primary allocation and secondary allocation. Consistent allocation optimizes space utilization.

System action: N/A

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: DFSMS VSAM RLS

Module: IGWRDSH2

Routing code: N/A

Descriptor code: N/A

Automation: N/A

IGWRH0141E • IGWRH0143I

Reference Documentation: N/A

IGWRH0141E Inconsistent allocation amounts were found.

Explanation: CHECK (IBMVVSAMRLS,VVSAMRLS_SHCDS_CONSISTENCY) found inconsistent primary allocation amounts across SHCDSs. Inconsistent allocation amounts might lead to wasted space. When the SHCDS with the smallest allocation starts to run out of space, all SHCDSs are extended with their secondary quantity. SHCDSs might extend unnecessarily with large wasted secondary quantities. VSAM RLS expects identical allocation amount for all SHCDSs.

IGWRH0143I has been placed in the message buffer to identify the data sets that are in error.

System action: The system continues processing.

System programmer response: Reallocate SHCDSs by consistent amounts.

Problem determination: See IGWRH0143I in the message buffer that lists all SHCDSs and their allocation amounts.

Source: DFSMS VSAM RLS

Module: IGWRDISH2

Routing code: See note 35.

Descriptor code: 3 is the default set by this check. See note 1.

Reference Documentation: For additional information about how to define SHCDSs, see "Defining Sharing Control Data Sets" in *z/OS DFSMSdfp Storage Administration*.

IGWRH0143I Problems were found with SHCDSs.

The data set names shown below are partially-qualified. The fully-qualified name comes with the prefix "SYS1.DFPSHCDS". The primary (PRI) and secondary (SEC) allocation amounts are in kilobytes (KB).

DSNAME	PRI	SEC
SHCDS1	P1	S1
SHCDS2	P2	S2
SHCDS3	P3	S3

Explanation: CHECK (IBMVVSAMRLS,VVSAMRLS_SHCDS_CONSISTENCY) found a problem in the current SHCDSs. This is a list of SHCDSs in the system.

In the message text:

DSNAME

The SHCDS names.

PRI

The primary allocation amount in kilobytes (KB).

SEC

The secondary allocation amount in kilobytes (KB).

System action: The system continues processing.

Operator response: N/A

System programmer response: See IGWRH0141E.

Problem determination: See IGWRH0141E.

Source: DFSMS VSAM RLS

Module: IGWRDISH2

Routing code: N/A

Descriptor code: N/A

Automation: N/A

Reference Documentation: See IGWRH0141E.

IGWRH0150I All SHCDSs meet the minimum size. The check ran successfully and found no exceptions.

Explanation: CHECK (IBMVSAMRLS,VSAMRLS_SHCDS_MINIMUM_SIZE) ran successfully and found no exceptions. The minimum size is required for SHCDS operation.

System action: The system continues processing.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: DFSMS VSAM RLS

Module: IGWRDSH3

Routing code: N/A

Descriptor code: N/A

Automation: N/A

Reference Documentation: N/A

IGWRH0151E The check detects SHCDS that is not big enough on your system. SHCDS needs to be at least *MinSize* MB.

Explanation: If SHCDS is too small, the system might potentially experience problems. The initial size of the SHCDS needs to be at least the size indicated in the message text. A larger size should be used if a large number of recoverable data sets will be opened between a large number of recoverable subsystems. The recommended minimum size displayed by this health check is rounded up to the nearest MB.

In the message text:

MinSize

SHCDS minimum size.

System action: The system continues processing.

System programmer response: Increase the SHCDS size to a value greater than the minimum value specified in the message text.

Problem determination: Issue DISPLAY SMS, SHCDS to identify the SHCDSs below the threshold value.

Source: DFSMS VSAM RLS

Module: IGWRDSH3

Routing code: See note 35.

Descriptor code: 3 is the default set by this check. See note 1.

Reference Documentation: For additional information about how to define SHCDSs, see "Defining Sharing Control Data Sets" in *z/OS DFSMSdfp Storage Administration*.

IGWRH0152I The only valid parameters are NUMOFRDS and NUMOFRSS, in that order. The range for NUMOFRDS is 1 to 3000 inclusive, and the range for NUMOFRSS is 1 to 100 inclusive.

Explanation: Update PARM to calculate the recommended minimum size of the SHCDS based on the sysplex environment.

The default value is PARM('NUMOFRDS(100),NUMOFRSS(10)'), which specifies that an average of 100 recoverable data sets will be opened across an average of 10 recoverable subsystems.

System action: The health check is stopped.

System programmer response: Use the MODIFY hzsproc command to specify a valid value for the parameters NUMOFRDS and NUMOFRSS.

IGWRH0201I • IGWRH0202E

Problem determination: N/A

Source: DFSMS VSAM RLS

Module: IGWRDSH3

Reference Documentation: For additional information, see 'Syntax and Parameters for HZSPRMxx and MODIFY hzsproc command' in *IBM Health Checker for z/OS User's Guide*.

IGWRH0201I This is consistent with IBM recommendation that all SHCDS's are on unique volumes.

Explanation: VSAMRLS_SINGLE_POINT_FAILURE ran successfully and found no exceptions. It determined each SHCDS data set was placed on a unique volume which prevents a single point of failure.

System action: The system continues processing.

Operator response: None

System programmer response: None

Problem determination: None

Source: DFSMS VSAM RLS

Module: IGWRDSHC

Routing code: N/A

Descriptor code: N/A

IGWRH0202E Problem(s) were found with SHCDS's.

Explanation: Check VSAMRLS_SINGLE_POINT_FAILURE found more than one SHCDS on the same volume. IGWRH0204I has been placed in the message buffer to identify the data sets that are in error.

Please note that the explanations for any SHCDS that has an error code in the format '*ERRxx' (where xx is a two digit number) are listed as following:

*ERR01: The volume serial specified at the end of this SHCDS name is longer than 6 characters, which is the maximum length allowed for a volume serial.

System action: The system continues processing.

Operator response: N/A

System programmer response: Sharing control data sets (SHCDS) should be placed on unique volumes to avoid a single point of failure. You should always run with at least two active and one spare SHCDSs. If a permanent I/O error occurs for an active SHCDS, or if an SHCDS becomes inaccessible from one or more systems, it is automatically replaced by one of the spare SHCDS's. If any system does not have access to an SHCDS, all opens for VSAM RLS processing are prevented on that system until an SHCDS becomes available.

See "Defining Sharing Control Data Sets" in *z/OS DFSMSdfp Storage Administration* for direction and allocate each SHCDS on a unique volume.

Problem determination: See IGWRH0204I in the message buffer which lists all SHCDS's and their volumes.

Source: DFSMS VSAM RLS

Module: IGWRDSHC

Routing code: See note 35.

Descriptor code: 11 is the default set by this check. See note 1.

Reference Documentation: For additional information on how to define SHCDS's, see "Defining Sharing Control Data Sets" in *z/OS DFSMSdfp Storage Administration*.

IGWRH0204I Problem(s) were found with SHCDS's.

The dataset names shown below are partially-qualified. The fully-qualified name comes with the prefix 'SYS1.DFPSHCDS.'

DSNAME	VOLUME
=====	=====
ACTIVE2.VSPLXPK	SPLXPK
ACTIVE.VSPLXPK	SPLXPK
SPARE.VSPLXPK	SPLXPK
-----	-----
-----	-----
-----	-----
-----	-----
-----	-----
-----	-----
-----	-----

Explanation: Check VSAMRLS_SINGLE_POINT_FAILURE found a problem in the current SHCDS's. This is a list of SHCDS's in the system.

In the message text:

dsname

The SHCDS names.

volume

The volume on which SHCDS's reside.

System action: The system continues processing.

Operator response: None.

System programmer response: See IGWRH0202E.

Problem determination: See IGWRH0202E.

Source: DFSMS VSAM RLS

Module: IGWRDSHC

Routing code: N/A

Descriptor code: N/A

IGWRH0300I DFSMStvs is enabled. The check ran successfully and found no exceptions.

Explanation: Check(IBMVSAMRLS,VSAMRLS_TVS_ENABLED) ran successfully and found no exceptions. DFSMStvs is installed and enabled.

System action: The system continues processing.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: DFSMStvs.

Module: IGWRDTVS

Routing code: See note 35.

Descriptor code: See note 1.

Automation: N/A

Reference Documentation: N/A

IGWRH0301E The check detected that DFSMStvs is installed but not enabled.

Explanation: Check(IBMVSAMRLS,VSAMRLS_TVSEENABLED) found that DFSMStvs is not enabled. Verify that DFSMStvs is properly set up in either IFAPRDXX and/or IGDSMSXX.

System action: The system continues processing.

Operator response: N/A

System programmer response: To enable DFSMStvs, please refer to the 'Specifying SYS1.PARMLIB parameters for DFSMStvs' section in *z/OS DFSMStvs Planning and Operating Guide*. This check must be rerun manually.

Problem determination: The check found that DFSMStvs is installed but not active on the system.

Source: DFSMStvs

Module: IGWRDTVS

Routing code: See note 35.

Descriptor code: See note 1.

Automation: N/A

Reference Documentation: *z/OS DFSMStvs Planning and Operating Guide*.

IGWRH0302I This check detected that DFSMStvs is not installed on this system.

Explanation: Check(VSAMRLS,VSAMRLS_TVSEENABLED) found that DFSMStvs is not installed on this system.

System action: The system continues processing.

Operator response: N/A

System programmer response: To install DFSMStvs, please refer to the DFSMStvs manual *z/OS DFSMStvs Planning and Operating Guide*.

Problem determination: Please issue the following command to verify that DFSMStvs is not installed on this system. D SMS,TRANVSAM.

Source: DFSMStvs

Module: IGWRDTVS

Routing code: See note 35.

Descriptor code: See note 1.

Automation: N/A

Reference Documentation: *z/OS DFSMStvs Planning and Operating Guide*.

IGWPH messages

IGWPH0101E Check PDSE_SMSPDSE1, the restartable SMSPDSE1 address space is not active.

Explanation: In this release, SMSPDSE1 address space is available but not active on this system. The default is inactive for z/OS 1.6 and later releases. If a PDSE related problem should occur, a system outage could be avoided with a restart of the SMSPDSE1 address space. The use of the SMSPDSE1 restartable address space is encouraged.

System action: The system continues processing.

Operator response: N/A

System programmer response: The use of the SMSPDSE1 restartable address space is encouraged.

Problem determination: N/A

Source: DFSMS PDSE

Module: IGWHCPD2

Routing code: See note 35.

Descriptor code: 12 is the default set by this check. See note 1.

Automation: N/A

Reference Documentation: For additional information see *z/OS MVS Initialization and Tuning Reference*.

IGWPH0102I Check ran successfully and found no exceptions.

Explanation: PDSE_SMSPDSE1 check ran successfully and found no exceptions.

System action: The system continues processing.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: DFSMS PDSE

Module: IGWHCPD2

Routing code: N/A

Descriptor code: N/A

Automation: N/A

Reference Documentation: N/A

Chapter 7. IHJ messages

IHJ0001 CHECKPOINT *jjj* [,*sss* [*ppp*]] (*ddname*) NOT TAKEN (*xxx* [-*www*]) [MODULE=*module-name*]

Explanation: During processing of a CHKPT macro instruction, an error occurred before the checkpoint routine wrote any part of a checkpoint entry.

In the message text:

jjj The jobname.

sss The stepname.

ppp The procedure step name.

ddname The data definition name of the checkpoint data set. Omitted if *xxx* is 001.

xxx Indicates why the checkpoint entry was not written.

www When it appears, further describes the problem.

module-name

The module in which an error was detected.

Reason code 114 is issued with a return code of 8 when a checkpoint is attempted in a step using UNIX System Services MVS functions.

System action: A checkpoint entry was not written. The current checkpoint is not eligible for restart, but all previous valid checkpoints are eligible for deferred restarts, and the last valid checkpoint entry is eligible for automatic restart. In some cases, an SVC dump will be written.

If MOD is not the disposition of the checkpoint data set and if this is the first issuance of the CHKPT macro instruction after the data control block for the data set was opened, then all checkpoint entries in the data set are lost. (The data control block may have been opened by the programmer or as a result of this checkpoint request.) However, if *xxx* is 001, no entries are lost.

If *xxx* is 048, the system ends media manager processing.

System programmer response: If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL, the logrec data set error record, and all printed output and output data sets related to the problem. Obtain the ABEND dump for the failing job step. If the JCL for the step did not contain a DD statement for an ABEND dump, add one of the following and run the job step again. Use a SYSMDUMP DD statement if you plan to analyze and format the dump with the interactive problem control system (IPCS).

- SYSABEND DD statement
- SYSMDUMP DD statement
- SYSUDUMP DD statement

Programmer response: See *z/OS DFSMSdfp Checkpoint/Restart* for the reason codes for the IHJ messages. Find the value of *xxx* under the heading 'Reason Codes for IHJ Messages,' and follow the programmer response for that reason code. After correcting the problem, resubmit the job, if appropriate.

Ensure that a checkpoint is not issued when the step is using UNIX System Services MVS functions or eliminate the use of UNIX System Services MVS functions from the step.

Source: Data Facility Product (DFP)

Routing code: 2,11

Descriptor code: 6

IHJ001I *jjj (ddname,devnum,volser) INVALID CHECKPOINT checkid (xxx[-module-name-return-code])*

Explanation: During processing of a CHKPT macro instruction, an error occurred while the checkpoint routine was writing a checkpoint entry.

In the message text:

jjj The jobname.

ddname The data definition name of the checkpoint data set.

devnum The device number.

volser The serial number of the volume containing the data set.

checkid The checkpoint identification.

xxx Indicates why the checkpoint was incorrect.

module-name

 The module.

return-code

 The return code.

System action: A partial incorrect checkpoint entry was written. The current checkpoint is not eligible for restart, but all previous checkpoints are eligible for deferred restarts, and the last valid checkpoint entry is eligible for automatic restart. In some cases, an SVC dump will be written.

System programmer response: If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL, the logrec data set error record, and all printed output and output data sets related to the problem. Obtain the ABEND dump for the failing job step. If the JCL for the step did not contain a DD statement for an ABEND dump, add one of the following and run the job step again. Use a SYSMDUMP DD statement if you plan to analyze and format the dump with the interactive problem control system (IPCS).

- SYSABEND DD statement
- SYSMDUMP DD statement
- SYSUDUMP DD statement

Programmer response: See z/OS *DFSMSdfp Checkpoint/Restart* for the return and reason codes for the IHJ messages. Find the value of *xxx* under the heading "Reason Codes for IHJ Messages", and follow the programmer response for that reason code. After correcting the problem, resubmit the job, if appropriate.

Source: Data Facility Product (DFP)

Routing code: 2,11

Descriptor code: 6

IHJ002I *jjj [,sss [,ppp]] (ddname,devnum,volser) ERROR checkid (xxx) [MODULE = module-name]*

Explanation: During processing of a CHKPT macro instruction, an error occurred. However, a checkpoint entry was written successfully.

In the message text:

jjj The jobname.

sss The stepname.

ppp The procedure step name.

ddname The data definition name of the checkpoint data set.

devnum The device number.

volser The serial number of the volume containing the data set.

checkid The checkpoint identification.

xxx Indicates the cause of the error.

module-name

The module in which the error was detected.

System action: A valid checkpoint entry that can be used to perform a deferred restart was written.

System programmer response: If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL, the logrec data set error record, and all printed output and output data sets related to the problem. Obtain the ABEND dump for the failing job step. If the JCL for the step did not contain a DD statement for an ABEND dump, add one of the following and run the job step again. Use a SYSMDUMP DD statement if you plan to analyze and format the dump with the interactive problem control system (IPCS).

- SYSABEND DD statement
- SYSMDUMP DD statement
- SYSUDUMP DD statement

Programmer response: See *z/OS DFSMSdfp Checkpoint/Restart* for the reason codes for the IHJ messages. Find the value of xxx under the heading 'Reason Codes for IHJ Messages,' and follow the programmer response for that reason code. After correcting the problem, resubmit the job, if appropriate.

Source: Data Facility Product (DFP)

Routing code: 2,11

Descriptor code: 6

IHJ003I *jjj,sss [,ppp]* ABEND *cde* DETECTED DURING CHECKPOINT [IN MODULE *module-name*]

Explanation: While taking a checkpoint, the ESTAE exit routine of checkpoint/restart was entered.

In the message text:

jjj The job name.

sss The stepname.

ppp The procedure step name.

module-name

The module in which the error was detected. A service which *module-name* called may have abnormally ended.

cde The abend code.

System action: Message IHJ000I, IHJ001I, or IHJ002I will accompany this message to indicate the state of the current checkpoint. Other messages may also accompany this message. An SVC dump is written in cases where the abnormal end itself is not sufficient to correct the problem, and a previous recovery routine has not already collected diagnostic information. A return code is loaded into register 15 and a reason code into register 0, and control is returned to the caller of checkpoint.

Operator response: See *z/OS MVS System Codes* for code *cde*, and see the accompanying messages.

System programmer response: If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL, the logrec data set error record, and all printed output and output data sets related to the problem. Obtain the ABEND dump for the failing job step. If the JCL for the step did not contain a DD statement for an ABEND dump, add one of the following and run the job step again. Use a SYSMDUMP DD statement if you plan to analyze and format the dump with the interactive problem control system (IPCS).

- SYSABEND DD statement
- SYSMDUMP DD statement
- SYSUDUMP DD statement

Programmer response: See *z/OS MVS System Codes* for the abend code, and see the accompanying messages.

Source: Data Facility Product (DFP)

Routing code: 2,11

Descriptor code: 6

IHJ004I *jjj* [*,sss* [*.ppp*]] (*ddname*, *devnum*, *volser*)

Explanation: One or more of the following accompanies this message:

- CHKPT *checkid*
- CHECKPOINT SUCCESSFUL. ID = *checkid*

A CHKPT macro instruction was run successfully; no errors occurred.

In the message text:

jjj The jobname.

sss The stepname.

ppp The procedure step name.

ddname The data definition name of the checkpoint data set.

devnum The device number.

volser The serial number of the volume containing the data set.

checkid The checkpoint identification.

System action: A valid checkpoint entry was written. A restart was requested.

Programmer response: If a deferred restart is to be performed, code the checkpoint identification (*checkid* in the message text) in the RESTART parameter of the JOB statement.

If multiple checkpoint data sets were used, use *ddname* in the message text to determine the name of the data set containing the desired checkpoint entry. Code the data set name in the DSNNAME parameter of the SYSCHK DD statement.

If the checkpoint data set is multivolume, indicate on the SYSCHK DD statement the volume containing the checkpoint data set that is the first (or only) volume containing the data set. That is, code the serial number (*ser* in the message text) in the VOLUME=SER parameter or, if the data set is to be retrieved using the catalog, code the volume in the volume sequence subparameter of the VOLUME parameter. Then resubmit the job.

Source: Data Facility Product (DFP)

Routing code: 2,11

Descriptor code: 6

IHJ005I *jjj* [*,sss* [*.ppp*]] (*ddname*, *devnum*, *volser*) ID = *checkid* (*xxx*)

Explanation: In the message text:

One of the following two lines then appears:

CHECKPOINT SUCCESSFUL WITH POSSIBLE
SPECIAL REQUIREMENTS.

Then the following line appears:

[MODULE = *module-name*]

A CHKPT macro instruction was run successfully. However:

- Your program could be enqueued upon resources. The ENQ macro instruction was issued by either the problem program, the BDAM READ macro instruction with exclusive control, the RESERVE macro instruction, or the BDAM WRITE macro instruction with variable-length (V) or undefined (U) record format. Note that the enqueues will not be reestablished if restart occurs.
- Or checkpoint was unable to complete the check for enqueued resources, due to insufficient storage or due to an error detected by the QSCAN service.

In the message text:

jjj The jobname.
sss The stepname.
ppp The procedure step name.
ddname The data definition name of the checkpoint data set.
devnum The device number.
volser The serial number of the volume containing the data set.
checkid The checkpoint identification.
xxx The reason code giving more specific information about the condition.
module-name
 The module in which an error was detected.

System action: A valid checkpoint entry was written and is eligible for a deferred or automatic restart.

Programmer response: See *z/OS DFSMSdfp Checkpoint/Restart* for the reason codes for the IHJ messages. Find the value of *xxx* under the heading 'Reason Codes for IHJ Messages,' and follow the programmer response for that reason code. Ensure that the program reestablished the enqueues upon restart, provide more storage for checkpoints, or determine what the problem is with GQSCAN service. After correcting the problem, resubmit the job.

Source: Data Facility Product (DFP)

Routing code: 2,11

Descriptor code: 6

IHJ007I **RESTART NOT SUCCESSFUL FOR *jjj* (*xxx* [*-module-name-return-code*] [*-www*] [*,devnum*]) [MODULE = *module-name*]**

Explanation: During processing of a checkpoint restart for the job, an error occurred.

In the message text:

jjj The jobname.
xxx The reason code for the error. See *z/OS DFSMSdfp Checkpoint/Restart* for the reason codes.
module-name
 A module ID that corresponds to a module name.
return-code
 The return code issued by the module. For a detailed explanation of the return code, see *z/OS DFSMSdfp Checkpoint/Restart*.
www An additional information code for VSAM.
devnum A tape device number.
module-name
 The module in which the error was detected.

In most IHJ007I messages, *module-name*, *return-code*, and *www* do not appear.

System action: Restart for job *jjj* ends.

System programmer response: If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL, the logrec data set error record, and all printed output and output data sets related to the problem. Obtain the ABEND dump for the failing job step. If the JCL for the step did not contain a DD statement for an ABEND dump, add one of the following and run the job step again. Use a SYSMDUMP DD statement if you plan to analyze and format the dump with the interactive problem control system (IPCS).

- SYSABEND DD statement
- SYSMDUMP DD statement
- SYSUDUMP DD statement

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Programmer response: See *z/OS DFSMSdfp Checkpoint/Restart* for the return and reason codes for the IHJ messages. Find the value of xxx under the heading 'Reason Codes for IHJ Messages,' and follow the programmer response for that reason code. Then resubmit the job, if appropriate.

Source: Data Facility Product (DFP)

Routing code: 2,11

Descriptor code: 6

IHJ008I *jjj* RESTARTED

Explanation: A checkpoint restart for the job specified has completed successfully.

In the message text:

jjj The jobname.

System action: Processing of job *jjj* continues.

Source: Data Facility Product (DFP)

Routing code: 2,11

Descriptor code: 6

IHJ009I **ERROR ON** *ddname*

Explanation: This message gives the DD name of the DD statement associated with the error. For Checkpoint errors, the error is described in messages IHJ000I, IHJ001I, IHJ002I, or IHJ005I. For Restart errors, the error is described in message IHJ007I.

In the message text:

ddname The specified DD name on the DD statement.

System action: The system writes messages IHJ000I, IHJ001I, IHJ002I or IHJ007I with this message.

Operator response: See the operator response of the accompanying messages.

System programmer response: See the system programmer response of the accompanying messages.

Programmer response: See the programmer response of the accompanying messages.

Source: Data Facility Product (DFP)

Module: IDA0A05B

Routing code: 2,11

Descriptor code: 6

IHJ011I *jjj, sss [.ppp]* **ABEND** *cde*
 One of the following lines then appears:
 DETECTED DURING CHECKPOINT
 DETECTED DURING RESTART IN MODULE *module-name*

Explanation: While taking a restart, the ESTAE exit routine of checkpoint restart was entered.

In the message text:

jjj The job name.

sss The stepname.

ppp The procedure step name.

cde The abend code.

module-name

Either the module in which an error was detected, or the last module in the checkpoint/restart component that had control. A service which *module-name* called may have abnormally ended.

System action: Messages IEF007I and IHJ007I will accompany this message. Other messages may also accompany this message. An SVC dump is written in cases where the abnormal end itself or the accompanying messages are not sufficient to correct the problem and a previous recovery routine has not already collected diagnostic information. The task ends with system completion code 13F.

Operator response: See *z/OS MVS System Codes* for code *cde*, and see the accompanying messages.

System programmer response: If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL, the logrec data set error record, and all printed output and output data sets related to the problem. Obtain the ABEND dump for the failing job step. If the JCL for the step did not contain a DD statement for an ABEND dump, add one of the following and run the job step again. Use a SYSMDUMP DD statement if you plan to analyze and format the dump with the interactive problem control system (IPCS).

- SYSABEND DD statement
- SYSMDUMP DD statement
- SYSUDUMP DD statement

Programmer response: See *z/OS MVS System Codes* for the abend code, and see the accompanying messages.

Source: Data Facility Product (DFP)

Routing code: 2,11

Descriptor code: 6

IHJ012I RECURSIVE ERROR IN ESTAE ROUTINE.

Explanation: While handling an abnormal end, an error occurred in the ESTAE routine for checkpoint/restart.

System action: Another attempt will be made to handle the abnormal end. If it cannot be handled, or another occurs, the task is ended.

System programmer response: If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL, the logrec data set error record, and all printed output and output data sets related to the problem. Obtain the ABEND dump for the failing job step. If the JCL for the step did not contain a DD statement for an ABEND dump, add one of the following and run the job step again. Use a SYSMDUMP DD statement if you plan to analyze and format the dump with the interactive problem control system (IPCS).

- SYSABEND DD statement
- SYSMDUMP DD statement
- SYSUDUMP DD statement

Programmer response: Use the diagnostic information provided by the first error message to solve the problem. If the second error occurred before the diagnostic information for the first error was saved, use the information from the second error to solve the problem.

Source: Data Facility Product (DFP)

IHJ013I *jjj,sss,ppp* ABEND *cde* DETECTED DURING RECORD MANAGEMENT IN MODULE *moduleid*

Explanation: An abnormal end occurred while a system module had control or while a service called by that module had control during a Checkpoint or a Restart request.

In the message text:

jjj The specified job name.
sss The specified step name.
ppp The specified proc name.
cde The abnormal end code associated with the error.
moduleid
 The module identifier.

System action: The system writes messages IHJ003I or IHJ011I to identify the last Checkpoint or Restart module

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that had control before the error occurred. Other messages may also accompany this message. The system writes an SVC dump in cases where the abnormal end does not contain sufficient information to correct the problem and a previous recovery routine has not already collected diagnostic information.

Operator response: See the operator response for abnormal end *cde* and the accompanying messages.

System programmer response: If the error recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SVC dump if one was taken.

Programmer response: See the programmer response for abnormal end *cde* and the accompanying messages.

Source: Data Facility Product (DFP)

Routing code: 2,11

Descriptor code: 6

IHJ014I *jjj,sss[.ppp]* RESTART DETECTED A TAPE LIBRARY ERROR ON *dev*

Explanation: Library automation communication services detected an error while processing a tape volume.

In the message text:

jjj

The job name.

sss

The step name.

ppp

The procedure name.

dev

The device number.

System action: See accompanying IHJ messages.

Programmer response: See the accompanying message(s) for detailed information about the error.

Source: Data Facility Product (DFP)

Module: IGC0K05B

Routing code: 2,11

Descriptor code: 6

IHJ015I *jjj,sss[.ppp]* UNUSUAL CONDITION FOUND DURING RESTART *reason-code,volser*

Explanation: Restart detected an unusual condition while processing the volume with volume serial number *volser*.

In the message text:

jjj

The job name.

sss

The step name.

ppp

The procedure name.

reason-code

The reason code giving more specific information about the condition.

ser

The six-digit volume serial number.

System action: Restart continues.

Programmer response: See the reason code for more information.

Source: Data Facility Product (DFP)

Module: IGC0K05B

Routing code: 2,11

Descriptor code: 6

IHJ101I [jjj, sss [.ppp]] **USER NOT [RACF] AUTHORIZED TO DASD DATA SET = dsname,volser**

Explanation: Although you were authorized by RACF to access the data set at the time it was opened, you are not authorized at the time of restart.

In the message text:

jjj The job name.

sss The stepname.

ppp The procedure step name.

dsname The data set name.

volser The volume serial number.

System action: Restart will be ended with system completion code 13F.

System programmer response: If the error recurs and the program is not in error, look at the messages in the job log for more information. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the RACF profile for the data set. Obtain the ABEND dump for the failing job step. If the JCL for the step did not contain a DD statement for an ABEND dump, add one of the following and run the job step again. Use a SYSMDUMP DD statement if you plan to analyze and format the dump with the interactive problem control system (IPCS).

- SYSABEND DD statement
- SYSMDUMP DD statement
- SYSUDUMP DD statement

Programmer response: Obtain authorization to the data set from the data set owner, and resubmit the job.

Source: Data Facility Product (DFP)

Routing code: 1,3,5,9

Descriptor code: 2

IHJ102I [jjj,sss [.ppp]] **{ENVIRONMENT|USER} NOT RACF AUTHORIZED TO TAPE VOLUME = volser**

Explanation: You are not authorized to access a RACF-protected tape volume at the time of the restart.

In the message text:

jjj The job name.

sss The stepname.

ppp The procedure step name.

volser The volume serial number.

System action: Restart will be ended with system completion code 13F.

Programmer response: Obtain authorization to access the RACF-protected tape, and resubmit the job.

Source: Data Facility Product (DFP)

Routing code: 1,4,6,9

Descriptor code: 2

Chapter 8. IKJ messages

Note: IKJ000 - IKJ999 Messages

This topic documents IKJ messages in the range IKJ000 to IKJ999 that are issued by the TSO/E element of z/OS. IKJ messages outside of this range are documented in *z/OS TSO/E Messages*.

IKJ000I *cm userid*

Explanation: The command verb and operand identified by *cm* were entered from a TSO terminal by a user identified by *userid*.

System action: The command, *cm*, is processed.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -

Descriptor code: 2,4

IKJ005I **TS START REJECTED - MEMBER OF SYS1.PARMLIB NOT FOUND**

Explanation: The member name specified either explicitly by the operator or by default could not be found in SYS1.PARMLIB.

System action: Time sharing initialization processing terminates.

Operator response: Reenter the MODIFY command and either omit the member name or specify it correctly. Omitting the member name causes the system to search for member IKJPRM00.

Source: Time Sharing Option/Extensions (TSO/E)

IKJ006I **I/O ERROR READING SYS1.PARMLIB**

Explanation: An I/O error occurred when an attempt was made to read a member of SYS1.PARMLIB.

System action: Time sharing initialization processing will continue using defaults for time sharing system parameter values.

Source: Time Sharing Option/Extensions (TSO/E)

IKJ007I **TS START REJECTED - TIME SHARING IS IN PROGRESS**

Explanation: A TS=START MODIFY command was entered when time sharing was already active.

System action: The extra command is ignored.

Source: Time Sharing Option/Extensions (TSO/E)

IKJ008I **USER(S) *user-list* AT BUSY TERMINAL(S), MESSAGE CANCELLED**

Explanation: The operator entered a SEND command with the NOWAIT,NOW,USERID=(...) options. Insufficient output buffers were available for the specified *userid(s)*.

In the message text:

user-list A list of userids that had busy terminals.

System action: The system does not send the message to the specified *userid(s)*.

Operator response: Enter the SEND command again. If the error occurs again, specify the LOGON or SAVE option on the SEND command.

IKJ019I • IKJ139I

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -

Descriptor code: 5

IKJ019I TIME SHARING IS INITIALIZED

Explanation: Time sharing initialization is complete.

System action: LOGONs will now be accepted.

Source: Time Sharing Option/Extensions (TSO/E)

IKJ021I TS STOP REJECTED - TIME SHARING IS NOT IN PROGRESS

Explanation: A TS=STOP MODIFY command was entered when time sharing was not active.

System action: The command is ignored.

Source: Time Sharing Option/Extensions (TSO/E)

IKJ024D TS STOP IN PROGRESS - REPLY 'U', OR 'FSTOP'

Explanation: A TS=STOP MODIFY command was entered when stop processing was already in progress from a previous command.

System action: Normal stop processing will continue until a reply is received.

Operator response: Reply 'U' to allow time sharing to complete normally. This will allow users to receive all messages queued for them. If the system seems unable to complete normally, reply 'FSTOP' and time sharing will terminate immediately.

Source: Time Sharing Option/Extensions (TSO/E)

IKJ138I SEND UNSUCCESSFUL. THE XCF xxxxx SERVICE ENDED IN ERROR, RETURN CODE xxx REASON CODE xxx.

Explanation: The SEND command could not complete its processing due to an error detected during XCF Service processing. Check *z/OS MVS Programming: Authorized Assembler Services Reference ALE-DYN*, *z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG*, *z/OS MVS Programming: Authorized Assembler Services Reference LLA-SDU*, or *z/OS MVS Programming: Authorized Assembler Services Reference SET-WTO* for the explanation of the return and reason codes for the service in error.

System action: The system ends SEND command processing.

Operator response: None.

Programmer response: Note the service in error, return codes, and reason codes, and contact your system programmer or IBM service representative for further assistance.

Source: Time Sharing Option/Extensions (TSO/E)

IKJ139I BROADCAST DATA SET NOT USABLE, I/O SYNAD ERROR

Explanation: An operator SEND command was issued which required accessing the broadcast data set. However, in accessing the data set a read/write failure was encountered.

System action: Processing is ended; messages may or may not have been saved in the broadcast data set. Broadcast data set-independent processing has been completed.

Operator response: Report this message to the system programmer.

System programmer response: Determine and remove the cause of the I/O error.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -

Descriptor code: 5

IKJ140I BROADCAST DATA SET NOT USABLE, CANNOT OPEN DATA SET

Explanation: An operator SEND command was issued which required accessing the broadcast data set. However, the broadcast data set could not be opened.

System action: Processing ends and no messages are saved in the broadcast data set. Broadcast data set-independent processing is completed.

Operator response: Report this message to the system programmer.

System programmer response: The master scheduler TIOT must contain a DD entry for the broadcast data set. The *ddname* on this entry must be SYSLBC.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -

Descriptor code: 5

IKJ141I BROADCAST DATA SET NOT USABLE, INSTALLATION MUST REFORMAT

Explanation: An operator SEND command was issued which required accessing the broadcast data set. However, the broadcast data set is not in release 2 format or has not been initialized.

System action: Processing ends and no messages are saved in the broadcast data set. Broadcast data set-independent processing is completed.

Operator response: Report this message to the system programmer.

System programmer response: Use the SYNC subcommand of ACCOUNT to initialize the broadcast data set and synchronize it with the UADS. The SYNC subcommand can be issued in the foreground or in the background using the TMP in the background.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -

Descriptor code: 5

IKJ142I INVALID USERID(S) *userid userid ...userid*

Explanation: A userid list, in an operator SEND command, contained an entry which was not a seven-character maximum alphameric string.

System action: Processing continues; the syntactically unacceptable recipients specified in the insert are ignored. If there are no other errors, the message will be sent to or saved for valid recipients.

Operator response: Examine the text of the SEND command for syntax errors. Issue another SEND command to route the message to the intended recipients who were ignored by the original SEND command processing.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -

Descriptor code: 5

IKJ143I USERIDS AFTER 20TH IGNORED

Explanation: An operator SEND command was issued which specified more than 20 valid userids. The first 20 userids will be processed, but all others will be ignored.

System action: Processing continues, but the message has not been sent to or saved for userids after the 20th userid.

Operator response: Issue another SEND command to route the message to the intended recipients who were ignored by the original SEND command processing.

Source: Time Sharing Option/Extensions (TSO/E)

IKJ144I • IKJ147I

Routing code: -

Descriptor code: 5

IKJ144I UNDEFINED USERID(S) *userid userid ...userid*

Explanation: An operator SEND command was issued which required saving mail for a specific user; however, the specified userids are not represented in the mail directory of the broadcast data set.

System action: Processing continues, but the message has not been sent to or saved for the unauthorized users.

Operator response: Report this message to the system programmer.

System programmer response: If the unauthorized user is represented in the UADS (User Attribute Data Set), then the UADS and broadcast data set should be synchronized; see SYNC subcommand of ACCOUNT. The ACCOUNT command may also be used to authorize userids for TSO.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -

Descriptor code: 5

IKJ145I IKJEFXSR ESTAE ERROR, CODE *return-code*

Explanation: This message is issued if there is a non-zero return code from ESTAE in IKJEFXSR, where *return-code* is one of the following:

- 04 ESTAE OV was specified with a valid exit address, but the current exit is either nonexistent, not owned by the user's RB, or is not an ESTAE exit.
- 08 BRANCH=YES was issued for the current SVRB with a create request; the previous BRANCH=YES exit is canceled and the new exit is made the current exit.
- 0C Cancel or an exit address equal to zero was specified, and either there are no exits for this TCB, the most recent exit is not owned by the caller, or the most recent exit is not an ESTAE exit.
- 10 An unexpected error was encountered while processing this request.
- 14 ESTAE was unable to obtain storage for an SCB.

System action: IKJEFXSR returns to IEEVIPL with a return code of zero.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: Note 2

Descriptor code: -

IKJ146I mod NOT FOUND BY IKJEFXSR IN LPA.

Explanation: The specified module was not found in LPA.

System action: Processing of IKJEFXSR continues normally.

Operator response: Notify the system programmer.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: Note 2

Descriptor code: -

IKJ147I IKJEFXSR ABNORMAL TERMINATION, ABEND *cde*.

Explanation: IKJEFXSR ended with an ABEND indicated by *cde*.

System action: IKJEFXSR returns to IEEVIPL.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: Note 2

Descriptor code: -

IKJ149I **IKJEFXSR COULD NOT JOIN THE SYSIKJBC XCF GROUP DUE TO AN IXCJOIN ERROR, RETURN CODE *xxx* REASON CODE *xxx*.**

Explanation: The SYSIKJBC XCF group could not be joined by IKJEFXSR during system initialization due to an error detected during IXCJOIN processing. Check *z/OS MVS Programming: Authorized Assembler Services Reference ALE-DYN*, *z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG*, *z/OS MVS Programming: Authorized Assembler Services Reference LLA-SDU*, or *z/OS MVS Programming: Authorized Assembler Services Reference SET-WTO* for the explanation of the return and reason codes for the service in error.

System action: The system continues processing.

Operator response: None.

Programmer response: Note the service in error, return codes, and reason codes, and contact your system programmer or IBM service representative for further assistance.

Source: Time Sharing Option/Extensions (TSO/E)

IKJ150I **AN ERROR OCCURRED IN THE XCF *service* SERVICE- RETURN CODE *return-code* REASON CODE *reason-code*.**

Explanation: During parmlib processing, the system tried to notify other systems in the sysplex that the values for the SEND parmlib statement were updated. The system found an error in the specified service.

System action: The system continues processing.

System programmer response: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

User response: Note the service in error, return codes, and reason codes, Contact the system programmer.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -

Descriptor code: 5

IKJ402I **TCAM PROCEDURE DOES NOT SUPPORT TIME SHARING**

Explanation: The procedure used to start TCAM specifies a message control program which will not support time sharing or a mixed-environment message control program which has no time sharing terminals.

System action: The request to modify TCAM to start time sharing is ignored.

Operator response: To start time sharing, the current TCAM procedure must be halted and a new one started which supports time sharing. If such a procedure cannot be found, notify the installation programmer.

Source: Time Sharing Option/Extensions (TSO/E)

IKJ403I **LINE GROUP FOR DD *ddname* NOT OPENED**

Explanation: The IBM-supplied TSO-TCAM message control program was unable to open the DCB for the line group data set that specified *ddn* as its *ddname*.

System action: Processing of the MCP continues with the telecommunications lines defined in this line group unavailable for use.

Operator response: Check the JCL used to execute the MCP to be sure that no desired DD statements are missing.

Source: Time Sharing Option/Extensions (TSO/E)

IKJ404I TS START REJECTED - INSUFFICIENT COMMON STORAGE AVAILABLE

Explanation: There was insufficient virtual storage available in the common area to support time sharing.

System action: The request to modify TCAM to start time sharing is rejected.

Operator response: The operator may wish to try his request again later. Common storage usage may drop enough to permit time sharing to be started. In any case, the installation programmer should be informed of the problem.

System programmer response: Determine if the heavy common storage usage was due to some exceptional condition. If not, enlarge the size of this area.

Source: Time Sharing Option/Extensions (TSO/E)

IKJ405I TIME SHARING ENDED

Explanation: Time sharing support in TCAM has ended.

System action: Time sharing is ended.

Source: Time Sharing Option/Extensions (TSO/E)

IKJ407I INVALID TIOC PARAMETER - xxx=yyy - IGNORED

Explanation: The indicated parameter expression is invalid on a TIOC parameter record.

System action: The invalid entry is ignored. If the intended parameter value is not specified on any other entry, the default value will be used.

Operator response: The installation programmer should be informed.

System programmer response: The invalid entry should be inspected for misspelling or conflict with other parameters and corrected appropriately.

Source: Time Sharing Option/Extensions (TSO/E)

IKJ408I MEMBER 'IKJPRM00' NOT FOUND

Explanation: The default member name 'IKJPRM00' could not be found on SYS1.PARMLIB.

System action: Time sharing initialization processing continues using defaults for time sharing system parameter values.

Source: Time Sharing Option/Extensions (TSO/E)

IKJ409I SYSTEM ERROR - TIME SHARING TERMINATED

Explanation: A system error occurred, causing time sharing to terminate.

System action: A diagnostic dump is taken to the SYS1.DUMP data set if this data set is available. Time sharing support is then ended.

Operator response: Time sharing may be started again if desired.

System programmer response: Before calling your programming support personnel, print the dump taken to SYS1.DUMP.

Source: Time Sharing Option/Extensions (TSO/E)

IKJ413I TIME SHARING NOT SUPPORTED ON AN ASCB-BASED TCAM

Explanation: For a MODIFY jobname,TS=START command, jobname must identify a CVT-based TCAM. Either the MODIFY command specifies an incorrect jobname or TCAM was started as an ASCB-based TCAM, which does not support time sharing.

System action: The system does not start the time sharing option (TSO/E).

Operator response: If the MODIFY command specified the correct jobname, notify the system programmer. Otherwise, correct the jobname.

System programmer response: See the description of the BASED operand for the INTRO operand in *ACF/TCAM Installation Guide*.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 2,8

Descriptor code: 5

IKJ414I UNABLE TO OPEN SYS1.PARMLIB

Explanation: The SYS1.PARMLIB data set either could not be opened or could not be allocated.

System action: Time sharing initialization processing continues using defaults for time sharing system parameter values.

Source: Time Sharing Option/Extensions (TSO/E)

IKJ550I USERIDS REFORMATTED – *userid userid ...userid*

Explanation: The specified modification has been accomplished on the noted userid members.

System action: Processing continues.

Operator response: Enter the next command.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 11

Descriptor code: 7

IKJ551I NOT ENOUGH MAIN STORAGE TO {EXECUTE REFORMAT | REFORMAT USERID *userid*}

Explanation: A GETMAIN request was unsuccessful.

System action: For userid space failure, UADSREFM continues processing any userids remaining in the UADS directory. Otherwise, all UADSREFM processing ends.

Operator response: Rerun the job in a larger region.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 11

Descriptor code: 7

IKJ552I UTILITY SYSTEM ERROR+ {*text*} ERROR CODE *nn*

Explanation: *text* is one of the following:

- STAE
- PUTLINE
- ENQ
- DEQ
- ACCOUNT-READ
- ACCOUNT-GETSPACE
- ACCOUNT-WRITE
- BACKSPACE

A failure has occurred in a service function. A code (*nn*) of 12 indicates an incorrect parameter list was supplied to the service routine. A code of *nn* represents an incorrect code with no assigned significance.

System action: If the error is STAE, BPS, or ENQ on SYSUADS, UADSREFM processing ends. Otherwise, processing for the current userid is ended and UADSREFM continues to process any userids remaining in the UADS directory.

System programmer response: Rerun the job.

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Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 11

Descriptor code: 7

IKJ553I **UNABLE TO EXECUTE REFORMAT+** *{text}*

Explanation: *text* is one of the following:

- SYSUADN RDJFCB FAILURE
- SYSUADS RDJFCB FAILURE
- NONIDENTIFIABLE BLOCKSIZE FOR IDENTICAL SYSUADS/SYSUADN
- SYSUADS BLOCKSIZE TOO SMALL

An error occurred in allocation or in reading the JFCB.

System action: UADSREFM processing continues.

System programmer response: Check the allocation and reallocation if required. Rerun the job.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 11

Descriptor code: 7

IKJ554I **{SYSUADN|SYSUADS} DATA SET NOT USABLE+** *{text}*

Explanation:

- CANNOT OPEN DATA SET
- STOW I/O ERROR CODE *return-code*
- SYNAD ERROR *synad info*

A failure was encountered in a service function.

System action: UADSREFM processing is ended.

Operator response: Rerun the job.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 11

Descriptor code: 7

IKJ555I **UNABLE TO REFORMAT** *userid*, **{USERID IN USE|BLOCKSIZE TOO SMALL}**

Explanation: The specified member is currently in use or the blocksize allocation is insufficient for the specified member.

System action: Processing for the specified *userid* is ended. UADSREFM continues to process any *userids* remaining in the UADS directory.

System programmer response: Attempt the reformat again after using the ACCOUNT command functions to rebuild the specified *userid*, individually.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 11

Descriptor code: 7

IKJ556I USERID *userid* NOT FOUND

Explanation: The service routines were unable to read the specified name.

System action: Processing for the specified userid is terminated. UADSREFM continues to process any userids remaining in the UADS directory.

System programmer response: Cross-check for the correct name (using the ACCOUNT-LIST or ACCOUNT-LISTIDS).

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 11

Descriptor code: 7

IKJ557I UADSREFM ENDED DUE TO ERROR+ SYSTEM COMPLETION CODE *cde*

Explanation: An error resulting in an ABEND (*cde*) occurred during UADSREFM member processing.

System action: UADSREFM processing is ended.

Operator response: Rerun the job.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 11

Descriptor code: 7

IKJ558I UNABLE TO CLOSE {SYSUADS|SYSUADN} DATA SET

Explanation: A failure occurred in the CLOSE function.

System action: UADSREFM processing is ended.

Operator response: Rerun the job.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 11

Descriptor code: 7

IKJ570I SEND NOT SUPPORTED IN THIS SYSTEM

Explanation: A SEND command was issued; however, the time sharing option was not included in the system at system generation time. Therefore, the SEND command is not operative.

System action: The SEND command is rejected.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -

Descriptor code: 5

IKJ572I USER *userid* NOT LOGGED ON, MESSAGE CANCELED

Explanation: In a SEND command which does not include the LOGON parameter, a userid was specified which is not currently logged on the time sharing system or the sending and/or target system does not support SEND in a sysplex. The message specified in the SEND command is not issued to the user with the userid specified in the message text. The message is issued to those users with userids which are logged on.

System action: The message specified in the SEND command is issued to the users, with userids specified in the SEND command, who are currently logged on.

Operator response: No response is required. If a message is to be sent to users with userids which are not logged on, enter the SEND command and include the LOGON parameter.

Source: Time Sharing Option/Extensions (TSO/E)

IKJ573I • IKJ576I

Routing code: -

Descriptor code: 5

IKJ573I SEND SYNTAX ERROR. COMMAND REJECTED

Explanation:

- The command contains embedded blanks.
- A delimiter is missing such as a comma after the message text, an equal sign after the key word 'USER', or a parenthesis around the userid list.
- The command contains an unidentifiable key word.
- Quotation marks around the message text are missing.
- The length of the message text is less than one character.

System action: The SEND command is rejected.

Operator response: Reenter the SEND command correctly.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -

Descriptor code: 5

IKJ574I NO SPACE IN BROADCAST DATA SET FOR {MAIL to *userid* | NOTICES}

Explanation: The portion of the Broadcast data set needed to contain a SEND message record is full:

1. MAIL to *userid* - The SEND command specified 'USER' and 'LOGON', but no free space is available in the user mail section of the Broadcast data set to contain the SEND message. *userid* is the user for whom mail cannot be saved.
2. NOTICES - The SEND command specified 'LOGON' and did not specify 'USER', no free space is available in the Broadcast notice section to contain the SEND message.

System action: The SEND message is sent to all specified users currently logged on. However, the message is not saved in the Broadcast data set for those users not currently logged on.

Operator response: Case 1 is a temporary situation. Space will be available in the mail section of the Broadcast data set as soon as a user for whom a message is intended enters a LOGON or LISTBC command. For case 2, it is necessary to free a Broadcast message number by issuing a SEND command with the 'DELETE' parameter specified.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -

Descriptor code: 5

IKJ576I NO BROADCAST MESSAGE

Explanation: One of the following occurred when a SEND command was issued:

- If the parameter MSGNO was specified, either there was no Broadcast notice message for the particular message number specified, or the message number specified exceeded the maximum value set at system generation time.
- If the LIST parameter was specified (without MSGNO) there were no Broadcast notice messages in the Broadcast data set.

System action: None.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -

Descriptor code: 5

IKJ577I MESSAGE FROM (*userid1* or *console*) HAS BEEN DELETED FROM *userid2* USER LOG BECAUSE OF INSUFFICIENT AUTHORITY TO VIEW THE MESSAGE.

Explanation: RACF indicated that the user attempting to view the message in the individual user log is not defined to a high enough security level to ever equal or dominate the security level associated with the message. The message is not displayed to the user and it is erased from the user log.

System action: The message is not displayed to the user and the message is erased from the user log.

Programmer response: None

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 9

Descriptor code: 4

IKJ578I BROADCAST MSGNO=nn

Explanation: A SEND command has been issued with the 'LOGON' parameter specified. The SEND message text is entered in the Broadcast data set with the message number nn.

System action: A message is entered in the Broadcast data set and is assigned message number nn.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -

Descriptor code: 5

IKJ579I CANNOT EXECUTE SEND

Explanation: The SEND command handling routines are unable to perform their functions for one of the following reasons:

- There is an insufficient amount of storage available.
- An internal error has occurred in one of the SEND modules.

System action: SEND processing is ended at the point the error is detected.

Operator response: Reenter the SEND command.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -

Descriptor code: 5

IKJ580I MESSAGE TRUNCATED TO 115 CHARACTERS

Explanation: A SEND command specified message text that was greater than the maximum of 115 characters allowed.

System action: The message text is truncated to 115 characters.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -

Descriptor code: 5

IKJ581I SEND UNSUCCESSFUL. SEND IS NOT ACTIVE.

Explanation: In the SEND PARMLIB control block, the installation indicated that SEND be deactivated.

System action: SEND processing ends.

Operator response: To make SEND operational, have your system programmer code an exit, or reIPL with the SEND PARMLIB command specifying OPERSEND(ON) to activate SEND.

System programmer response: To make SEND operational, you may want to code an initialization exit for SEND

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that changes the SEND PARMLIB control block to indicate that SEND is active.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -

Descriptor code: 5

IKJ582I SEND UNSUCCESSFUL. MESSAGES CANNOT BE STORED FOR USER(S) *useridlist* AT THIS TIME.

Explanation: The installation indicated in the SEND PARMLIB control block that messages are not to be saved for the users specified by *useridlist*.

System action: The system does not save messages for the specified users.

Operator response: To allow messages to be saved for the specified users, have your system programmer code an exit, or re-IPL with the SEND PARMLIB command specifying SAVE(ON) to allow messages to be saved.

System programmer response: To allow messages to be saved for the specified users, you may want to code an initialization exit or pre-save exit for SEND that changes the SEND PARMLIB control block to indicate that messages can be saved.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -

Descriptor code: 5

IKJ583E SEND TERMINATED. THE MESSAGE LOG COULD NOT BE ALLOCATED.+ DYNAMIC ALLOCATION ERROR CODE OF *xxxx* AND INFORMATION REASON CODE OF *rsnc* FOR USERID *userid*.

Explanation: SVC 99 could not allocate the user log for *userid*. *xxxx* and *reason-code* are the SVC 99 return codes for this error.

System action: The system does not save messages for the specified user, and SEND processing ends.

Operator response: Use the SVC 99 return codes to determine and correct the error that occurred. Then reissue the SEND command.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -

Descriptor code: 5

IKJ584I INSTALLATION EXIT *instexit* REQUESTED TERMINATION.+ REASON CODE X'xxxxxxxx'.

Explanation: The installation exit *instexit* requested termination and a message to be issued by specifying a return code of 12. This message is accompanied by the following message displaying the reason code, *xxxxxxxx*, that the exit returned to the invoker.

System action: The invoker of the installation exit ended.

Operator response: Check the list of exit reason codes for this particular exit to determine the problem.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -,2

Descriptor code: 5

IKJ585I EXIT NAME *exitname* WAS NOT FOUND.

Explanation: The exit name *exitname* could not be found in the proper system control block.

System action: The invoker of the installation exit ends.

Operator response: Notify your system programmer that this message appeared for *exitname*.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -

Descriptor code: 5

IKJ586I **ERROR OCCURRED WHILE INVOKING EXIT** *exitname.*+ **ABEND CODE** *code* **REASON CODE** X'xxxxxxx'.

Explanation: An ABEND occurred while attempting to invoke installation exit *exitname*; ABEND code *code* and reason code *xxxxxxx* are given.

System action: The invoker of the installation exit ends.

Operator response: Notify your system programmer that this message appeared for *exitname*, and provide the ABEND and reason code information.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -,2

Descriptor code: 5

IKJ587I **ERROR OCCURRED IN EXIT** *exitname.*+ **ABEND CODE** *code* **REASON CODE** X'xxxxxxx'.

Explanation: The invoker of exit *exitname* detected an ABEND in that installation exit's processing; ABEND code *code* and reason code *xxxxxxx* are given.

System action: The invoker of the installation exit ends.

Operator response: Notify your system programmer that this message appeared for *exitname*, and provide the ABEND and reason code information.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -,2

Descriptor code: 5

IKJ588I **ERROR DETECTED WHILE INVOKING EXIT** *exitname.*+ **UNABLE TO ESTABLISH RECOVERY ENVIRONMENT.**

Explanation: The invoker of exit *exitname* detected an error while attempting to invoke that exit; the error is the inability to establish a recovery environment.

System action: The invoker of the installation exit ends.

Operator response: Notify your system programmer that this message appeared for *exitname*.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -,2

Descriptor code: 5

IKJ590I **USER(S)** *userid list* **NOT ALLOWED TO VIEW THE MESSAGE, MESSAGE CANCELLED.**

Explanation: SAF and the security product (RACF) indicated that the specified user in the *userid list* do not have a security level that is equal to or higher than the sender's security level. To receive messages, a user must have a security level equal to or greater than the sender user's security level.

System action: The message is not displayed for the specified user.

Operator response: The message must be re-sent after the user logon at a security level which will allow them to view the message.

System programmer response: None

User response: None

Source: Time Sharing Option/Extensions (TSO/E)

IKJ591I • IKJ593I

Routing code: -

Descriptor code: 5

IKJ591I MAIL LOG DOES NOT EXIST FOR USER(S) *userid list* AND THE BROADCAST DATA SET CANNOT BE USED, MESSAGE CANCELLED.

Explanation: The message being sent to the specified user in the *userid list* cannot be saved because the user does not have an individual mail log and the SEND PARMLIB statement operand USEBROD is OFF.

System action: The message is not saved for the specified user.

Operator response: A user will have an individual mail log created after either of these actions:

- the user performs a LISTBC
- the user logs on requesting mail.

System programmer response: Have the specified user perform a LISTBC or log on requesting mail, or allocate an individual mail log for the user.

User response: None

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -

Descriptor code: 5

IKJ592I ERROR IN SEND COMMAND PROCESSING. MESSAGE NOT SENT. CONVCON RETURN CODE IS *xx*.

Explanation: An internal error occurred in the SEND command. The SEND command processor failed to identify the origin console or terminal.

System action: SEND command processing ends.

Operator response: Note the CONVCON return code and ask your system programmer to contact an IBM service representative.

Programmer response: Note the CONVCON return code and ask your system programmer to contact an IBM service representative.

Routing code: -

Descriptor code: 5

IKJ593I CONSOLE *name or number* IS NOT VALID.

Explanation: A user of the SEND command entered a console name or number which is not valid at that user's installation.

Console names are defined by your system programmer in SYS1.PARMLIB (CONSOL xx). The console names are two to eight characters long and must begin with an alphabetic or national character. The remaining characters may be alphanumeric.

System action: SEND command processing ends.

Operator response: Issue the SEND command with a valid console name.

Programmer response: None.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -

Descriptor code: 5

IKJ594I CONSOLE ID *number* IS OUT OF THE VALID RANGE.

Explanation: A user of the SEND command entered a console number that exceeds 99. Console numbers must be one or two decimal digits.

System action: The SEND command issues this message and processing ends.

Operator response: Issue the SEND command with a valid console number.

Programmer response: None.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -

Descriptor code: 5

IKJ595I ERROR IN SEND COMMAND PROCESSING. MESSAGE NOT SENT TO CONSOLE *name or number*. CONVCON RETURN CODE IS *xx*.

Explanation: An internal error occurred in the SEND command.

System action: SEND command processing ends.

Operator response: Note the CONVCON return code and ask your system programmer to contact an IBM service representative.

Programmer response: Note the CONVCON return code and ask your system programmer to contact an IBM service representative.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -

Descriptor code: 5

IKJ596I NOT ALLOWED TO SEND MESSAGES TO USER(S) *userid list*, MESSAGE CANCELLED.

Explanation: SAF and the security product (RACF) indicated that the operator issuing the SEND command does not have authority to the resource(s) describing the receiver(s) of the message in the *userid list*.

System action: The message is not displayed for the specified user(s).

Operator response: Contact your security administrator.

System programmer response: Determine if the operator should be allowed to send messages to the specified user(s). Then give the user access to the resource they need.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -

Descriptor code: 5

IKJ597I SEND TERMINATED. THE MESSAGE LOG COULD NOT BE LOCATED. LOCATE RETURN CODE OF *xxxxxxx* FOR USERID *userid*.

Explanation: The LOCATE of the user log for *userid* encountered an error. *xxxxxxx* is the LOCATE return code for this error.

System action: The system does not save messages for the specified user and SEND processing ends.

Operator response: Use the LOCATE return code to determine and correct the error that occurred. Then reissue the SEND command.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -,2

Descriptor code: 5

IKJ600I **TSOLOGON {I/O|OBTAIN|OPEN} ERROR,DDNAME *ddname*, USER {userid|UNKNOWN}, PROC {ppp|UNKNOWN}**

Explanation: TSO LOGON was unsuccessful in performing one of the indicated operations (I/O, OBTAIN, or OPEN). In the message text, *ddname* refers to the DD statement defining the data set being referenced when the error occurred. The message text also includes the user identification (userid) of the user being serviced when the error occurred and the procedure name, *ppp*, which the user had selected unless they are unknown to TSO LOGON at the time of the error.

System action: The system disconnects the user from the TSO subsystem after transmitting message IKJ56452I to the user's terminal and invoking the TSO Dump facility to provide a dump for error analysis.

Operator response: Probable hardware error.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 2,10

Descriptor code: 4

IKJ601I **TSOLOGON {PROCEEDING | TERMINATED | ATTEMPTING RETRY} ABEND *cde*, USER {userid|UNKNOWN} , PROC {ppp|UNKNOWN}**

Explanation: Conditions leading to an abnormal termination with a code of *cde* have arisen in a TSO LOGON module. In the message text, *userid* is the identification of the user being serviced by TSO LOGON when abnormal end occurred, and *ppp* is the name of the procedure that the user requested. If the *userid* or procedure name are not known, UNKNOWN appears in the message text. Also in this message text is an indication of whether LOGON can recover from the error via RETRY, end of the session is to occur, or the error was not critical to user LOGON processing and LOGON will proceed with this processing.

System action: The system either ends the TSO LOGON function in which the abnormal end occurred, or attempts to recover after transmitting message IKJ65452I to the terminal on whose behalf TSO LOGON was operating.

An SVC dump is issued when:

- A program check occurred.
- The PSW RESTART key was pressed.
- A failure occurred in module IKJEFLD.

For any other condition, the system provides a dump only if the master scheduler JCL contains a SYSABEND, SYSMDUMP, or SYSUDUMP DD statement.

An error record is written to the logrec data set.

Operator response: Notify the system programmer of this message.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 2,10

Descriptor code: 4

IKJ602I **INCONSISTENT AUTHORIZATION DATA FOR *userid***

Explanation: A data or control field within the User Attribute Data Set (UADS) for the user with the *userid* specified in the message is incorrect. The authorization data cannot be used for LOGON processing.

System action: The system offers the terminal user the choice of logging on with a different *userid*, or logging off.

Operator response: For diagnostic purposes it is desirable to freeze the UADS data for 'userid' until the cause of the difficulty has been isolated. However, if rapid restoration of the authorization data for 'userid' is necessary, it can be restored by performing the following recovery operations:

- Use the DELETE subcommand of the ACCOUNT command to purge the damaged data for 'userid' from the UADS.
- Use the ADD subcommand of the ACCOUNT command to reenter valid authorization data.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 2,10

Descriptor code: 4

IKJ603I TSOLOGON {TERMINATED|ATTEMPTING RETRY} INSTALLATION EXIT {ABEND *cde*|ERROR}

Explanation: A routine provided by the installation's systems programmer to augment or modify IBM's standard LOGON processing has failed. If the failure took the form of a system abnormal end, the word ABEND appears in the message text, and code *cde* is the system completion code and an indication as to whether LOGON is attempting retry or ending because of the ABEND. Otherwise, the word ERROR appears in the message text, code *cde* is the error code developed by TSO LOGON upon analysis of the parameters returned by an exit routine and LOGON will always end. The error codes and their meaning are as follows:

Code Explanation

004	The address of the control switch buffer passed to the preprompt EXIT was altered during exit processing.
008	The control switches buffer length passed to the preprompt EXIT was altered during exit processing.
012	The length of the control switches returned by the preprompt EXIT was longer than the buffer or less than zero.
016	The address of the command buffer passed to the preprompt EXIT was altered during exit processing.
020	The command buffer length passed to the Pre-Prompt Exit was altered during exit processing.
024	The length of the command returned by the preprompt EXIT was longer than the buffer or less than zero.
028	The address of the userid buffer passed to the preprompt EXIT was altered during exit processing.
032	The userid buffer length passed to the Pre-Prompt Exit was altered during exit processing.
036	The length of the userid returned by the Pre-Prompt Exit was longer than the buffer or less than zero.
040	The preprompt EXIT returned a zero length userid for LOGON processor use.
044	The preprompt EXIT returned an unauthorized userid for LOGON processor use.
048	The address of the password buffer passed to the preprompt EXIT was altered during exit processing.
052	The password buffer length passed to the Pre-Prompt Exit was altered during exit processing.
056	The length of the password returned by the preprompt EXIT was longer than the buffer or less than zero.
060	The preprompt EXIT returned an unauthorized password for LOGON processor use.
064	The address of the account buffer passed to the preprompt EXIT was altered during exit processing.
068	The account buffer length passed to the Pre-Prompt Exit was altered during exit processing.
072	The length of the account returned by the Pre-Prompt Exit was longer than the buffer or less than zero.
076	The preprompt EXIT returned an unauthorized account for LOGON processor use.
080	The address of the procedure name buffer passed to the preprompt EXIT was altered during exit processing.
084	The procedure name buffer length passed to the preprompt EXIT was altered during exit processing.
088	The length of the procedure name returned by the preprompt EXIT was longer than the buffer or less than zero.
092	The preprompt exit returned a zero length procedure name for LOGON processor use and no JCL was supplied, or else it was a logon reconnect and the logon was the first logon.
096	The preprompt EXIT returned an unauthorized procedure name for LOGON processor use.
100	The preprompt EXIT returned a region size outside the bounds supported by TSO/E for LOGON processor use.
104	The preprompt EXIT returned an unauthorized region size for LOGON processor use.
108	The address of the JCL buffer passed to the preprompt EXIT was altered during exit processing.
112	The JCL buffer length passed to the preprompt EXIT was altered during exit processing.

IKJ603I

- 116 The length of the JCL returned by the preprompt EXIT was longer than the buffer or less than zero.
- 120 The preprompt EXIT returned less than two JCL card images for LOGON processor use.
- 124 The preprompt EXIT returned a partial JCL card image for LOGON processor use.
- 128 The address of the PSCB accounting data buffer passed to the preprompt EXIT was altered during exit processing.
- 132 The PSCB accounting data buffer length passed to the preprompt EXIT was altered during exit processing.
- 136 The length of the PSCB accounting data returned by the preprompt EXIT was longer than the buffer or less than zero.
- 140 The address of the First Attribute buffer passed to the preprompt EXIT was altered during exit processing.
- 144 The First Attribute buffer length passed to the preprompt EXIT was altered during exit processing.
- 148 The length of the First Attribute returned by the preprompt EXIT was longer than the buffer or less than zero.
- 152 The address of the Second Attribute buffer passed to the preprompt EXIT was altered during exit processing.
- 156 The Second Attribute buffer length passed to the preprompt EXIT was altered during exit processing.
- 160 The length of the Second Attribute returned by the preprompt EXIT was longer than the buffer or less than zero.
- 164 The address of the Generic Group buffer passed to the preprompt EXIT was altered during exit processing.
- 168 The Generic Group buffer length passed to the preprompt EXIT was altered during exit processing.
- 172 The length of the Generic Group returned by the preprompt EXIT was longer than the buffer or less than zero.
- 176 The address of the UPT buffer passed to the preprompt EXIT was altered during exit processing.
- 180 The UPT buffer length passed to the preprompt EXIT was altered during exit processing.
- 184 The length of the UPT returned by the Pre-Prompt Exit was longer than the buffer or less than zero.
- 188 The address of the ECT buffer passed to the preprompt EXIT was altered during exit processing.
- 192 The ECT buffer length passed to the preprompt EXIT was altered during exit processing.
- 196 The length of the ECT returned by the preprompt EXIT was longer than the buffer or less than zero.
- 200 The address of the DEST userid buffer passed to the preprompt EXIT was altered during exit processing.
- 204 The DEST userid buffer length passed to the preprompt EXIT was altered during EXIT processing.
- 208 The length of the DEST userid returned by the preprompt EXIT was longer than the buffer or less than zero.
- 212 The Pre-prompt EXIT returned a zero length DEST userid for LOGON processor use.
- 216 The Pre-prompt EXIT returned a DEST userid that was not defined to the subsystem.
- 220 The Pre-prompt EXIT returned a performance group value which was not between 1 and 255 inclusive.
- 224 The Pre-prompt EXIT returned an unauthorized performance group value for LOGON processor use.
- 228 The Pre-prompt EXIT returned a performance group value which was not defined to the system.
- 232 The subsystem encountered an error while attempting to validate the DEST userid returned by the preprompt EXIT.
- 236 The subsystem interface encountered an error while attempting to validate the DEST userid returned by the preprompt EXIT.
- 250 The address of the new password buffer passed to the pre-prompt exit was altered during exit processing.
- 254 The new password buffer length passed to the pre-prompt exit was altered during processing.
- 258 The length of the new password buffer returned by the pre-prompt exit was longer than the buffer or less than zero.

- 262 The pre-prompt exit returned an unauthorized new password for logon processor use.
- 266 The address of the group identification buffer passed to the pre-prompt exit was altered during exit processing.
- 270 The group identification buffer length passed to the pre-prompt exit was altered during exit processing.
- 274 The length of the group identification buffer returned by the pre-prompt exit was longer than the buffer or less than zero.
- 278 The pre-prompt exit returned an unauthorized group identification for logon processor use.

System action: The system issues message IKJ56452I to the terminal of the user whose LOGON failed. A dump is taken for error analysis and error recording is taken to the LOG data set. The message text indicates whether LOGON will retry or end.

Operator response: Notify the system programmer of this message.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 2,10

Descriptor code: 4

IKJ605I TSOLOGON TERMINATED. TO MANY ATTEMPTS. USER {userid|UNKNOWN}

Explanation: TSO LOGON denied a user with the identification userid access to the TSO subsystem because the user exceeded the limit, specified at system generation time, of attempts to enter a valid set of LOGON operands.

System action: The system transmits message IKJ56428I to the terminal of the user, and disconnects the terminal from the TSO subsystem.

Operator response: None required. However, if this situation recurs frequently, inform your installation manager since some individual may be attempting to obtain unauthorized access to the TSO subsystem.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 2,9

Descriptor code: 6

IKJ606I TSOLOGON REJECTED. USERID, userid, < IN USE

Explanation: TSO LOGON denied a LOGON request of a user for one of two reasons:

- Another user was currently logged on under the same userid.
- A member of the installation management staff was using the TSO ACCOUNT command to alter the authorization of the user to utilize the TSO subsystem.

System action: The system transmits message IKJ56425I to the terminal of the user who was unable to log on.

Operator response: None required. If your installation requires that each individual using the TSO subsystem have his own unique userid, then the userid of the individual involved may be in use by an unauthorized individual. If there is any reason to suspect that this is the case, make sure that the installation manager is informed of the incident.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 2,9

Descriptor code: 6

IKJ608I TSOLOGON TERMINATED. {sname|mac} ERROR return-code. USER {userid|UNKNOWN} PROC {ppp|UNKNOWN}

Explanation: The TSO service routine (*sname*) or the macro instruction (*mac*) returned the abnormal return code (*return-code*), which indicates that a situation had arisen from which indicates that a situation had arisen from which TSO/E LOGON could not recover. The userid of the user being serviced by TSO/E LOGON when the incident occurred and the name of the procedure requested appear in the message text.

IKJ609I • IKJ611I

When the service is IKTLOGR and the return code is 12, it means either the USERMAX limit in the TSOKEYxx member has been exceeded or the CLSDST PASS to the old address space failed.

When the service is IKTLOGR and the return code is 16, it means reconnect was disabled by RECONLIM=0 in the TSOKEYxx parmlib member. For more information about TSOKEYxx settings, see *z/OS MVS Initialization and Tuning Reference*.

When the program is IKTLOGR and the return code is 26, it means reconnect failed because a previous reconnect attempt was already in progress.

System action: The system transmits message IKJ56454I to the terminal for which TSO/E LOGON was operating. It then disconnects the terminal from the system.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 2,10

Descriptor code: 4

IKJ609I TSOLOGON TERMINATED REQUIRED DDNAMES, MISSING: *ddname ddname...ddname*

Explanation: The ddnames specified in the message are required for LOGON processing. The following list of ddnames is currently required:

SYSUADS

This *ddname* describes the user attribute data set.

SYSLBC

This *ddname* is used for access to the broadcast data set.

System action: The system issues message IKJ56452I to the terminal for which TSOLOGON was operating. It then disconnects the terminal from the TSO subsystem.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 2,10

Descriptor code: 4

IKJ610I TSOLOGON TERMINATED. RACF IS INACTIVE

Explanation: The user could not log on because RACF is inactive.

System action: The system ends the logon attempt.

Operator response: Notify your system programmer.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 2,10

Descriptor code: 4

IKJ611I TSOLOGON TERMINATED *xxx* ERROR-RETURN CODE *return-code*, REASON CODE *reason-code*, USER *userid*

Explanation: The user received an unexpected return code from a RACF macro, such as RACHECK. The macro name, along with the return code, reason code, and userid is displayed in this message.

System action: The system ends the logon attempt.

Operator response: Notify your system programmer.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 2,10

Descriptor code: 4

IKJ612I TSOLOGON TERMINATED. USER *userid* IS NOT DEFINED TO ANY PROCEDURE NAMES

Explanation: The user does not have any procedure names defined to RACF, so JCL cannot be built.

System action: The system ends the logon attempt.

Operator response: Notify your system programmer.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: -

Descriptor code: -

IKJ613I TSOLOGON TERMINATED. RACHECK ERROR WHILE PROCESSING CLASS *xxx*- RETURN CODE *return-code* REASON CODE *reason-code*, USER *userid*

Explanation: While processing class *xxx*, RACHECK passed back an unexpected return code.

System action: The system ends the logon attempt.

Operator response: Notify your system programmer.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 2,10

Descriptor code: 4

IKJ614I UPT MIGRATION FROM UADS TO RACF FAILED FOR USER *userid*,< REASON CODE *rc*

Explanation: The migration of the user profile table failed for user *userid*, due to the error indicated by reason code *reason-code*:

Reason Code**Explanation**

04 An error occurred while attempting to open the UADS data set.

08 An input/output error occurred while reading the UADS data set.

System action: The default user profile table is created for *userid*, and logon continues.

Operator response: Notify your system programmer.

System programmer response: Correct the error indicated by reason code *reason-code*.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 2,10

Descriptor code: 4

IKJ620I Unable to reconnect user *user_id* - JESXCF not active.

Explanation: A logon was made with the reconnect option, but the user was not logged on to the local system. Since JESXCF is not active TSO is not able to determine the system where the user might be logged on.

System action: The logon request is rejected.

User response: Attempt to logon again later, or contact your system programmer for assistance.

IKJ621I LOGON terminated - IXZXTSOI function call failed. RC = *return-code*, RSN = *reason-code*, User *userid*

Explanation: JESXCF reported an error condition while TSO was attempting to transfer the logon reconnect request to the system where the user was logged on. Examine the return and reason code in the message for the cause of the failure.

System action: The logon request is rejected.

IKJ622I • IKJ703I

User response: Attempt to logon again later. If the problem occurs again, contact your system programmer for problem analysis.

IKJ622I Unable to reconnect user *user_id* to system *system name* - **RC** = *return-code*, **RSN** = *reason-code*.

Explanation: An attempt was made to logon on with the reconnect option, but TSO was unable to transfer the logon request to the system in the sysplex where the user was logged on. The error occurred on the system where the user was logged on. Examine the return and reason code (both shown in decimal) for possible causes:

RC	RSN	Cause
12	nn	An ESTAE or SETLOCK macro request failed. nn is the return code provided by ESTAE or SETLOCK.
16	nn	An abend occurred. nn is the abend reason code.

System action: The LOGON command terminates.

User response: Issue the logon command using the reconnect option.

IKJ701I TSO PARMLIB MEMBER IKJT_{SO}xx NOT FOUND.

Explanation: The SYS1.PARMLIB member specified on the PARMLIB or SET command, or IKJT_{SO}=xx in member IEASYSxx at IPL time, does not exist.

System action: The system ignores the PARMLIB command or, in the case of an IPL, the system will use the settings specified in the IKJT_{ABLES} load module and continue. See *z/OS TSO/E Customization*, "Specifying authorized commands/programs, and commands not supported in the background" for more information.

System programmer response: If you wish to use the specified PARMLIB member, create the member using another member as a model or by copying it from SYS1.SAMPLIB to SYS1.PARMLIB and updating as appropriate. Use the TSO PARMLIB UPDATE(xx) command, or the SET IKJT_{SO}=xx command on the System Console to activate the specified PARMLIB member.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 2

Descriptor code: 4

IKJ702I TSO PARMLIB MEMBER IKJT_{SO}xx CONTAINS A RECORD THAT IS TOO LONG.

Explanation: In the SYS1.PARMLIB member specified on the PARMLIB or SET command, or in member IKJT_{SO}xx at IPL time, the length of a command record exceeds the maximum number of bytes (32768).

System action: The system ignores the record. At IPL time, the system builds IBM-supplied defaults for that command, and continues to process any other valid records in the member.

System programmer response: After the IPL or PARMLIB command is finished, correct the long record.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 2

Descriptor code: 4

IKJ703I TSO PARMLIB MEMBER IKJT_{SO}xx CONTAINS AN INCORRECT KEYWORD.

Explanation: An incorrect keyword was found in the SYS1.PARMLIB member specified on the PARMLIB or SET command, or in member IKJT_{SO}xx at IPL time.

System action: The system ignores the record containing the incorrect keyword. At IPL time, the system builds IBM-supplied defaults for that record and any other records in the member.

System programmer response: After the IPL or PARMLIB command is finished, correct the incorrect keyword and reissue the PARMLIB command. For a list of keywords that are valid in IKJT_{SO}xx, see *z/OS MVS Initialization and Tuning Reference*.

If this message appears during a syntax check, it indicates that the record is incorrect. If an update request were to be made using this PARMLIB member, the above action would be taken by the system. The command will continue to check other records in the PARMLIB member, and other messages may be generated. Correct the invalid records before attempting an update operation.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 2

Descriptor code: 4

IKJ704I TSO PARMLIB MEMBER IKJTSOxx CONTAINS AN INVALID KEYWORD VALUE.

Explanation: An incorrect value was found on a keyword parameter in the SYS1.PARMLIB member specified on the PARMLIB or SET command, or in member IKJTSOxx at IPL time.

System action: The system ignores the record with the incorrect value. At IPL time, the system builds IBM-supplied defaults for that record, and continues to process any other valid records in the member.

System programmer response: After the IPL or PARMLIB command is finished, correct the incorrect value and reissue the PARMLIB command. For a list of keyword values that are valid in IKJTSOxx, see *z/OS MVS Initialization and Tuning Reference*.

If this message appears during a syntax check, it indicates that the record is incorrect. If an update request were to be made using this PARMLIB member, the above action would be taken by the system. The command will continue to check other records in the PARMLIB member, and other messages may be generated. Correct the incorrect records before attempting an update operation.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 2

Descriptor code: 4

IKJ705I A COMMAND FOUND IN TSO PARMLIB MEMBER IKJTSOxx IS NOT VALID.

Explanation: The COMMAND SCAN routine found an incorrect command in the SYS1.PARMLIB member specified on the PARMLIB or SET command, or in member IKJTSOxx at IPL time.

System action: The system ignores the record with the incorrect command. At IPL time, the system builds IBM-supplied defaults for that record, and continues to process any other valid records in the member.

System programmer response: After the IPL or PARMLIB command is finished, correct the incorrect command and reissue the PARMLIB command. For a list of commands that are valid in IKJTSOxx, see *z/OS MVS Initialization and Tuning Reference*.

If this message appears during a syntax check, it indicates that the record is incorrect. If an update request were to be made using this PARMLIB member the above action would be taken by the system. The command will continue to check other records in the PARMLIB member, and other messages may be generated. Correct the incorrect records before attempting an update operation.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 2

Descriptor code: 4

IKJ706I AN ERROR OCCURRED WHEN READING TSO PARMLIB MEMBER IKJTSOxx.

Explanation: The system could not properly read the SYS1.PARMLIB member specified on the PARMLIB or SET command, or member IKJTSOxx at IPL time.

System action: The system continues without updating system values. At IPL time, the system builds IBM-supplied defaults. If this message appears during a syntax check, the check ends and no system values are changed.

Operator response: Notify your system programmer.

System programmer response: Contact programming support personnel.

IKJ707I • IKJ710I

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 2

Descriptor code: 4

IKJ707I TSO PARMLIB MEMBER IKJTSOxx IS EMPTY.

Explanation: The SYS1.PARMLIB member specified on the PARMLIB or SET command, or member IKJTSOxx at IPL time, contains no data.

System action: At IPL time, the system builds IBM-supplied defaults. If this message appears during a syntax check, the syntax check terminates and no system values are updated.

System programmer response: If you wish to use the specified PARMLIB member, create the member by copying it from SYS1.SAMPLIB to SYS1.PARMLIB and make any desired changes.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 2

Descriptor code: 4

IKJ708I AN ERROR OCCURRED WHILE PROCESSING TSO PARMLIB MEMBER IKJTSOxx.

Explanation: This message always appears with message IKJ709I, which further explains the error.

System action: The system continues to IPL.

System programmer response: Refer to message IKJ709I for the appropriate programmer response.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 2

Descriptor code: 4

IKJ709I END OF FILE OCCURRED AFTER CONTINUATION WAS FOUND.

Explanation: For the SYS1.PARMLIB member specified on the PARMLIB or SET command, or member IKJTSOxx at IPL time, one of two situations was encountered:

- an end of file appeared in the middle of a continued line; or
- a line was continued at the end of the SYS1.PARMLIB member.

System action: The system ignores the invalid record. At IPL time, the system builds IBM-supplied defaults for any remaining commands and tables.

System programmer response: After the IPL or PARMLIB command is finished, correct the invalid record.

If this message appears during a syntax check, it indicates that the record is invalid. If an update request were to be made using this PARMLIB member the above action would be taken by the system. The command will continue to check other records in the PARMLIB member, and other messages may be generated. Correct the invalid records before attempting an update operation.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 2

Descriptor code: 4

IKJ710I DUPLICATE PARAMETER FOUND IN SYS1.PARMLIB MEMBER IKJTSOxx.

Explanation: A parameter is duplicated in the SYS1.PARMLIB member specified on the PARMLIB or SET command, or in member IKJTSOxx at IPL time.

System action: The parameter is processed at its last occurrence and preceding duplicates are ignored.

System programmer response: When the IPL or PARMLIB command is finished, remove any duplicate parameters in the specified member of SYS1.PARMLIB.

If this message appears during a syntax check, it indicates that the record is duplicated. If an update request were to be made using this PARMLIB member, the above action would be taken by the system. The command will continue to check other records in the PARMLIB member, and other messages may be generated. Correct the duplicate records before attempting an update operation.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 2

Descriptor code: 4

IKJ711I A NODE NAME OR SMF ID IS MISSING FROM THE TRANSREC STATEMENT.

Explanation: NODE names and SMF identifiers must be specified in pairs. Either the NODE name or SMF identifier is missing.

System action: The PARMLIB UPDATE fails, or IPL continues using IBM-supplied defaults.

System programmer response: When the IPL or PARMLIB command is finished, check the TRANSREC NODESMF parameters in the specified member of SYS1.PARMLIB. Make sure that each parameter contains a NODE name and an SMF identifier, separated by a comma or a blank, and that each parameter is enclosed in parentheses.

If this message appears during a syntax check, it indicates that the record is invalid. If an update request were to be made using this PARMLIB member, the above action would be taken by the system. The command will continue to check other records in the PARMLIB member, and other messages may be generated. Correct the invalid records before attempting an update operation.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 2

Descriptor code: 4

IKJ712I DEFAULT VALUES WERE USED FOR xxxxxxxx

Explanation: Default values for the command were used because:

- The command was not included in the specified member of SYS1.PARMLIB (at IPL time, IKJTSOxx).
- An error occurred reading the command at IPL time.

System action: The system builds IBM-supplied defaults for the command.

System programmer response: If installation values should have been specified for the command, verify that the command is properly specified in IKJTSOxx. Otherwise, this is an informational message.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 2

Descriptor code: 4

IKJ713I SYSTEM DEFAULTS WERE UPDATED USING SYS1.PARMLIB MEMBER xxxxxxxx

Explanation: A PARMLIB UPDATE request completed successfully using the specified SYS1.PARMLIB member.

System action: Values specified in that member take effect on the system. This message is informational only.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 2

Descriptor code: 4

IKJ714I THE PARMLIB CLEANUP ROUTINE FAILED FOR xxxxxxxx

Explanation: The PARMLIB cleanup routine for the specified command failed while attempting to release the storage that its corresponding update routine had obtained.

System action: The PARMLIB command is ending.

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System programmer response: There may be some residual storage from the PARMLIB routine remaining in the common storage area. Contact local support personnel or your IBM service representative for further assistance.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 2

Descriptor code: 4

IKJ715I SYSTEM DEFAULTS WERE UPDATED USING *member* OF DATASET *dataset* FROM SYSTEM *system*

Explanation: A PARMLIB UPDATE request, which was routed from another system, caused the TSO/E parmlib settings to be updated on this system.

System action: Values specified in that member take effect on this system. This message is informational only.

System programmer response: None.

Source: Time Sharing Option/Extensions (TSO/E)

IKJ716I TSO/E PARMLIB DEFAULT VALUES WERE USED FOR *xxxxx*

Explanation: A PARMLIB UPDATE request was routed from another system. Default values for the statement were used because the statement was not included in the specified PARMLIB member.

System action: The system builds IBM-supplied defaults for the statement.

System programmer response: If installation values should have been specified for the statement, verify that the statement is properly specified in the IKJTSOxx. Otherwise, this is an informational message.

Source: Time Sharing Option/Extensions (TSO/E)

IKJ720I UNABLE TO FORWARD REQUEST - JESXCF IS NOT ACTIVE

Explanation: An attempt was made to send a message to one or more TSO/E users that are logged on to another system in the sysplex. JESXCF or JES is not active or the service that allows you to transport the SEND command to a remote system is currently not available. TSO/E is not able to forward the SEND command to the system(s) where the user(s) is logged on.

System action: The SEND command is rejected.

User response: Issue the SEND command again later, or contact your system programmer for assistance.

Routing code: -

Descriptor code: 5

IKJ721I IXZXTSOI FUNCTION CALL FAILED. RC=*xx*, RSN=*nnnn*,

Explanation: JESXCF reported an error condition while TSO/E was attempting to transfer the SEND command to the system where the user is logged on.

System action: The SEND command is rejected.

User response: Likely the causes for the failure are:

- the USERID was not found (RC04, RSN04) or duplicate USERIDs were found (RC04, RSN08).
- the system name or group name specified by the ROUTE parameter is valid, but either the system is not active (RC04, RSN44) or no system in the group is active (RC04, RSN56).
- The current version of the local Job Entry Subsystem (JES) does not support the routing of the SEND command to another system in the sysplex (RC04, RSN48).

Attempt to correct the error or contact your system programmer for problem analysis. If none of the above conditions apply, or the problem persists, record the message ID, return code, and reason code and contact IBM support personnel for problem analysis.

Return Code

Explanation

04

Reason Code	Explanation
12	The input buffer passed to JESXCF by the TSO/E SEND command processor exceeds the maximum. The maximum length is 60K bytes.
20	An error occurred while processing the SEND command on one of the systems identified by the ROUTE parameter.
24	An error occurred while processing the SEND command on the system named by the ROUTE parameter.
28	JESXCF was not able to obtain the required storage to return the information provided by the remote TSO/E routine to the SEND command processor.
32	The z/OS operating system running on the remote system is not at the appropriate level.
36	An internal JESXCF error occurred.
44	The system name specified by the ROUTE parameter is valid, but not active.
48	The current version of the local job entry subsystem (JES) does not support the routing of the SEND command to another system in the sysplex.
56	The group name specified by the ROUTE parameter is valid, but no system in the group is active.
68	Incorrect version identifier found in the parameter list passed to JESXCF by the PARMLIB command processor.

If you receive one of these return and reason codes, re-issue the SEND command later. If the problem reoccurs, contact your IBM service representative.

All other return and reason codes indicate a severe error. If you receive a return or reason code that is not listed, contact your IBM service representative for problem analysis.

Routing code: -

Descriptor code: 5

IKJ722I UNKNOWN SYSTEM NAME OR GROUP NAME *nnnnnnnn*

Explanation: The system name or group name specified on the ROUTE parameter is not defined. If the name identifies a system, the system might not be active in the sysplex. This message can also mean that the level of JES on the operating system running the remote system is at a level lower than required.

System action: The SEND command is rejected.

User response: Issue the SEND command again with a valid system or group name. If you need a list of valid system or group names, contact your system programmer.

Routing code: -

Descriptor code: 5

IKJ723I SEND UNSUCCESSFUL ON SYSTEM *nnnnnnnn*. **RC=xx**, **RSN=nnn**

Explanation: An attempt was made to send a message to one or more users logged on to other system(s) in the sysplex. The remote TSO/E system encountered an error. Examine the return and reason code (in decimal) for possible causes.

Return Code

Explanation

12

Reason Code

Explanation

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nn An z/OS service call failed. *nn* is the return code given by the service call.

16

nn An abend occurred. *nn* is the abend reason code.

System action: Processing continues

User response: A likely cause for the failure is remote system nnnnnnnn specified on the ROUTE parameter is at a level lower than required.

Attempt to correct the error or contact your system programmer for problem analysis. If the problem persists, record the message ID, return code, and reason code and contact IBM support personnel for problem analysis.

Routing code: -

Descriptor code: 5

IKJ724I SEND REJECTED: NOT RUNNING WITHIN A PARALLEL SYSPLEX

Explanation: The ROUTE parameter was specified on the SEND command, but the system is one of the following:

- not participating in a sysplex
- the sysplex consists of one active system only

System action: The SEND command is rejected.

User response: Reenter the SEND command correctly.

Routing code: -

Descriptor code: 5

IKJ730I REDUNDANT USE OF ((*,*)) ON TRANSREC STATEMENT IN SYS1.PARMLIB DET

Explanation: During IPL or processing of a PARMLIB command the system detected invalid TRANSREC NODESMF statement in SYS1.PARMLIB member IKJTSOxx. The ((*,*)) notation was found in addition to a list of nodename-smfid pairs.

You can use a pair of asterisks in the form of ((*,*)) or list of nodename-smfid pairs, but not both. Asterisks allow the system to dynamically retrieve the information from JES.

System action: If the error occurred during IPL, the system uses IBM-supplied defaults and continues IPL. If the error occurred in response to a PARMLIB UPDATE command, the system did not update the IKJTSOxx member of SYS1.PARMLIB.

System programmer response: Correct the parameters on the TRANSREC NODESMF statement. Specify either ((*,*)) or ((nodename,smfid),(nodename,smfid) ...). Refer to *z/OS MVS Initialization and Tuning Reference* for the correct syntax.

Source: INMPRM10

Time Sharing Option Extensions (TSO/E)

IKJ731I INVALID USE OF * ON TRANSREC STATEMENT IN SYS1.PARMLIB DETECTED.

Explanation: During IPL or processing of a PARMLIB command, the system detected an invalid TRANSREC NODESMF statement in SYS1.PARMLIB member IKJTSOxx. An asterisk was found in combination with either a node name or smfid.

You can use a pair of asterisks in the form of ((*,*)) or list of nodename-smfid pairs, but not both. Asterisks allow the system to dynamically retrieve the information from JES.

System action: If the error occurred during IPL, the system uses IBM-supplied defaults and continues IPL. If the error occurred in response to a PARMLIB UPDATE command, the system did not update the IKJTSOxx member of SYS1.PARMLIB.

System programmer response: Correct the parameters on the TRANSREC NODESMF statement. Specify either ((*,*)) or ((nodename,smfid),(nodename,smfid) ...). Do not specify a combination of both. Refer to *z/OS MVS Initialization and Tuning Reference* for the correct syntax.

Source: INMPRM10

Time Sharing Option Extensions (TSO/E)

IKJ732I **REQUEST TO SWITCH BROADCAST DATA SET DETECTED WHILE PROCESSING PARMLIB MEMBER IKJTSOxx CONFIRM THE SWITCH FROM *current-data-set-name* ON VOLUME *current-volser* TO *new-data-set-name* ON VOLUME *new-volser***

Explanation: This message is issued when the SET IKJTSO=xx command is invoked to switch the broadcast data set. This message contains the name and volume serial for both the current broadcast data set and the new broadcast data set.

System action: Message IKJ733A is issued along with this message.

Operator response: Use the information in this message to determine the appropriate reply for message IKJ733A.

System programmer response: None

Source: Time Sharing Options Extensions (TSO/E)

Routing code: -

Descriptor code: 2

IKJ733A **REPLY YES TO SWITCH, NO TO CANCEL PROCESSING OF THIS PARMLIB MEMBER.**

Explanation: This message is issued along with message IKJ732I when the SET IKJTSO=xx command is invoked and the processing of the IKJTSOxx parmlib member includes the need to switch the broadcast data set. See message IKJ732I for the name and volume serial for both the current broadcast data set and the new broadcast data set.

System action: After a reply of YES is received, the current broadcast data set is unallocated and the new one is allocated.

Operator response: Reply YES to confirm the broadcast data set switch. Any reply other than YES will cancel processing of the IKJTSOxx parmlib member.

System programmer response: None

Source: Time Sharing Options Extensions (TSO/E)

Routing code: -

Descriptor code: -

IKJ735E **SWITCH TO NEW BROADCAST DATA SET FAILED. RESOURCE NOT AVAILABLE.**

Explanation: This message is issued when the attempt to switch to a new broadcast data set fails because a resource is not available in the time period specified. The time-out value is obtained from the BROADCAST data set keyword of the SEND statement of the IKJTSOxx parmlib member being processed. This usually occurs when a command or TSO/E user is hung while attempting to process the broadcast data set.

System action: The current broadcast data set remains active.

Operator response: One of several actions may be necessary to have the switch complete successfully:

- Issue the SET IKJTSO command with a larger time-out value.
- Use the MVS CMDSD command, introduced in z/OS V1R2, to determine if there are any hung SEND commands. If there are hung commands, attempt to resolve the cause of the hang, or cancel the commands and then reissue the SET IKJTSO command.

System programmer response: None

Source: Time Sharing Option Extensions (TSO/E)

Routing code: -

Descriptor code: 5

IKJ735I **COMMAND *cmd_name* FOUND IN TSO PARMLIB MEMBER IKJTSOxx IS NOT VALID.**

Explanation: The COMMAND SCAN routine found an incorrect command *cmd_name* in the SYS1.PARMLIB member IKJTSOxx specified on the PARMLIB or SET command or at IPL time.

System action: The system ignores the record with the incorrect command. At IPL time, the system builds IBM-supplied defaults for that record, and continues to process any other valid records in the member.

System programmer response: After the IPL or PARMLIB command is finished, correct the incorrect command and reissue the PARMLIB command. For a list of commands that are valid in IKJTSOxx, see *z/OS MVS Initialization and Tuning Reference*.

If this message appears during a syntax check, it indicates that the record is incorrect. If an update request were to be made using this PARMLIB member the above action would be taken by the system. The command will continue to check other records in the PARMLIB member, and other messages may be generated. Correct the incorrect records before attempting an update operation.

Source: Time Sharing Option/Extensions (TSO/E)

Routing code: 2

Descriptor code: 4

IKJ736E **SWITCH TO NEW BROADCAST DATA SET FAILED. THE ENQ MACRO FAILED WITH RETURN CODE *return-code*.**

Explanation: This message is issued when the attempt to switch to a new broadcast data set fails. TSO/E received an unexpected return code from ENQ processing.

System action: The current broadcast data set remains active.

Operator response: Issue the command again. If it continues to fail for the same reason, contact the system programmer.

System programmer response: Look up the return code for the ENQ macro in the *z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG*.

Source: Time Sharing Options Extensions (TSO/E)

Routing code: -

Descriptor code: 5

IKJ737I **SYSTEM PARAMETER IKJTSO SPECIFIED MORE THAN ONE SUFFIX. SUFFIX 00 WILL BE USED.**

Explanation: IKJTSO= was specified in the system parameters with more than one suffix. Only 1 member suffix is allowed.

System action: The system uses parmlib member IKJTSO00 for this IPL.

Operator response: None.

System programmer response: If the settings in IKJTSO00 are not desired, issue SET IKJTSO=xx command or PARMLIB UPDATE(xx) command to activate the settings in the IKJTSOxx parmlib member.

Source: Time Sharing Options Extensions (TSO/E)

Routing code: -

Descriptor code: 5

IKJ738I **TSO/E PARMLIB SETTINGS:**

Explanation: This message is the output from the DISPLAY IKJTSO command. Note that the complete output of this command is detailed in *z/OS MVS System Commands*.

System action: None.

Operator response: None.

System programmer response: None

Source: Time Sharing Options Extensions (TSO/E)

Routing code: -

Descriptor code: 5

IKJ739E TSO/E PARMLIB PROCESSING FAILED DUE TO AN ENVIRONMENTAL ERROR.

Explanation: This message is issued by the DISPLAY IKJTSO or SET IKJTSO command. A TSO/E environment could not be created as a TSO/E environment already exists.

System action: The current TSO/E parmlib settings remain in effect.

Operator response: None

System programmer response: Terminate other applications using a TSO/E environment and reissue the command. If the command continues to fail, use the TSO/E PARMLIB command as an alternative or report the error to IBM.

Source: Time Sharing Options Extensions (TSO/E)

Routing code: -

Descriptor code: 5

Time Sharing Option Extensions (TSO/E)

Chapter 9. IKM messages

IKM001 11111111 UNMATCHED STRING QUOTES IN THIS STATEMENT

Explanation: The system detected that the quotation mark at the end of a character or bit string is missing. The systems does no more checking of the statement.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let a syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM002 11111111 UNMATCHED COMMENT BRACKETS IN THIS STATEMENT

Explanation: The system detected that the character pair `*/` marking the end of a comment is missing. The system does no more checking of the statement.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM003 11111111 STATEMENT NOT RECOGNIZED

Explanation: The system detected that a statement (including prefixes) does not start with an identifier, semicolon, decimal integer, or left parenthesis; or, a statement (excluding prefixes) starts with a non-keyword identifier but does not contain an equal sign or does not have an equal number of left and right parentheses on the left of the equal sign.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM004 11111111 LABEL MISSING FROM *xxx* STATEMENT

Explanation: The system detected that the label that should prefix an ENTRY, PROCEDURE, or FORMAT statement is missing.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM005 11111111 PREFIX NOT PERMITTED BEFORE *xxx*

Explanation: The system detected that a condition prefix to an ELSE clause, or an ENTRY or DECLARE statement is not permitted.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM006 11111111 CHECK/NOCHECK PREFIX NOT PERMITTED BEFORE THIS STMT

Explanation: The system detected a prefix CHECK or NOCHECK that did not precede a PROC or BEGIN statement.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM007 11111111 PREFIX OPTION FOLLOWS LABEL

Explanation: The system detected a condition prefix following a label prefix. This is not permitted under the rules of PL/I. A condition prefix must always precede any label prefix.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM008 11111111 ILLEGAL STATEMENT FOLLOWS *xxx*

Explanation: In the message text:

xxx ON: An on-unit consisting of an IF, ON, DO, RETURN, PROCEDURE, DECLARE, END, or FORMAT statement, or an ELSE clause, is not permitted.

xxx IF or ELSE: A unit-1 or unit-2 branch of an IF statement consisting of an ON, DO, PROCEDURE, ENTRY, DECLARE, END, or FORMAT statement, or an ELSE clause, is not permitted. The illegal statement is not checked further.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM009 11111111 INVALID LABEL BEGNG *xxx*

Explanation: The system detected that a label is not an (conditionally subscripted) identifier.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM010 11111111 INVALID PREFIX OPTION *xxx*

Explanation: The system detected that a condition prefix contains an incorrect condition name. The checking continues after the next colon.

In the message text:

xxx The incorrect prefix option.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM011 11111111 LABEL NOT PERMITTED BEFORE *xxx*

Explanation: In the message text:

xxx ON: the on-unit in an ON statement may not have a label prefix.

xxx ELSE: a label to an ELSE clause must not precede the word ELSE.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM012 11111111 INCOMPLETE IF STATEMENT, THEN NOT FOUND WHEN EXPECTED

Explanation: The system detected that in an IF statement, the keyword THEN, or the entire THEN clause, is missing. The checking of the statement is ended.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM013 11111111 ERROR IN *xxx* STATEMENT BEGNG *yyy*

Explanation: In the message text:

xxx ALLOCATE, FREE, DECLARE, OPEN, CALL, DO, GET, or PUT statements. An incorrect symbol may be contained in one of these statements.

IKM014 • IKM016

xxx BEGIN. The BEGIN statement is incorrectly written (may have the option ORDER or REORDER in PL/I Version 5).

xxx THIS. Error in an unclassified statement. Checking of the statement is ended.

yyy The statement beginning.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM014 11111111 INVALID CHAR *xxx* PRECEDING *yyy*

Explanation: The system detected a character in a PL/I statement that is not a PL/I character. Checking of this statement is ended.

In the message text:

xxx The incorrect character.

yyy The preceding character.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM015 11111111 INVALID CHAR IN BIT STRING BEGNG *xxx*

Explanation: The system detected a bit string containing a character other than 0 or 1 in a PL/I statement.

In the message text:

xxx The bit string beginning.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM016 11111111 *xxx* MISSING AFTER *yyy*

Explanation: The system detected that a delimiter (comma, colon, or right parenthesis) or an identifier is missing.

In the message text:

xxx The missing character.

yyy The character following the missing character.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM017 11111111 MISSING EQUAL SIGN IN DO SPECIFICATION

Explanation: A Type 3 DO statement or repetitive specification must have the following general form: DO variable = expression [...]; . The system detected a DO statement that does not follow this form. The system ends the checking of the DO specification.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM018 11111111 SURPLUS COMMA AFTER xxx

Explanation: The system detected that a comma separates the options in a GET, PUT, or DECLARE (ENVIRONMENT) statement.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM019 11111111 A LETTER IMMEDIATELY FOLLOWS CONSTANT BEGNG xxx

Explanation: In a PL/I statement a constant may only be followed by one of the following:

- Any of several special characters, such as a blank or semicolon.
- An arithmetic operator.
- A comparison operator
- A bit-string operator. This could not be internally translated so no further checking of the statement is performed.

The system detected a PL/I statement with a constant that is followed by an unallowed character.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM020 11111111 INVALID PREFIX OPERATOR xxx PRECEDING yyy

Explanation: The system detected an expression that begins with an operator other than \neg , +, -, (or an operand other than an identifier, a string, or a constant.)

In the message text:

xxx The incorrect prefix operator.

yyy The preceding operator.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

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Source: Programming Language/I (PL/I)

IKM021 11111111 CONSTANT BEGNG *xxx* IS TOO LONG

Explanation: The system detected that a binary fixed point or integer constant has more than 31 digits, or a decimal fixed point or integer constant has more than 15 digits. A binary floating point constant has more than 53 digits in the mantissa part, or a decimal floating point constant has more than 16 digits in the mantissa part.

In the message text:

xxx The constant that is incorrect.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM022 11111111 CONSTANT BEGNG *xxx* EXCEEDS MAXIMUM VALUE

Explanation: The system detected a floating point constant that exceeds the value 7.205,759,403,792,793E75, which is the highest value allowed.

In the message text:

xxx The incorrect constant.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM023 11111111 SOLITARY DECIMAL POINT FOUND IN OPERAND POSITION

Explanation: The system detected a period that appears incorrectly in an expression in an operand position.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM024 11111111 EXPONENT MISSING IN CONSTANT BEGNG *xxx*

Explanation: The system detected the letter E in a floating point constant that is followed by some character other than a digit, a plus or minus sign, or a decimal point.

In the message text:

xxx The constant.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM025 11111111 EXPONENT TOO LONG IN CONSTANT BEGNG *xxx*

Explanation: The system detected a binary floating point constant that has more than 3 digits in the exponent part, or a decimal floating point constant has more than 2 digits in the exponent part.

In the message text:

xxx The constant.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in your PL/I source statement and let a syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM026 11111111 DECIMAL POINT IN EXPONENT OF CONSTANT BEGNG *xxx*

Explanation: The system detected that the exponent in a floating point constant contains a decimal point.

In the message text:

xxx The constant.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM027 11111111 CONSTANT BEGNG *xxx* HAS TOO MANY DECIMAL POINTS

Explanation: The system detected a fixed point constant or the mantissa part of a floating point constant that contains more than one radix point. Sterling constants are not checked.

In the message text:

xxx The constant.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM028 11111111 CONFLICTING *op* OPTION

Explanation: The system detected an option that conflicts with a previously specified option.

In the message text:

op The option specified.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM029 11111111 xxx OPTION REQUIRED

Explanation: The system detected that a required option was not specified.

In the message text:

xxx The option specified.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM030 11111111 INVALID OPTION BEGNG *op*

Explanation: The system detected an option that is not a valid option keyword.

In the message text:

op The option specified.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM031 11111111 EXPRESSION MISSING AFTER *xxx*

Explanation: The system detected that an expression to the right of an equal sign or IF is missing. Checking of the statement is ended.

In the message text:

xxx Either an equal sign or an IF.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again.

Source: Programming Language/I (PL/I)

IKM032 11111111 INVALID ARGUMENT SPECIFIED FOR *xxx*

Explanation: The system detected that an attribute or option has an incorrect argument or argument list.

In the message text:

xxx The option specified.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM033 1111111 ARGUMENT MISSING AFTER *xxx*

Explanation: The system detected that an argument that must follow an attribute or option is missing, or the argument list is empty.

In the message text:

xxx The attribute or option named.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM034 1111111 MULTIPLE *xxx yyy* SPECIFIED

Explanation: The system detected that an attribute or option has been previously specified in this statement.

In the message text:

xxx

yyy

The multiple attributes or options.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM035 1111111 NO FILE SPECIFIED IN OPEN/CLOSE STATEMENT

Explanation: The system detected that the FILE option in an OPEN or CLOSE statement is missing. No more checking of the statement is performed.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM036 1111111 ILLEGAL USE OR INCORRECT FORMAT OR REFER OPTION

Explanation: The system detected that the REFER option is used in an illegal context or is specified in an incorrect format.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM037 11111111 FILE ORGANIZATION MISSING FROM ENVIRONMENT OPTION

Explanation: The system detected that the file organization is not specified in the ENVIRONMENT option.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM038 11111111 CR OR DB IN FLOATING FIELD OF PICTURE BEGNG xxx

Explanation: The system detected that a CR or DB symbol is specified for the exponent of a floating field in a PICTURE specification. This is not allowed.

In the message text:

xxx The PICTURE specification.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM039 11111111 CONFLICTING xxx ATTRIBUTE

Explanation: The system detected that an attribute conflicts with a previously specified attribute. For DECLARE and ALLOCATE statements, checking continues for the next level-one declare variable (i.e., if the conflicting attribute is inside a structure, no more checking of this structure is performed).

In the message text:

xxx The specified attribute.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM040 11111111 xxx ATTRIBUTE NOT PERMITTED IN THIS CONTEXT

Explanation: The system detected an ISUB dummy variable that appears outside the context of a DEFINED attribute of a DECLARE statement; or a LIKE attribute specified in an incorrect context.

In the message text:

xxx The specified attribute.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM041 11111111 ERROR IN FORMAT LIST BEGNG *xxx*

Explanation: The system detected one of the following:

- A format item does not start with an identifier or a decimal integer constant.
- The identifier is not a valid format item keyword
- The FORMAT item has an incorrect format.

Checking continues after the format list.

In the message text:

xxx The specified format list.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM042 11111111 *xxx* MUST HAVE ENTRY ATTRIBUTE

Explanation: The system detected an identifier that must be declared with an ENTRY attribute, but is not.

In the message text:

xxx The identifier named.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM043 11111111 INVALID *xxx* ATTRIBUTE SPECIFIED FOR *keywd*

Explanation: The system detected an attribute that is not a valid attribute keyword.

In the message text:

xxx The attribute named.

keywd The keyword.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM044 11111111 ILLEGAL BASE FOR DEFINED ITEM *xxx*

Explanation: The system detected an item that is defined on an incorrect base.

In the message text:

xxx The named item.

System programmer response: If the error recurs and the program is not in error, search problem reporting data

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bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM045 11111111 ERROR IN INITIAL ATTRIBUTE LIST BEGNG *xxx*

Explanation: The system detected an INITIAL attribute list that does not begin with a constant, a string, or a repetition factor; or a + or - sign is not followed by a constant.

In the message text:

xxx The attribute list beginning.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM046 11111111 INVALID CHAR *xxx* IN PICTURE BEGNG *yyy*

Explanation: The system detected a picture specification that contains one or more incorrect characters.

In the message text:

xxx The incorrect character.

yyy The picture specification.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM047 11111111 ILLEGAL USE OF CHAR *xxx* IN PICTURE BEGNG *yyy*

Explanation: The system detected that a valid character is improperly used in a picture specification.

In the message text:

xxx The character illegally used.

yyy The picture specification.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM048 11111111 EXPONENT FIELD MISSING IN PICTURE BEGNG *xxx*

Explanation: The system detected that in a picture specification for a floating point number, the exponent field is missing.

In the message text:

xxx The picture specification.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM049 11111111 EXPONENT FIELD TOO LARGE IN PICTURE BEGNG *xxx*

Explanation: The system detected that in a picture specification for a floating point number, the exponent field has too many decimal positions.

In the message text:

xxx The picture specification.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM050 11111111 MORE THAN ONE SIGN CHAR IN PICTURE BEGNG *xxx*

Explanation: The system detected a numeric picture specification that contains more than one (not drifting) sign character.

In the message text:

xxx The picture specification.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM051 11111111 INVALID SCALING FACTOR IN PICTURE BEGNG *xxx*

Explanation: The system detected that in a picture specification for a fixed point number, the scaling factor is represented incorrectly.

In the message text:

xxx The picture specification.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

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Source: Programming Language/I (PL/I)

IKM052 11111111 INVALID USE OF SCALING FACTOR IN PICTURE BEGNG xxx

Explanation: The system detected a scaling factor in something other than a picture specification for a fixed-point number. This is an error.

In the message text:

xxx The picture specification.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM053 11111111 NO SCALING FACTOR PARENTHESES IN PICTURE BEGNG xxx

Explanation: The system detected that the parentheses enclosing the integer of a scaling factor in a picture specification are missing.

In the message text:

xxx The picture specification.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM054 11111111 INVALID REPETITION FACTOR IN PICTURE BEGNG xxx

Explanation: The system detected that a repetition factor in the picture specification is not an integer. A repetition factor in a picture specification must be a nonzero integer enclosed in parentheses.

In the message text:

xxx The picture specification.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM055 11111 MULTIPLE USE OF CHARACTER xxx IN PICTURE BEGNG yyy

Explanation: The system detected that the characters E, K, or V occur more than once in a numeric picture specification. This is an error.

In the message text:

xxx The character.

yyy The picture specification.

System programmer response: If the error recurs and the program is not in error, search problem reporting data

bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM056 111111 NO DIGIT POSITION BEFORE EXPONENT IN PICTURE xxx

Explanation: The system detected that a picture specification for a floating point number makes no allowance for the digits of a mantissa preceding the delimiter E.

In the message text:

xxx The picture specification.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM057 11111111 PICTURE BEGNG xxx LONGER THAN 255 CHAR

Explanation: The system detected a picture specification that exceeds the maximum length of 255 characters.

In the message text:

xxx The picture specification.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM058 11111111 STERLING CHAR FOUND IN NON-STERLING PICTURE xxx

Explanation: The system detected that one of the characters 8, 7, 6, P, G, H, or M was specified, but the character G did not start this picture specification.

In the message text:

xxx The picture specification.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM059 11111111 ILLEGAL LEVEL NUMBER xxx

Explanation: The system detected that a major structure name was declared with the level number 1 or a minor structure was declared with level numbers greater than 1. Level numbers must be decimal integers.

In the message text:

xxx The level number.

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System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM060 11111111 PRECISION EXCEEDS *xxx* FOR PICTURE BEGNG *yyy*

Explanation: The system detected that the precision implied by a picture specification for a fixed or floating point number exceeds the maximum default precision.

In the message text:

xxx The maximum default precision.

yyy The picture specification.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM061 11111111 ILLEGAL ASTERISK AS SUBSCRIPT IN DEFINING LIST

Explanation: The system detected that an asterisk is specified as a subscript in a defining list. This is an error.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM062 11111111 ELEMENT *xxx* IS ILLEGALLY DEFINED WITH ISUB

Explanation: The system detected that an ISUB variable is used to define a scalar variable on an array base. This is an error.

In the message text:

xxx The specified element.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM063 11111111 ILLEGAL ISUB VALUE

Explanation: The system detected that the value of an ISUB dummy variable is outside the range 1 to 32.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM064 11111111 POSITION ATTRIBUTE ILLEGAL FOR DEFINED ITEM xxx

Explanation: The system detected that a POSITION attribute is specified for a data item defined by ISUB variables on a base identifier. This is an error.

In the message text:

xxx The defined item.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM065 11111111 SUBSCRIPTED BASE ILLEGAL FOR DEFINED ITEM xxx

Explanation: The system detected that the base identifier on which a data item is defined is a subscripted name. This is an error.

In the message text:

xxx The defined item.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM066 11111111 FORMAT LIST MISSING

Explanation: The system detected that the format in a GET, PUT, or FORMAT statement is missing.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM067 11111111 FORMAT LIST CONTAINS NO DATA FORMAT ITEM

Explanation: The system detected that the format list in a GET or PUT statement must include a format item for the data item being transmitted.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM068 11111111 FORMAT ITEM *xxx* PERMITTED WITH OUTPUT ONLY

Explanation: The system detected a format item that may not be used in the format list of a GET statement.

In the message text:

xxx The specified format item.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM069 11111111 FORMAT ITEM *xxx* IS INVALID

Explanation: The system detected a format item that uses incorrect characters or is incorrectly written. Checking continues after the end of the format list.

In the message text:

xxx The specified format item.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM070 11111111 NESTING OF FORMAT LIST EXCEEDS 20

Explanation: The system detected a format list in this statement that is nested to more than 20 levels. This is an error.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM071 11111111 INVALID DATA ITEM BEGNG *xxx*

Explanation: The system detected a data item that is not a valid identifier or is incorrectly written.

In the message text:

xxx The data item.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM072 11111111 NO DATA SPECIFICATION OR CONTROL OPTION FOUND

Explanation: The system detected that a data list and format list for a GET or PUT statement are missing.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM073 11111111 ARRAY BOUND FOR *xxx* IS TOO LARGE

Explanation: The system detected that the upper and lower bound of one or more dimensions of an array exceeds the maximum value.

In the message text:

xxx The dimension to which the array was bound.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM074 11111111 *BOUNDS ARE MIXED WITH NON* BOUNDS

Explanation: The system detected that variable array bounds (denoted by asterisks) are mixed with non-variable bounds in a DECLARE statement. This is an error.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM075 11111111 LOWER BOUND GREATER THAN UPPER BOUND FOR *xxx*

Explanation: The system detected that an array is declared with a lower bound greater than the upper bound or with a single upper bound equal to or less than zero. This is an error.

In the message text:

xxx The dimension to which the array was bound.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM076 11111111 EXTERNAL NAME BEGNG *xxx* LONGER THAN SEVEN CHAR

Explanation: The system detected an external name that exceeds seven characters in length. This is an error.

In the message text:

xxx The external name.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM077 11111111 IDENTIFIER BEGNG *xxx* IS TOO LONG

Explanation: The system detected an identifier that has more than 31 characters. This is an error.

In the message text:

xxx The identifier.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM078 11111111 UNMATCHED PARENTHESES, *xxx* MISSING

Explanation: The system detected that the left and right parentheses in the current statement are unbalanced; one or more left or right parentheses are missing. The statement is not checked further.

In the message text:

xxx Identifies which parenthesis was missing.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM079 11111111 LEFT PARENTHESIS REQUIRED AFTER *xxx*

Explanation: The system detected an option that is not followed by one or more arguments enclosed in parentheses. This is an error.

In the message text:

xxx The option named.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM080 11111111 OPERAND MISSING BEFORE *xxx*

Explanation: The system detected that an identifier or expression preceding an item is missing. This error ends checking of the expression in question.

In the message text:

xxx The item that follows the missing operand.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM081 11111111 INSUFFICIENT ARGUMENT SPECIFIED FOR *xxx yyy*

Explanation: The system detected that the number of arguments specified in the statement is insufficient.

In the message text:

xxx The arguments specified.

yyy The arguments specified.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM082 11111111 ON CONDITION INVALID OR MISSING

Explanation: The system detected that an ON condition is either missing or incorrectly specified. Checking of the ON statement is ended.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM083 11111111 INVALID SET/IN CLAUSE SPECIFIED FOR *xxx*

Explanation: The system detected that the clause following the SET or IN option is incorrect.

In the message text:

xxx The clause.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM084 1111111 VARIABLE IN LOCATE STATEMENT INVALID OR MISSING

Explanation: The system detected that the LOCATE keyword is not followed by an unscripted, unqualified identifier.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM085 1111111 FACTORING NOT PERMITTED ON ALLOCATE STATEMENT

Explanation: The system detected that an ALLOCATE statement contains a list of two or more factored variables.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM086 1111111 POINTER QUALIFIER AFTER POINTER QUALIFIER OR SUBSCRIPT

Explanation: The system detected that a pointer in a pointer qualifier may not be pointer qualified or subscripted.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM087 1111111 OPERAND MISSING AFTER *xxx*

Explanation: The system detected that an identifier or expression following the item is missing. Checking is ended.

In the message text:

xxx The item named.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM088 1111111 NO DIGIT POSITION IN PICTURE BEGNG *xxx*

Explanation: The system detected a picture specification that does not contain at least one digit position.

In the message text:

xxx The picture specification.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM089 1111111 INVALID OPERATOR xxx

Explanation: The system detected an operator that is not valid for use in an expression.

In the message text:

xxx The incorrect operator.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM090 1111111 IDENTIFIER MISSING AFTER xxx

Explanation: The system detected that an operator is missing after an item. This error ends the checking of the expression in question.

In the message text:

xxx The named item.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM091 1111111 OPERATOR MISSING BEFORE xxx

Explanation: The system detected that an operator is missing before an item. This error ends the checking of the expression in question.

In the message text:

xxx The item named.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM092 1111111 ILLEGAL LEFT PART OF ASSIGNMENT STATEMENT

Explanation: The system detected an incorrect operand that appears to the left of the assignment symbol. Checking of the statement is ended.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM093 11111111 INVALID DO SPECIFICATION

Explanation: The system detected that the keyword TO or BY is used multiply, or the DO specification contains an illegal symbol.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM094 11111111 *xxx* MISSING IN *yyy* STATEMENT

Explanation: The system detected that the keyword TO or the label in a GO TO statement is missing.

In the message text:

xxx The item missing.

yyy The specified statement.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM095 11111111 SEMICOLON NOT FOUND WHEN EXPECTED

Explanation: The system detected that a semicolon marking the end of a logically complete statement is missing, or no semicolon is found for the last statement of the input buffers.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM096 11111111 INVALID EVENT NAME BEGNG *xxx*

Explanation: The system detected that, in a WAIT or input/output statement, the event name specified for the EVENT option is incorrect.

In the message text:

xxx The event name.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM097 11111111 BREAK CHAR INVALID AT BEGNG OF IDENTIFIER xxx

Explanation: The system detected an identifier that begins with a break character. This is an error.

In the message text:

xxx The identifier.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM098 11111111 INVALID FORM OF INITIALIZATION FOR xxx

Explanation: The system detected that the initialization specified in this statement does not comply with the rules of PL/I syntax.

In the message text:

xxx The statement specified.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM099 11111111 MORE THAN 3 LEVELS OF ENTRY NESTING

Explanation: The system detected that the ENTRY attribute applies to more than three logical levels. This is an error.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM100 11111111 INVALID REPETITION FACTOR IN INITIAL LIST

Explanation: The system detected that the repetition factor, a decimal integer constant, is not enclosed in parentheses and does not precede the value or character to which it relates.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM101 11111111 MORE THAN 63 TRUE LEVEL NUMBERS SPECIFIED FOR *xxx*

Explanation: The system detected that a structure has more than a maximum of 63 levels. A structure may have a maximum of 63 levels, including the major structure number 1.

In the message text:

xxx The specified statement.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

IKM102 11111111 MORE THAN 32 DIMENSIONS SPECIFIED FOR *xxx*

Explanation: The system detected that an array has more than 32 dimensions. The maximum number of dimensions for an array is 32.

In the message text:

xxx The specified statement.

System programmer response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide all printed output and output data sets related to the problem.

Programmer response: Correct any errors in the PL/I source statement and let the syntax checker scan it again. Compile the statement as part of a valid program.

Source: Programming Language/I (PL/I)

Chapter 10. ILM messages

ILMI107I ILM PARAMETERS ILMMODE=NONE

Explanation: The system processed the ILMMODE system parameter.

System action: The system continues processing. IBM License Manager is not active.

Note: If you receive messages other than ILMI107, you have specified an ILMMODE value other than NONE in IEASYSxx.

Operator response: None

System programmer response: None

Source: IBM License Manager

Module: ILMPRLWI

Chapter 11. ILR messages

ILR003A WARM START FOR VIO FAILED. REPLY 'U' TO INVOKE CVIO PROCESSING

Explanation: The system could not restore the VIO journaling data set and/or ASM control blocks to reflect the status of journaled VIO data sets from the previous IPL.

System action: The system waits for a response from the operator.

If the operator enters REPLY xx,U, system operation continues and ASM switches to CVIO processing for VIO journaling data set. If ASM is successful, VIO journaling will be possible for this IPL. However, any VIO data sets journaled on the previous IPL are lost, and jobs requiring these data sets will not be able to be restarted.

Operator response: Notify the system programmer. The programmer will ask you to obtain a stand-alone dump and reIPL, or enter REPLY xx,U to invoke CVIO processing.

System programmer response: This message indicates a problem with the VIO journaling data set or its contents. A stand-alone dump should reveal the problem. If the VIO journaling data set itself is the problem, try to correct the problem and ask the operator to reIPL with the warm start option again, without losing the contents of the VIO journaling data set.

Source: Auxiliary storage manager (ASM)

Module: ILRTMI00

Routing code: 1,10

Descriptor code: 1

ILR003I WARM START FOR VIO FAILED. OPERATION = operation, RETURN CODE = return-code - err

Explanation: The system could not restore the the VIO journaling data set and/or auxiliary storage manager (ASM) control blocks to reflect the status of journaled VIO data sets from the previous IPL.

In the message text:

operation

The operation that failed, as follows:

- GENCB ACB - VSAM GENCB to build the ACB
- GENCB RPL - VSAM GENCB to build the RPL
- MODCB RPL - VSAM MODCB to use keys as search arguments or to use RBAs as search arguments when reading from the VIO journaling data set
- OPEN - VSAM OPEN for the VIO journaling data set with addressed, control interval and keyed access options.
- GET TIMESTAMP - VSAM GET to read the time stamp record
- GET - VSAM GET to read records from the VIO journaling data set.
- VERIFY - VSAM VERIFY to update catalog information about the VIO journaling data set.
- UPDATE PATS - Update PAT maps and the available slot count in each part entry.
- NONE - No VSAM operation performed.

return-code

Depending on the type of operation that failed and the VSAM GENCB, OPEN, VERIFY, MODCB, or GET return code from register 15, or the ASM return code in register 15 as follows:

80 The time stamp in the TPARTBLE does not match the time stamp that was read.

84 ASM was unable to update the PAT maps or the available slot count in each part entry.

err

Depending on the type of operation that failed and the VSAM return code, the VSAM feedback or error code. See *z/OS DFSMS Macro Instructions for Data Sets* for a description of the VSAM return codes and feedback or error codes.

ILR004I • ILR005E

System action: ASM issues message ILR003A before continuing operation. If the operator enters REPLY XX,'U' to message ILR003A, system operation continues and ASM switches to CVIO processing for the VIO journaling data set. If ASM is successful, VIO journaling will be possible for this IPL. However, any VIO data sets journaled on the previous IPL are lost, and jobs requiring these data sets will not be able to be restarted.

Operator response: Notify the system programmer.

System programmer response: See the system programmer response to message ILR003A.

Source: Auxiliary storage manager (ASM)

Routing code: 2,10

Descriptor code: 4

ILR004I ASM UNABLE TO BUILD DATA SET NAME LIST, PAGEADD, PAGEDEL, AND D ASM COMMANDS UNUSABLE

Explanation: ASM could not build the page data set name list required for the PAGEADD command. The system will not process a PAGEADD command for this initialization.

System action: System operation continues with the PAGEADD command unusable.

Operator response: Notify the system programmer.

System programmer response: Occurrence of this message indicates that ASM could not obtain space in the common storage area (CSA). Correct the size of the CSA, if necessary.

Otherwise, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Auxiliary storage manager (ASM)

Module: ILRTMI00

Routing code: 2,10

Descriptor code: 4

ILR005E PLPA PAGE DATA SET FULL, OVERFLOWING TO COMMON DATA SET

Explanation: The PLPA page data set has become full. All subsequent writes for the PLPA will be sent to the COMMON page data set.

System action: The system continues to build the link pack area by writing pages for the remaining LPA modules to the common page data set. If the common page data set is unavailable or becomes full, the system will be terminated with a wait state code X'03C' reason 3.

Operator response: Notify the system programmer.

System programmer response: This message is issued when the PLPA page data set is too small to contain all PLPA pages. IPL processing will attempt to write the remaining pages to the COMMON page data set.

- If both PLPA and COMMON page data sets are on the same volume, and have been allocated in contiguous extents with the PLPA data set allocated first on the volume, this message can be ignored as long as enough COMMON page data set space has been allocated to contain both PLPA and COMMON pages.
- If the PLPA and COMMON page sets are on the same volume, and their allocated extents are not contiguous, they should be reallocated in contiguous extents, or the PLPA data set should be increased in size large enough to hold all LPA pages and moved to another volume.
- If the PLPA and COMMON page data sets are on different volumes, you should increase the size of the PLPA page data set prior to the next IPL.

Source: Auxiliary storage manager (ASM)

Module: ILRIODRV

Routing code: 2,4,10

Descriptor code: 11

ILR006E COMMON PAGE DATA SET FULL, OVERFLOWING TO PLPA DATA SET

Explanation: The COMMON page data set has become full. All writes for the COMMON page data set will be sent to the PLPA page data set.

System action: Processing continues with new common pages being written to the PLPA page data set. When the PLPA page data set also becomes full, the system will be terminated with wait state code X'3C', reason code 2/3.

Operator response: Notify the system programmer.

System programmer response: Increase the size of the common page data set and re-IPL.

Source: Auxiliary storage manager (ASM)

Module: ILRIODRV

Routing code: 2,4,10

Descriptor code: 11

ILR007I DUPLEX PAGE DATA SET {BAD|FULL}, DUPLEXING SUSPENDED

Explanation: A problem occurred with the DUPLEX page data set, as follows:

- It has become full.
- It is unusable because of permanent I/O errors on the volume containing the DUPLEX data set.
- It is unusable because the cache of a cached auxiliary storage subsystem has hardware problems.

System action: The system continues processing, but suspends duplexing of PLPA and COMMON pages.

Operator response: If this message was issued for a hardware problem, contact hardware support. Otherwise, notify the system programmer.

System programmer response: If the system issued this message due to a full data set, the size of the page data set allocated to duplex storage is inadequate. Increase the size of the DUPLEX page data set before the next IPL.

Source: Auxiliary storage manager (ASM)

Module: ILRIODRV

Routing code: 2,4,10

Descriptor code: 4

ILR008W {PLPA|COMMON|LOCAL} PAGE DATA SET ON VOL *volser* BAD, ASM UNABLE TO CONTINUE

Explanation: ASM is unable to continue because the system cannot access one of the following:

- The PLPA page data sets.
- Any installation LOCAL page data set. All LOCAL page data sets are unusable.
- The COMMON page data set.
- Either the PLPA or COMMON page data set.
- Both the PLPA and COMMON page data sets because they have become full.

In the message text:

volser The volume serial number.

System action: The system enters wait state X'02E' or X'03C'.

Operator response: See the operator response for the wait state.

System programmer response: See the system programmer response for the wait state.

Source: Auxiliary storage manager (ASM)

Module: ILRDRV01

Routing code: 1,4,10

Descriptor code: 1

ILR009E {PLPA PAGE|COMMON PAGE|LOCAL PAGE} DATA SET ON VOL *volser* BAD

Explanation: ASM is unable to access a page data set for one of the following reasons:

- A permanent I/O error occurred.
- A needed control block was unavailable.
- A cached auxiliary storage subsystem failed.

In the message text:

volser The volume serial number.

System action: The system continues processing without the unusable data set.

Operator response: Tell the system programmer that the data set is unusable.

For local page data sets, use the PAGEADD command, if possible, to add an equivalent data set; this action maintains system performance and, in some cases, system operation. Remove the message from the screen.

Isolate the failing storage director (SD) for repair. Contact hardware support.

System programmer response: Correct or replace the unusable data set before the next IPL.

Source: Auxiliary storage manager (ASM)

Module: ILRCMP

Routing code: 2,4,10

Descriptor code: 11

ILR010I {PLPA|COMMON} PAGE DATA SET {FULL|BAD}, ASM USING ONLY DUPLEX PAGE DATA SET

Explanation: The auxiliary storage manager (ASM) is using the duplex page data set for all reads and/or writes to the PLPA or common data set, for one of the following reasons:

- The system issued message ILR009E for the PLPA or common page data set. All reads and writes for the PLPA or common page data set will be done using the duplex page data set.
- The system issued message ILR009E for the PLPA or common page data set, and now the PLPA or common page data set has become full. All writes for the common or PLPA will be done to the duplex page data set.
- The PLPA and common page data sets have become full. All writes for the PLPA or common page data set will be done to the duplex page data. Should space subsequently become available in the common page data set, it may be used again for writes.

System action: The system continues processing using only the DUPLEX page data set.

Operator response: Notify the system programmer.

System programmer response: Correct or replace the unusable page data set or subsystem, according to message ILR009E, before the next system initialization. If the message was issued because the data sets became full, the size of the PLPA and/or common page data set is inadequate. Increase the size of the page data set(s) before the next IPL.

Source: Auxiliary storage manager (ASM)

Module: ILRDRV01

Routing code: 2,4,10

Descriptor code: 4

ILR011E LAST PAGE DATASET ELIGIBLE FOR VIO PAGES HAS BEEN MARKED BAD

Explanation: The last local paging data set eligible for VIO pages has been marked bad. The auxiliary storage manager (ASM) will place any subsequent VIO pages in NONVIO-designated paging space.

System action: The system continues processing.

For the next initialization, if any VIO-accepting page data sets are *not* available, and ASM determines that they contained VIO pages, ASM will force a CVIO option.

Operator response: Notify the system programmer.

System programmer response: Upon another request for VIO page space, the system will issue message ILR025E.

If desired, ask the operator to enter a PAGEADD command to add a VIO-accepting local page data set.

Source: Auxiliary storage manager (ASM)

Module: ILRMSG00

Routing code: 1,10

Descriptor code: 11

ILR012W ALL LOCAL PAGING SPACE IS FULL OR BAD, ASM UNABLE TO CONTINUE

Explanation: The auxiliary storage manager (ASM) is attempting to locate free auxiliary storage slots on a local paging data set or free blocks on storage-class memory (SCM), but is unable to obtain any. The reason is one or more of the following:

- All local paging data sets have been marked bad.
- All slots in all local paging data sets are currently in use.
- All storage-class memory (SCM) blocks are currently in use.

System action: The system enters wait state X'02E' or wait state X'03C'.

Operator response: See the operator response for the wait state.

System programmer response: See the system programmer response for the wait state.

Source: Auxiliary storage manager (ASM)

Module: ILRIODRV

Routing code: 1,4,10

Descriptor code: 1

ILR013E COMMON PAGE DATA SET FULL, OVERFLOWING TO LOCAL PAGE DATA SETS

Explanation: The COMMON page data set has become full. All writes for the COMMON page data set will be sent to the local page data sets.

System action: Processing continues with new common pages being written to the local page data sets.

Operator response: Notify the system programmer.

System programmer response: Increase the size of the common page data set and re-IPL.

Source: Auxiliary storage manager (ASM)

Module: ILRIODRV

Routing code: 2,4,10

Descriptor code: 11

ILR014E PLPA PAGE DATA SET FULL, OVERFLOWING TO LOCAL PAGE DATA SETS

Explanation: The PLPA page data set has become full. All subsequent writes for the PLPA will be sent to the local page data sets.

System action: The system continues to build the link pack area by writing pages for the remaining LPA modules to the local page data sets. Warm and quick starts might no longer be possible.

Operator response: Notify the system programmer.

System programmer response: This message is issued when the PLPA page data set is not large enough to contain all PLPA pages. IPL processing will attempt to write the remaining pages to the local page data sets.

Warm and quick starts use the records from both PLPA and COMMON page data sets, but not from local page data

ILR018W • ILR023I

sets. If warm or quick starts are desired, allocate enough PLPA and COMMON page data set space to contain both PLPA and COMMON pages.

Source: Auxiliary storage manager (ASM)

Module: ILRIODRV

Routing code: 2,4,10

Descriptor code: 11

ILR018W [PLPA|COMMON] PAGE DATA SET ON VOL *volser* FULL, ASM WAIT03C RSN=*reason-code*

Explanation: The auxiliary storage manager (ASM) is unable to continue because there is not enough auxiliary storage space available for system operation.

In the message text:

volser The volume serial number.

reason-code

The reason code that identifies the error:

- 00 The cause of the error cannot be determined because of an error in end processing.
- 02 The PLPA data set is full and the common data set is unavailable.
- 03 The common data set is full, duplexing is not active, and the PLPA data set is unavailable.
- 04 The duplex data set is full, and both the PLPA and common data sets are unavailable.

System action: The system enters wait state X'03C'.

Operator response: Notify the system programmer. ReIPL the system, specifying larger page data sets or correcting any bad page data sets as indicated by other ASM messages.

System programmer response: Ensure that sufficient auxiliary storage is available.

Source: Auxiliary storage manager (ASM)

Routing code: 1,4,10

Descriptor code: 1

ILR021I UNEXPECTED ERROR DETECTED DURING VIO INITIALIZATION PROCESSING

Explanation: The auxiliary storage manager (ASM) detected an undetermined error. ASM entered recovery. VIO journaling and possibly processing of the PAGEADD command will not be functional this IPL.

System action: If a warm start had been requested, all journaled VIO data sets will be lost.

Operator response: Notify the system programmer.

System programmer response: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Auxiliary storage manager (ASM)

Module: ILRTMI01

Routing code: 2,10

Descriptor code: 4

ILR023I DYNAMIC ALLOCATION OF VIO JOURNALING DATA SET, *dsname*, FAILED. NO VIO JOURNALING. RETURN CODE *aa - bbbb*

Explanation: The data set name displayed was specified in the VIODSN parameter but the data set could not be dynamically allocated, or a system error occurred.

In the message text:

dsname VIO journaling data set name.

aa The SVC 99 return code in Register 15.

bbbb The SVC 99 information or error reason code.

System action: The system attempts to complete other non-VIO-related initialization. The system will reject journaling requests for VIO data sets.

If a warm start was requested, jobs requiring that VIO data sets be journaled on the VIO data set in the previous IPL cannot be restarted after this IPL.

Operator response: If a warm start was requested, the contents of the VIO journaling data set may still be retrievable. If the reason code starts with a "2", check to be sure the volume containing the data set is mounted. If reason code is not "2", notify the system programmer. Correct the problem and reIPL.

System programmer response: Correct the problem described by the dynamic allocation return code and reIPL.

Source: Auxiliary storage manager (ASM)

Module: ILRTMI00

Routing code: 2,10

Descriptor code: 4

ILR024I **INITIALIZATION OF VIO JOURNALING DATA SET, *dsname*, FAILED. NO VIO JOURNALING: OPERATION=*operation*,RETURN CODE=*bbbbbbbb* - *ccccccc***

Explanation: The system could not fully initialize the VIO journaling data set. VIO journaling will not take place.

In the message text:

dsname VIO journaling data set name.

operation

The operation that failed.

bbbbbbbb

The VSAM return code from register 15.

ccccccc The VSAM feedback/error code.

System action: The system will reject journaling requests for VIO data sets.

Operator response: Report error to system programmer.

System programmer response: If VIO journaling is required, correct the problem as described by the VSAM return code and reIPL the system.

Source: Auxiliary storage manager (ASM)

Module: ILRTMI00, ILRTMI01

Routing code: 2,10

Descriptor code: 4

ILR025E **PAGING SPACE FOR VIO FULL, VIO MAY SPILL TO NON-VIO PAGE SPACE**

Explanation: The local paging data sets that contain VIO pages are full. Therefore, the auxiliary storage manager (ASM) will direct VIO pages to NONVIO paging data sets until more space for VIO pages becomes available.

System action: The system continues processing.

Operator response: Notify the system programmer.

System programmer response: To avoid spilling any more VIO pages to NONVIO paging data sets, ask the operator to enter a PAGEADD command to add another local paging data set.

For a more permanent correction, modify the appropriate IEASYSxx parmlib member before the next initialization so that it includes more local paging data sets.

ILR026I • ILR028I

Note: If VIO pages do spill to a NONVIO data set and you then remove that NONVIO data set from the system and try to do a warm start, the warm start will fail. NONVIO data sets to which VIO pages have spilled must be kept across warm starts.

Source: Auxiliary storage manager (ASM)

Module: ILRIODRV

Routing code: 1,10

Descriptor code: 11

ILR026I VIO JOURNALING ACTIVE, DATA SET NAME IS *dsname*

Explanation: VIO initialization is complete. VIO data sets can be journaled in the VIO journaling data set.

In the message text:

dsname VIO journaling data set name.

System action: The system accepts requests for journaling of VIO data sets.

Source: Auxiliary storage manager (ASM)

Module: ILRTMI00

Routing code: 2

Descriptor code: 4

ILR027D NUCLEUS/PLPA FMID MISMATCH, RE-IPL OR REPLY 'GO' FOR COLD START.

Explanation: The FMID value in the nucleus does not match the FMID used when the PLPA was created. The FMID of the nucleus and PLPA must match for proper system operation. This may be caused by:

- Not specifying CLPA when IPLing a new release of MVS.
- IPLing the wrong nucleus.

System action: This message requests a response from the operator. If the operator replies GO, the system issues message IEA929I (CLPA FORCED), changes the IPL to a cold start, and continues paging initialization. Otherwise, the operator must re-IPL.

Operator response: Determine if the nucleus was specified at IPL. If not, specify the correct nucleus and re-IPL. If the correct nucleus was specified at IPL, notify the system programmer.

System programmer response: If the problem cannot be resolved, search the problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Auxiliary Storage Management (ASM)

Module: ILRASRIM

ILR028I PERMANENT I/O ERROR OPENING PAGE DATA SET *dsname*

Explanation: An uncorrectable I/O error occurred during the open process when trying to read or write the status information record from the identified page data set. This information is required for the data set to be considered usable.

System action: Open processing for the data set is terminated. The data set cannot be used.

Operator response: None.

System programmer response: Delete the data set and define a new one to replace it.

Source: Auxiliary Storage Management (ASM)

Module: ILROPS00

ILR029I STATUS RECORD BEING FORMATTED FOR PAGE DATA SET *dsname*

Explanation: The status information record in the identified page data set was not recognized. This may mean that the data set:

- is currently being used by a system which does not support page data set protection (this cannot be determined),
- was formatted by a system that does not support page data set protection, or
- was previously validly used (but is not currently in use) by a system that does not support page data set protection.

System action: The status information record is formatted and processing continues.

Operator response: None.

System programmer response: None.

Source: Auxiliary Storage Management (ASM)

Module: ILROPS00

ILR030A PAGE DATA SET MAY BE IN USE:
 DATA SET NAME - *dsname*
 VOLUME SERIAL - *volser*
 DEVICE NUMBER - *nnnn*
 SYSTEM NAME - *sysname*
 CPU IDENTIFIER - *mach-serial*
 [LPAR NAME - *lparname*]
 [VM USERID - *vmuserid*]
 [IPL IS IN PROGRESS (TIME/DATE MAY NOT BE ACCURATE)]
 DATA SET LAST UPDATE AT *hh:mm:ss* ON *mm/dd/yy* (GMT)
 [*hh:mm:ss* ON *mm/dd/yy* (LOCAL)]

Explanation: The identified page data set might be used by a different system within the time range from 10 minutes before the current time to 10 minutes after the current time or an IPL might be in progress. The data set might currently be in use by another system. Opening data set cannot proceed until the operator confirms that this data set can be used.

In the message text:

dsname The page data set name.

volser The volume serial number.

nnnn The device number.

sysname
The system name using the data set.

mach-serial
The machine and serial number of the CPU.

lparname
The logical partition name.

vmuserid
The VM user ID that is using the data set.

hh:mm:ss
The time of the last update of the data set.

mm/dd/yy
The date of the last update of the data set.

System action: Message ILR031A is issued, and the system waits for the operator to confirm or deny access to the data set.

Operator response: None.

System programmer response: None.

ILR031A • ILR032I

Source: Auxiliary Storage Management (ASM)

Module: ILROPS00

ILR031A REPLY 'DENY' TO PREVENT ACCESS, 'CONTINUE' TO ALLOW USE OF *dsname*

Explanation: This message is a follow-up to MSG ILR030A, and open processing is waiting for the operator to confirm that the data set can be used.

System action: The system waits for the operator to confirm or deny access to the data set.

Operator response: If the data set is in use by the identified system, respond with DENY. If the data set may validly be used by this system, respond with CONTINUE. A response of CONTINUE may cause a system failure if the data set is actually in use by the identified system.

System programmer response: None.

Source: Auxiliary Storage Management (ASM)

Module: ILROPS00

ILR032I PAGE DATA HAS BEEN USED BY ANOTHER SYSTEM:
DATA SET NAME - *dsname*
VOLUME SERIAL - *volser*
DEVICE NUMBER - *nnnn*
SYSTEM NAME - *sysname*
CPU IDENTIFIER - *mach-serial*
[LPAR NAME - *lparname*]
[VM USERID - *vmuserid*]
[IPL IS IN PROGRESS (TIME/DATE MAY NOT BE ACCURATE)]
DATA SET LAST UPDATE AT *hh:mm:ss* ON *mm/dd/yy* (GMT)
[*hh:mm:ss* ON *mm/dd/yy* (LOCAL)]

Explanation: The identified page data set might be used by a different system more than 10 minutes before or 10 minutes after the current time.

In the message text:

dsname The page data set name.

volser The volume serial number.

nnnn The device number.

sysname
The system name using the data set.

mach-serial
The machine and serial number of the CPU.

lparname
The logical partition name.

vmuserid
The VM user ID that is using the data set.

hh:mm:ss
The time of the last update of the data set.

mm/dd/yy
The date of the last update of the data set.

System action: The status information record will be updated to indicate that this system is now using the data set, and processing continues.

Operator response: None.

System programmer response: None.

Source: Auxiliary Storage Management (ASM)

Module: ILROPS00

ILR033I **UNABLE TO SERIALIZE IPL DEFINED PAGE DATA SET** *dsname*

Explanation: The system was unable to obtain an ENQ of SYSZILRD *dsname.volser* for page data sets defined during the IPL process. The page data set may be in use by another system.

System action: The system continues, with the ENQ left pending.

Operator response: None.

System programmer response: None.

Source: Auxiliary Storage Management (ASM)

Module: ILROPS00

ILR034I **PERMANENT I/O ERROR ON STATUS RECORD FOR PAGE DATA SET** *dsname*

Explanation: The system was unable to read or write the status information record.

System action: Status record checking for the identified data set is terminated. Protection against sharing by other systems for this data set has become limited until the system is reinitialized.

Operator response: None.

System programmer response: None.

Source: Auxiliary Storage Management (ASM)

Module: ILRPPROT

ILR035W **PAGE DATA SET STATUS ERROR:**

ERROR TYPE - *reason*

DATA SET NAME - *dsname*

VOLUME SERIAL - *volser*

DEVICE NUMBER - *nnnn*

[*system information*]

Explanation: The catalog or status information record for the identified page data has been altered unexpectedly, and the integrity of the data in the data set records has been lost.

In the message text:

reason is one of the following:

DELETED WHILE IN USE

The catalog entry for the data set has been deleted using IDCAMS on another system.

CATALOG INFORMATION ALTERED

The catalog data set extents, volume, device type, or page data set attributes have changed, which indicates that the data set has been deleted and defined using IDCAMS on another system.

HEADER RECORD DESTROYED

The status information record header has become unrecognizable, which indicates that the data set is probably in use by another system which does not have page data set protection support.

ALTERED BY ANOTHER SYSTEM

The status information record has been updated, which indicates that the data set is in use by another system.

dsname The page data set name.

volser The volume serial number.

nnnn The device number.

For *reason* **ALTERED BY ANOTHER SYSTEM**, the *system information* is:

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SYSTEM NAME - *sysname*
CPU IDENTIFIER - *mach-serial*
[LPAR NAME - *lparname*]
[VM USERID - *vmuserid*]
[IPL IS IN PROGRESS
(TIME/DATE MAY NOT
BE ACCURATE)]
DATA SET LAST UPDATE AT
hh:mm:ss ON *mm/dd/yy*
(GMT)

Details of the system information are:

sysname

The system name using the data set.

mach-serial

The volume serial number.

lparname

The logical partition name.

vmuserid

The VM user ID that is using the system.

hh:mm:ss

The time of the last date of the data set.

mm/dd/yy

The date of the last update of the data set.

System action: A wait state 02E will be loaded to limit destruction of data, because of the loss of data integrity for the page data set.

Operator response: None.

System programmer response: None.

Source: Auxiliary Storage Management (ASM)

Module: ILRPPROT

ILR036I PAGE DATA SET PROTECTION HAS BEEN DISABLED

Explanation: A failure occurred when building the data set name table. This table is required for data set protection, and the function has been disabled.

System action: The system continues with no page data set protection until the system is reinitialized.

Operator response: None.

System programmer response: None.

Source: Auxiliary Storage Management (ASM)

Module: ILRTMI00

ILR037I PAGE DATA SET STATUS UPDATE DELAYED FOR PAGEADD/PAGEDEL PROCESSING

Explanation: The page data set status record update processing is unable to be done, due to an active PAGEADD or PAGEDEL record.

System action: The system waits for the PAGEADD or PAGEDEL command to complete before performing an update of the page data set status information.

Operator response: None.

System programmer response: None.

Source: Auxiliary Storage Management (ASM)

Module: ILRPPROT

ILR038I PERMANENT CATALOG ERROR FOR THE PAGE DATA SET *dsname*

Explanation: The system was unable to read catalog information for the data set due to an unrecoverable catalog error.

System action: Status record checking for the identified data set is terminated. Protection against sharing by other systems for this data set has become limited until the system is initialized.

Operator response: None.

System programmer response: None.

Source: Auxiliary Storage Management (ASM)

Module: ILRPPROT

Chapter 12. ILRH messages

ILRH0100I The number of usable local page data sets is *numlocals*. This is at or above the recommended minimum number of *currmin*.

Explanation: CHECK(IBMASM,ASM_NUMBER_LOCAL_DATASETS) ran successfully and found no exceptions. It determined that the number of usable local page data sets is within the recommended amount (usable meaning not marked 'bad' and not in a drained state).

In the message text:

numlocals

The number of usable local page data sets

currmin

The recommended minimum number of usable local page data sets

System action: The system continues processing.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Aux Storage Manager

Module: ILRHCCHK

Routing code: N/A

Descriptor code: N/A

ILRH0101E Number of local page data sets is below recommended value

Explanation: CHECK(IBMASM,ASM_NUMBER_LOCAL_DATASETS) determined that the number of usable local page data sets is below the recommended value.

The number of usable local page data sets is *numlocals* (usable meaning not marked 'bad' and not currently in a drained state). This is below the recommended minimum number of *currmin*.

In the explanation text:

numlocals

The number of usable local page data sets

currmin

The recommended minimum number of usable local page data sets

System action: The system continues processing.

Operator response: Report this problem to the system programmer.

System programmer response: Consider adding additional paging data sets. This can be done dynamically via the PAGEADD command, or during the next IPL by specifying additional data sets in the IEASYSxx parmlib member.

Problem determination: See message ILRH0108I in the message buffer which lists the current status of all local page data sets.

Source: Aux Storage Manager

Module: ILRHCCHK

Routing code: See note 35.

Descriptor code: 12 is the default set by this check. See note 1.

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ILRH0102I The number of page data sets currently in use is *current*. You have the ability to add *curradd* additional data sets via the PAGEADD command. This is above the check warning threshold of *threshold*.

Explanation: CHECK(IBMASM,ASM_PAGE_ADD) ran successfully and found no exceptions. It determined that the number of page data sets that can be dynamically added is above the warning threshold.

In the message text:

current

The number of page data sets currently in use

curradd

The number of page data sets that can be added

threshold

The check warning value

System action: The system continues processing.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Aux Storage Manager

Module: ILRHCCHK

Routing code: N/A

Descriptor code: N/A

ILRH0103E PAGEADD threshold met or exceeded

Explanation: CHECK(IBMASM,ASM_PAGE_ADD) determined that the number of page data sets that can be dynamically added is at or below the check warning value.

The number of page data sets currently in use is *current*. You have the ability to add *curradd* additional data sets via the PAGEADD command which is at or below the check warning threshold of *threshold*.

In the explanation text:

current

The number of page data sets currently in use

curradd

The number of page data sets that can be added

threshold

The current check warning threshold value

System action: The system continues processing.

Operator response: Report this problem to the system programmer.

System programmer response: Verify the setting of the PAGTOTL parameter in IEASYSxx. Changes to this value will require an IPL to become effective.

Problem determination: N/A

Source: Aux Storage Manager

Module: ILRHCCHK

Routing code: See note 35.

Descriptor code: 3 is the default set by this check. See note 1.

ILRH0104I The size of CSA and ECSA is approximately *CsaBytes* bytes which corresponds to *CsaSlots* auxiliary storage slots. The size of PLPA and EPLPA is approximately *LpaBytes* bytes which corresponds to *LpaSlots* auxiliary storage slots. The size of the common page data set is *CommSlots* slots, the size of the PLPA page data set is *PlpaSlots* slots. The combined size of the PLPA and common page data sets is *CommPlpaPCT%* of the slots required for all of CSA/ECSA and PLPA/EPLPA. This is within the check threshold of *ChkPct%*.

Explanation: CHECK(IBMASM,ASM_PLPA_COMMON_SIZE) ran successfully and found no exceptions It determined that the combined size of the PLPA and Common page data sets is large enough to accommodate all of CSA/ECSA, PLPA/EPLPA, and MLPA/EMLPA.

In the message text:

CsaBytes

The current size of CSA/ECSA in bytes

CsaSlots

The number of aux slots required to hold all of CSA/ECSA

LpaBytes

The current size of PLPA/EPLPA and MLPA/EMLPA in bytes

LpaSlots

The number of aux slots required to hold all of PLPA/EPLPA and MLPA/EMLPA

CommSlots

The size of the Common page data set in units of aux slots

PlpaSlots

The size of the PLPA page data set in units of aux slots

CommPlpaPCT

The combined size of the PLPA and Common page data sets as compared to the total number of aux slots required for all CSA/ECSA, PLPA/EPLPA, and MLPA/EMLPA

ChkPct

The check warning percentage value

System action: The system continues processing.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Aux Storage Manager

Module: ILRHCHCK

Routing code: N/A

Descriptor code: N/A

ILRH0105E PLPA/Common page data set size is below recommended value

Explanation: CHECK(IBMASM,ASM_PLPA_COMMON_SIZE) determined that the combined size of the PLPA and Common page data sets is not large enough to accommodate the number of slots specified by the check threshold percentage value.

The size of CSA and ECSA is approximately *CsaBytes* bytes which corresponds to *CsaSlots* auxiliary storage slots. The size of PLPA and EPLPA is approximately *LpaBytes* bytes which corresponds to *LpaSlots* auxiliary storage slots. The size of the Common page data set is *CommSlots* slots, the size of the PLPA page data set is *PlpaSlots* slots. The combined size of the PLPA and Common page data sets is *CommPlpaPCT%* of the slots required for all of CSA/ECSA and PLPA/EPLPA. This is below the check warning threshold of *ChkPct%*.

In the message text:

CsaBytes

The current size of CSA/ECSA in bytes

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CsaSlots

The number of aux slots required to hold all of CSA/ECSA

LpaBytes

The current size of PLPA/EPLPA and MLPA/EMLPA in bytes

LpaSlots

The number of aux slots required to hold all of PLPA/EPLPA and MLPA/EMLPA

CommSlots

The size of the Common page data set in units of aux slots

PlpaSlots

The size of the PLPA page data set in units of aux slots

CommPlpaPCT

The combined size of the PLPA and Common page data sets as compared to the total number of aux slots required for all CSA/ECSA, PLPA/EPLPA, and MLPA/EMLPA

ChkPct

The current check warning percentage value

System action: The system continues processing.

Operator response: Report this problem to the system programmer.

System programmer response: Consider enlarging the size of the PLPA and/or Common page data set during the next IPL.

Problem determination: N/A

Source: Aux Storage Manager

Module: ILRHCCHK

Routing code: See note 35.

Descriptor code: 3 is the default set by this check. See note 1.

ILRH0106I Slot usage on all local page data sets is below the usage warning threshold of *ChkPct*%.

Explanation: CHECK(IBMASM,ASM_LOCAL_SLOT_USAGE) ran successfully and found no exceptions. It determined that the slot usage on all local page data sets is below the check warning threshold.

In the message text:

ChkPct

The check warning percentage value

System action: The system continues processing.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Aux Storage Manager

Module: ILRHCCHK

Routing code: N/A

Descriptor code: N/A

ILRH0107E Page data set slot usage threshold met or exceeded

Explanation: CHECK(IBMASM,ASM_LOCAL_SLOT_USAGE) determined that the slot usage on 1 or more local page data sets meets or exceeds the check warning value.

The slot usage on 1 or more local page data sets meets or exceeds the check warning threshold of *ChkPct*%.

In the message text:

ChkPct

The check warning percentage value

System action: The system continues processing.

Operator response: Report this problem to the system programmer.

System programmer response: Consider adding additional page data sets if slot utilization remains at a high level. This can be done dynamically via the PAGEADD command, or during the next IPL by specifying additional data sets in the IEASYSxx parmlib member.

Problem determination: Message ILRH0108I in the message buffer displays the status of the local page data sets that meet or exceed the usage warning value.

Source: Aux Storage Manager

Module: ILRHCCHK

Routing code: See note 35.

Descriptor code: 3 is the default set by this check. See note 1.

ILRH0108I	Page Data Set Detail Report			
	Type	Status	Usage	Dataset Name

	<i>type</i>	<i>status</i>	<i>usage</i>	<i>dsname</i>

Explanation: This report displays detailed page data set information.

In the message text:

type

The type of page data set:

PLPA

The PLPA page data set

Common

The Common page data set

Local

A local page data set

status

The data set status:

OK The data set is in normal use

FULL

The data set has no available space

DELETE

A PAGEDEL is in progress

BAD

The data set is marked unavailable for writes

DRAIN

The data is being used as read-only because of a PAGEDEL DRAIN command

usage

The percentage of the data set's allocated space that is currently in use (from 0 to 100%).

dsname

The page data set name

System action: The system continues processing.

Operator response: N/A

System programmer response: N/A

ILRH0110I • ILRH0111E

Problem determination: N/A

Source: Aux Storage Manager

Module: ILRHCCHK

Routing code: N/A

Descriptor code: N/A

ILRH0110I The combined PLPA/Common slot usage is *usepct%* which is below the check warning threshold of *warnpct%*.

Explanation: CHECK(IBMASM,ASM_PLPA_COMMON_USAGE) ran successfully and found no exceptions It determined that the combined usage of the PLPA and Common page data sets does not exceed the check warning threshold.

In the message text:

usepct

The current usage of the PLPA and Common page data sets

warnpct

The check warning threshold

System action: The system continues processing.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Aux Storage Manager

Module: ILRHCCHK

Routing code: N/A

Descriptor code: N/A

ILRH0111E PLPA/Common usage warning threshold exceeded

Explanation: CHECK(IBMASM,ASM_PLPA_COMMON_USAGE) determined that the combined usage of the PLPA and Common page data sets meets or exceeds the check warning threshold.

The combined usage of the PLPA and Common page data sets is *usepct%* which meets or exceeds the check warning threshold of *warnpct%*.

In the explanation text:

usepct

The usage of the PLPA and Common page data sets

warnpct

The check warning threshold

System action: The system continues processing.

Operator response: Report this problem to the system programmer.

System programmer response: Consider enlarging the size of the PLPA and/or Common page data set if usage remains at a high level.

Problem determination: Message ILRH0108I in the message buffer displays the status of the PLPA and Common page data sets.

Source: Aux Storage Manager

Module: ILRHCCHK

Routing code: See note 35.

Descriptor code: 3 is the default set by this check. See note 1.

-
- | **ILRH0112I** **checkname:** The PLPA and Common page data sets are not defined. The check is stopped.
- | **Explanation:** CHECK(IBMASM,ASM_PLPA_COMMON_SIZE, or IBMASM,ASM_PLPA_COMMON_USAGE) was not executed because both PLPA and Common page data sets do not exist. The check is meaningless when no PLPA nor common page data sets exist. The check is stopped.
- | **System action:** Check is not processed.
- | **Operator response:** N/A
- | **System programmer response:** N/A
- | **Problem determination:** N/A
- | **Source:** Aux Storage Manager
- | **Module:** ILRHCCHK
- | **Routing code:** N/A
- | **Descriptor code:** N/A

ILRH0500I *check_name module debugstr* **Entry Code:** *entrycode* **Function Code:** *functioncode*

Explanation: This message only appears when you are running in debug mode.

In the message text:

module

The module that was executing

debugstr

A debugging string that contains module version information

entrycode

Value that represents the check for which the module was called

functioncode

Value that represents the function for which the module was called

System action: The system continues processing.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Aux Storage Manager

Module: ILRHCCHK

Routing code: N/A

Descriptor code: N/A

Chapter 13. IOP messages

IOP050D SHOULD *jobname* WRITE TO LEVEL *xxx* IOCDS? REPLY 'YES', 'NO', OR 'CANCEL'

Explanation: A job processed the input/output configuration program (IOCP) with a WRTCDS option other than NO on the PARM parameter of an EXEC statement.

In the message text:

jobname The jobname.

xxx The specified level.

System action: IOCP issues this message to request permission from the system operator for the job to write to the specified level input/output configuration data set (IOCDS) in the processor controller. If two or more jobs are allowed to update concurrently the specified level IOCDS, the outcome could be an IOCDS that is logically inconsistent with the input from any one job. Using this IOCDS at power-on reset or SYSIML CLEAR could produce undesirable results.

Operator response: A reply of 'YES' allows the job to continue processing and, if no errors are encountered, to replace the input/output configuration data in the specified level IOCDS in the processor controller with the input/output configuration data generated by this job. The operator should use the IOCDSM frame to ensure the level IOCDS is not write-protected.

A reply of 'NO' allows the job to continue generating input/output configuration data in storage and to produce reports, but does not permit the job to replace the input/output configuration data in the level IOCDS in the processor controller.

A reply of 'CANCEL' ends the job immediately with system completion code X'222'.

Source: Input/output configuration program (IOCP)

Routing code: 1,11

Descriptor code: 7

IOP056I IOCP JOB *jobname* FAILED. DID NOT BUILD LEVEL *xxx* IOCDS.

Explanation: A job was processing the input/output configuration program (IOCP) with a WRTCDS option other than NO on the PARM parameter of an EXEC statement.

In the message text:

jobname The jobname.

xxx The specified level.

System action: IOCP ends the job with return code 8. IOCP issues this message to inform the system operator, who had previously responded to message IOP050D, that this job failed to build the level indicated input/output configuration data set (IOCDS).

Operator response: Notify the system programmer that the job failed.

System programmer response: Review the messages on the job listing, and take the necessary actions.

Source: Input/output configuration program (IOCP)

Routing code: 2,11

Descriptor code: 6

IOP057I

IOP057I IOCP JOB *jobname* **SUCCESSFUL. LEVEL *xxx* IOCDS REPLACED.**

Explanation: A job was processing the input/output configuration program (IOCP) with a WRTCDSD option other than NO on the PARM parameter of an EXEC statement.

In the message text:

jobname The jobname.

xxx The specified level.

System action: IOCP ends the job with a return code of 0 or 4. IOCP issues this message to inform the system operator, who had previously granted permission to write the IOCDS in response to message IOP050D, that this job successfully replaced the level indicated input/output configuration data set (IOCDS).

Operator response: Follow the installation procedures.

Source: Input/output configuration program (IOCP)

Routing code: 2,11

Descriptor code: 6

Chapter 14. IOS messages

Note: Notice that certain IOS messages contain two message identifiers. The longer message number indicates the inclusion of the subchannel set id of an alternate subchannel set to the device number.

IOS000I **IOS1000I** *devn,chnp,err,cmd,stat,[sens], [dcbbkct | op**term | trackaddress], [ser], [jobname][,sens][,text]*

Explanation: *text* is one of the following:

- TAPE DRIVE/CONTROL UNIT NOT COMPATIBLE
- TAPE LENGTH INCOMPATIBLE
- TAPE LENGTH VIOLATION
- CHANNEL INTERFACE ERROR
- CHANNEL PROTOCOL ERROR
- 3480X FORMAT INCOMPATIBLE
- 3480XF FORMAT INCOMPATIBLE
- 3480-2 XF FORMAT INCOMPATIBLE
- 3490 FORMAT INCOMPATIBLE
- ALLEGIANCE RESET
- BEGINNING OF VOLUME
- BLOCK NOT FOUND
- BUS OUT CHECK
- COMMAND REJECT
- CONFIGURATION ERROR
- HALT SIGNAL
- DEVICE FENCED
- DEVICE-PATH FENCED
- DEVICE REPORTED INVALID STATUS
- DRIVE ASSIGNED ELSEWHERE
- END OF DATA ENCOUNTERED
- END OF VOLUME
- EQUIPMENT CHECK
- ERASE ERROR DETECTED
- FORMATTING ERROR DETECTED
- LOST SENSE DATA
- MEDIUM LENGTH ERROR
- MEDIUM MANUALLY LOADED
- OVERRUN
- PERMANENT ERROR-DEVICE REPORTED UNKNOWN MESSAGE CODE *xx*
- POSITIONING LOST
- PROTECTION EXCEPTION
- READ ERROR DETECTED
- READ LENGTH ERROR
- READ-ONLY FORMAT
- UNSUPPORTED FORMAT
- UNSUPPORTED MEDIUM
- VOLUME NOT FORMATTED

DC0	A write data check occurred for a WRITE command in the current channel program.
DC1	A write data check occurred for a WRITE command in a previously completed channel program.
DCC	Data converter check, for magnetic tapes only.
DCK	Data check.
DSE	Data security erase command failure.
DSN	Data streaming not operational.
EOD	The control unit detected an end-of-data mark while processing a read or space command. The program is attempting to read beyond the end of valid data or read backward through invalid data.
EOT	The physical end of tape was reached.
EQC	Equipment check. For magnetic tape devices that are part of a Virtual Tape Server (VTS), this error descriptor indicates an error has occurred in the VTS itself.
FEN	The subsystem fenced the tape volume.
FPR	The system entered a WRITE command a file-protected tape.
ICC	Interface control check.
IOE	I/O error. For any device type: <ul style="list-style-type: none"> • Unit check. • I/O error could not be determined (subchannel status word was zeroes). • I/O error (for errors other than those already described in this list). For a tape device, the following conditions can also apply: <ul style="list-style-type: none"> • A write command is issued to a tape drive loaded with an IBM Enhanced Capacity Cartridge System Tape, or any tape that is too long for the tape drive. • A 36-track write command is issued for a tape formatted for 18 tracks. • An 18-track read command is issued for a tape formatted for 36 tracks. • On a 3490E tape drive, a cartridge is mounted whose tape is too long.
IPL	IPL check, for 370x only.
LDA	Lost data, for telecommunications only.
LDC	Load display during loading.
MAM	Missing address marker, for direct access only.
MBE	A write command attempted to write a data block larger than the maximum size the control unit could handle.
NCA	The density capabilities of the tape unit, tape control unit, and the mounted tape are not compatible. This occurs if: <ul style="list-style-type: none"> • A tape volume is mounted on an incompatible tape unit. • A load point in a density is not compatible with the tape unit. • A 1600 or 6250 tape unit cannot read the ID burst in the load point area of the tape.
NIN	Not initialized.
NPA	The engineering change (EC) level of the control unit and the drive microcode do not match.
NRF	No record found.
OFF	The drive is offline.
OVR	Overrun. A permanent hardware error occurred.
POS	The control unit error recovery procedure (ERP) failed.

IOS000I

PRC Channel protection check.
SAF Stand alone failure.
SEN A unit check occurred during a sense operation.
SEQ Block identifier sequence error.
SIM Simulated channel error.
SKC Seek check, for direct access only.
SNS A unit check occurred during a sense operation.
I SOF Device is in a soft fenced state.
SUR Subsystem reset.
SUU Subsystem unit unusable or degraded.
TEN Tape tension lost.
TLC Tape length check.
TOT Time out, for telecommunications only.
UEX Unit exception, for telecommunications only.
UNC Unusual command, for 2540 Card Reader and punch only.
UNL The operator unloaded the volume.
UNX An unexpected interrupt occurred.
VOI Tape void detected.
WRI The write inhibit switch may be on, for direct access only.

ERROR ON ERG

An error occurred on an ERASE GAP command. This text indicates that some residual data remained on the tape.

Later, the system may find a noise record when reading through the erased area. Depending on the length of the noise record, a read data check may occur.

INVALID CSW

An input/output (I/O) supervisor block (IOSB) contains a CCW address of zero instead of an expected address.

NOISE BLOCK

A noise record caused a read data check. The system ignores the noise record. The system performs another read without repositioning the tape.

UNEX INTERV

The operator pressed the RESET key on a tape drive. The operator may have replaced or repositioned the tape.

UNEX LOAD PT

The system found a load point while repositioning a magnetic tape.

cmd

The command code of the running channel command word (CCW) when the error occurred. If the system cannot find the CCW, asterisks appear in this field.

stat

The status portion of the subchannel status word (SCSW). If the system cannot find the device status, asterisks appear in this field.

sens

The sense information; it appears if the *stat* field indicates a unit check and sense data was obtained. Field replaceable unit (FRU) sense bytes are shown within parentheses. See the appropriate hardware information about sense bytes. The sense information, if it is not over 8 bytes in length, may appear in the first line of the message.

dcblkct

The number of records that the system counted preceding the error record, not including label records. This field appears only for magnetic tape. For a cartridge tape unit, this field contains asterisks.

op The teleprocessing (TP) operation code. It describes the CCW that was running when the error occurred.

** A delimiter between *op* and *term*.

term

The terminal identifier.

trackaddress

The track address where the error occurred. It is in the X'cccccc:h' format that is called the normalized format. The *cccccc* is the cylinder number as seven hexadecimal digits. The *h* is the track number as a hexadecimal digit. The cylinder number is not in the special reversed-digit format that is used by the hardware. If an error occurs when the system tries to obtain this data, the system displays the last seek address in this field. This field appears only for direct access devices.

ser

The serial number of the volume on which the error occurred. This field appears only for magnetic tapes or direct access devices.

jobname

The job name.

DDR SWAP FAILURE - BUFFERED DATA LOST DUE TO TAPE MOUNT ON THIS DEVICE

A tape was manually loaded on a tape drive while a DDR swap was in progress on that drive. Buffered write data that was being maintained in the drive has been lost. The DDR swap is terminated.

TAPE DRIVE/CONTROL UNIT NOT COMPATIBLE

For the 3480, 3490, and 3490E Magnetic Tape Subsystems, this text indicates one of the following:

- The tape drive requires microcode patches that are not available in the control unit
- The control unit and drive models are not compatible

TAPE LENGTH INCOMPATIBLE

For an 18-track write-capable tape drive, a cartridge was installed whose tape is too long for the tape drive.

TAPE LENGTH VIOLATION

For the 3490E Magnetic Tape Subsystem, the tape in the cartridge is too long for a 3490E tape drive.

CHANNEL INTERFACE ERROR

An abnormal condition was detected on the channel interface.

CHANNEL PROTOCOL ERROR

A device-level error was detected on the channel interface.

3480X FORMAT INCOMPATIBLE

One of the following occurred:

- A cartridge with a 3480 format identification mark was loaded on a device that writes in 3490 format. The program attempted to write to the tape when the tape is not positioned at the beginning.
- A cartridge written with compaction (3480X format) was loaded on a 3480 that does not support compaction and the program attempted to read the compacted data.

3480XF FORMAT INCOMPATIBLE

A cartridge with a 3480 format identification mark was loaded on a device that writes in 3480-2 XF format. The program attempted to write to the tape when the tape is not positioned at the beginning.

3480-2 XF FORMAT INCOMPATIBLE

A cartridge with a 3480-2 XF format identification mark was loaded on a device that writes in 3480 or 3480XF format. The program attempted to read the tape unsuccessfully.

3490 FORMAT INCOMPATIBLE

A cartridge with a 3480-2XF format identification mark was loaded on a device that writes in 3480 or 3480X format and the program attempted to read the tape.

ALLEGIANCE RESET

A host system has issued a RESET ALLEGIANCE command that resulted in the termination of the command in progress.

IOS000I

BEGINNING OF VOLUME

A backward motion command was issued that caused the device to attempt to position before the beginning of the volume.

BLOCK NOT FOUND

The device was unable to find the block specified by a LOCATE command.

BUS OUT CHECK

The control unit detected an unrecoverable channel interface integrity error on the command or data received from the channel.

CHANNEL PROTOCOL ERROR

The control unit detected a protocol error on the channel interface.

COMMAND REJECT

The control unit was unable to accept a command for one of the following reasons:

- An undefined command was issued.
- The parameter data for a command was invalid.
- A command sequence error was detected.

Probable software error.

CONFIGURATION ERROR

The command attempted to access or utilize devices or facilities which are not installed in the I/O system. For example:

- The device is not installed.
- A command requires the message display facility and the facility is not installed.
- A command requires the volume loader and the volume loader is not installed.
- The device is incompatible with the I/O subsystem.
- A command requires the library facility and the facility is not installed.
- A command requires the library high capacity I/O facility and the facility is not installed.
- Some portion of the library facility is incompatible with the I/O subsystem.

DEVICE FENCED

An unrecoverable error has caused the device to be fenced by the I/O subsystem. MVS might box the device after this error.

DEVICE-PATH FENCED

An unrecoverable error has caused a channel path to be fenced by the I/O subsystem. MVS might take the channel path offline after this error.

DEVICE REPORTED INVALID STATUS

An unrecoverable error has caused a channel path's status to be invalid.

DRIVE ASSIGNED ELSEWHERE

The device has been enabled on some other channel path. The device might be assigned to some other host.

END OF DATA ENCOUNTERED

A command was issued which attempted to read beyond the end of validly written data or backward through invalid data.

END OF VOLUME

Forward motion was issued which attempted to position past the current end of volume.

EQUIPMENT CHECK

An unrecoverable error occurred in the I/O subsystem.

ERASE ERROR DETECTED

An error was detected while trying to perform an erase-type command.

FORMATTING ERROR DETECTED

An unrecoverable error was detected while trying to perform a FORMAT command.

HALT SIGNAL

A HALT SIGNAL was issued which prevented the successful completion of a command.

LOST SENSE DATA

A SENSE command was issued to the device outside of a contingent allegiance. Sense data has been lost.

MEDIUM LENGTH ERROR

The currently mounted tape has a length that is not supported by the device.

MEDIUM MANUALLY UNLOADED

The tape was manually unloaded from the drive while still in use.

OVERRUN

The data rate on the channel interface was insufficient to sustain the data rate of the device.

PERMANENT ERROR-DEVICE REPORTED UNKNOWN MESSAGE CODE=xx

The device reported a message code that has not been defined to the MVS Error Recovery Procedure.

POSITIONING LOST

A condition has occurred which has resulted in the loss of volume integrity due to lost tape positioning

PROTECTION EXCEPTION

A supervisor-type command was issued in an unauthorized channel program.

READ ERROR DETECTED

An unrecoverable error was detected while attempting to read a data block or tapemark.

READ LENGTH ERROR

A READ command was issued for a data block whose length is not supported by the device. The block might be too short or too long.

READ-ONLY FORMAT

An write-type command was issued but the device only supports read-type commands on the currently mounted tape.

UNSUPPORTED FORMAT

A command was issued that attempted to read or write a format that is not supported by the device.

UNSUPPORTED MEDIUM

The currently mounted tape medium is not supported by the device.

VOLUME IS NOT FORMATTED

A read-type command was issued to a tape which has not been formatted for read-type operations. The tape might be blank or written in a format that the device cannot recognize.

WRITE ERROR DETECTED

An unrecoverable error was detected while attempting to write a data block or tapemark.

WRITE LENGTH ERROR

A write-type command was issued for a data block whose length is not supported by the device. The block might be too short or too long.

WRITE PROTECTED

A write-type command was issued to a tape which is logically or physically write-protected.

DEVICE HAS EXCEEDED LONG BUSY TIMEOUT

The device will be boxed.

PERMANENT ERROR - VOLUME FENCED

The job you are running ends. Deallocation will clear the problem. If this error persists, contact the IBM Support Center.

PERMANENT ERROR - DEVICE REPORTED UNKNOWN MESSAGE CODE = cde

The device reported a unit check with sense data containing a message code (cde) that was not recognized by host error recovery procedures. The Host error recovery procedures may be down-level or the error could be due to a microcode problem.

UNABLE TO OBTAIN SENSE DATA FROM THE DEVICE

For some tape drives, a two-line message is issued if there was a unit check but IOS was unable to obtain sense data from the device.

IOS0001

REQUEST TERMINATED, EXCESSIVE RETRIES

DASD ERP has a loop detector to prevent an infinite number of ERP entries. If a count of 2048 retries is detected, the I/O request is terminated with a permanent error indication.

LIMITED SHARED ACCESS VIOLATION

The device has the Limited Shared Access Facility enabled at the control unit. While the device was in use by another host operating system, a tape motion command which could have compromised data integrity was issued to the device by the current host operating system. The current host's tape motion command is rejected. If this command had been issued by an application job step, it would normally result in an abend of the step. The job on the first host will continue without disruption until an unload occurs or a new tape is loaded, or the first host loses all paths to the device or varies the device offline. This violation may occur when the device sharing is managed via software which bypasses control unit assists.

VOLUME IS NOT FORMATTED

A read-type command was issued to a tape which has not been formatted for read-type operations. The tape might be blank or written in a format that the device cannot recognize.

ENCRYPTION FAILURE CU=XX DRIVE=XXXXXX EKM=XXXXXX

If an encryption-related key exchange between the drive and the key manager fails, an IOS0001 message is issued indicating that an encryption failure has occurred. The control unit (CU), DRIVE, and Encryption Key Manager (EKM) error codes are from sense bytes 08, 13-15, and 17-19 respectively. For an EKM failure, see the Problem Determination section of the *IBM System Storage[®] Tape Encryption Key Manager, Introduction, Planning, and User's Guide*, GA76-0418. When looking up the EKM failure, use the last four bytes of the error code. For a control unit (CU) failure, see the *IBM System Storage TS1130 Tape Drive and TS1120 Tape Drive and Controller Operator Guide*, GA32-0556. For more detailed information about the drive-reported conditions, and also about the EKM-reported conditions, see the Problem Determination section of the *IBM System Storage TS3500 Tape Library Operator Guide*, GA32-0560.

For more information, see *z/OS DFSMS Software Support for IBM System Storage TS1140, TS1130, and TS1120 Tape Drives (3592)*, SC26-7514.

IMMEDIATE MODE COPY[EXPECTED|UNEXPECTED] FAILURE REASON CODE = ZZCOPY COUNTXX OF YY COMPLETED SUCCESSFULLY

At least one required Immediate Mode Copy for the volume could not be completed. This can be EXPECTED or UNEXPECTED. Expected reasons can occur because of scheduled maintenance on a TS7700 Virtualization Engine. REASON CODE is obtained from Sense Byte 19. COPY COUNT is obtained from Sense Byte 18. XX is between bits 4 to 7 and YY is between bits 0 to 3.

WORM OVERWRITE REJECTED

A write-type command was attempted to overwrite existing data on a physical or logical WORM volume.

VOLUME SOFT FENCED

Device is in a soft fenced state which prevents unintended access (reads and writes) to the volume. See *Device Support Facilities (ICKDSF) User's Guide and Reference* for additional information on how to use the ICKDSF CONTROL with the CLEARFENCE parameter to reset the soft fenced setting.

System action: For magnetic tape devices, the results of the operation are unpredictable. This message warns that the system might fail. If CMD appears in the *err* field, the system rejects the command.

Operator response: Do the following:

- Isolate the failing storage director. Contact hardware support to repair it.
- If only one functional path remains, transfer critical applications to backup.
- Isolate the failing control unit. Contact hardware support to repair it.
- Identify and recover failing tasks.
- Notify the Storage Administrator.
- Depending on the value of *err*, one of the following:

CMD Correct and retry the command. If the command is FF, a hardware error occurred.

OVR, BOC, EQC, IOC, or ICC

Contact hardware support.

DCK Request an alternate utility program to perform recovery/replace functions and assign an alternate track. If alternate tracks are not available, contact hardware support.

EOD Recreate the data by rerunning the original job.

IOS002A • IOS003A

chp An inoperative channel path identifier (CHPID).

System action: Until the operator reactivates the inoperative paths, the system continues to use the device over paths that are operational.

Operator response: Do the following:

- Isolate the failing storage director. Contact hardware support to repair it.
- If only one functional path remains, transfer critical applications to backup.
- Check for a disabled control unit, an altered switching unit, or a disabled channel path.
- If the problem persists, vary the path(s) to the device offline to prevent the channel from selecting paths that are not operational.

Source: Input/output supervisor (IOS)

Module: IOSVIRBN

Routing code: 1

Descriptor code: 11

IOS002A IOS1002A *devn*, NO PATHS AVAILABLESTATUS FOR PATH(S) *chp,chp,...*

Explanation: The system selected a device for operation. The device did not respond on any online path. The system requires an I/O interrupt to retry I/O requests to the device.

The system issued this message for one or more of the following reasons:

- There are no paths available to the device
- During device initialization, the system encountered a permanent I/O error

In the message text:

devn The device number. The subchannel set identifier is indicated where appropriate.

chp

System action: In most cases, subsequent I/O requests to the device wait until the device becomes available.

Operator response: An I/O interrupt is required to cause I/O requests to the device to be retried. Do one of the following to simulate an I/O interrupt and cause queued requests to be retried:

- Enter a VARY DEVICE ONLINE command for *devn*
- Enter a VARY PATH ONLINE command for a path to device *devn*
- If a serial fiber is not connected, connect the serial fiber to device *devn*.

Source: Input/output supervisor (IOS)

Module: IOSVIRBN, IOSRDPSV, IOSVSLFD

Routing code: 1,3/4/7/8

Descriptor code: 2

IOS003A IOS1003A *devn*, INTERVENTION REQUIRED [READY THE DRIVE | RELOAD CARTRIDGE | UNLOAD CARTRIDGE.]

Explanation: The operator must perform manual maintenance on a device before the system can use it.

In the message text:

devn

The device number. The device number is prefixed by the subchannel set identifier when appropriate.

READY THE DRIVE, RELOAD CARTRIDGE, or UNLOAD CARTRIDGE.

The operator must ready a drive, reload a cartridge, or unload a cartridge. The system issues this message only for a cartridge tape subsystem.

System action: Subsequent I/O requests to the device wait in a queue until the device becomes available. Jobs will be delayed until the condition is satisfied; therefore a response in a timely manner is required.

Operator response: Depending on the device type, do one of the following:

- Put paper in the printer.
- Feed cards in the reader.
- Ready the tape device. Load or unload a cartridge.
- Ready the direct access storage device (DASD). Notify your storage administrator. The volume may be full or there may be other hardware-related considerations.

Source: Input/output supervisor (IOS)

Module: ERPS

Routing code: 1,3|4|7|8

Descriptor code: 2

IOS004I IOS RECOVERY FAILURE - DEVICES MAY BE UNAVAILABLE

Explanation: An error occurred while the system was performing channel recovery. Some I/O devices may not be available.

System action: The system continues processing. If several I/O devices are not available for use, system performance may suffer.

Operator response: Notify the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If none exists, contact the IBM Support Center.

Source: Input/output supervisor (IOS)

Routing code: 2,10

Descriptor code: 1

IOS017I IOS1017I ALIAS DEVICE *adev* IS UNBOUND

Explanation: Box processing has been invoked for a parallel access volume (PAV) alias device. For PAV alias devices, IOS unbinds the device instead of boxing it.

Note: A PAV alias device will be put into the boxed state only when a hot I/O condition has been detected. In the message text:

adev

The device number of the alias UCB.

System action: The system resumes normal operation. The alias is unbound.

Operator response: To bind the PAV alias device, either issue a vary online command against the base with the UNCOND keyword, or issue a vary online command against the base when it is in the offline state.

Note: The Workload Manager (WLM) may bind the PAV alias automatically if dynamic PAVs are being exploited.

Source: Input/output supervisor (IOS)

Module: IOSRFDEV, IOSRDBOX

Routing code: 2,10

Descriptor code: 4

IOS019W I/O SUBSYSTEM IS NO LONGER OPERATIONAL - SYSTEM TERMINATED

Explanation: The system can no longer perform I/O.

System action: The system enters non-restartable wait state X'A19'.

Operator response: See the operator response for wait state X'A19'.

Source: Input/output supervisor (IOS)

IOS050I • IOS051I

Module: IOSRMCH

Routing code: 2,10,Note 12

Descriptor code: 1

IOS050I CHANNEL DETECTED ERROR ON *dev,chnp,cmd,stat* [,PCHID=*pppp*] [,EXTSS=*ss*]

| **Explanation:** A channel detected an error while the system was operating a device. If the detecting component can
| be identified, a companion message IOS054I may also be issued.

In the message text:

dev The device number.

chnp The channel path identifier (CHPID), if known; otherwise, this field is set to asterisks.

cmd The failing command code, if known; otherwise, this field is set to asterisks.

stat The device and subchannel status, if known; otherwise, this field is set to asterisks.

PCHID=pppp

The physical channel id, if known.

EXTSS=ss

The subchannel extended status, if known.

System action: The system writes a logrec data set error record.

Operator response: Do the following:

1. Isolate the failing storage director, control unit, or channel path for repair.
2. If the error persists on one path to the device, and the system has another path to the device, vary offline the path with the error.
3. If the job that allocated the device is running in the master's address space, force the device offline, then cancel any jobs that allocated the device.
If the job that allocated the device is not running in the master's address space, cancel any jobs that allocated the device, then force the device offline.

Source: Input/output supervisor (IOS)

Module: IOSRSLH

Routing code: 2,10

Descriptor code: 4

IOS051I INTERFACE TIMEOUT DETECTED ON *dev,chnp,cmd,stat* [,PCHID=*pppp*] [,EXTSS=*ss*]

| **Explanation:** The channel subsystem detected a timeout condition during the operation of device *dev*. If the
| detecting component can be identified, a companion message IOS054I may also be issued.

In the message text:

dev The device number.

chnp The channel path identifier (CHPID), if known; otherwise, this field is set to asterisks.

cmd The failing command code, if known; otherwise, this field is set to asterisks.

stat The device and subchannel status, if known; otherwise, this field is set to asterisks.

PCHID=pppp

The physical channel id, if known.

EXTSS=ss

The subchannel extended status, if known.

System action: The system writes a logrec record to record this condition.

| **Operator response:** Determine if an IOS050I message has been issued in the same time frame for the same resource.

- | • If an IOS050I message was issued for the same resource, then use the operator response for message IOS050I.
- | • If an IOS050I message was not issued, then check the resource for fabric contention using performance tools.

Source: Input/output supervisor (IOS)

Module: IOSRSLH

IOS052I CHANNEL EVENT REPORTED FOR *dev,chp,cmd,stat* [,PCHID=*pppp*][,EXTSS=*ss*]

Explanation: A channel detected an error while the system was operating a device.

In the message text:

dev The device number.

chp The channel path identifier (CHPID), if known; otherwise, this field is set to asterisks.

cmd The failing command code, if known; otherwise, this field is set to asterisks.

stat The device and subchannel status, if known; otherwise, this field is set to asterisks.

PCHID=*pppp*
The physical channel id, if known.

EXTSS=*ss*
The subchannel extended status, if known.

System action: This message indicates that the channel detected an error (for example, a cross check error) and the error has automatically been recovered by the channel. The message is issued to the SYSLOG only to provide an audit trail for serviceability.

Source: Input/output supervisor (IOS)

Module: IOSRSLH

IOS053I UTILITY SUBCHANNEL DETECTED ERROR ON *Usss* [EQC, CC]

Explanation: The system detected an error on a utility subchannel. An example of a utility subchannel is a system-assigned subchannel used to access Storage Class Memory (SCM).

In the message text:

Usss The utility identifier.

CC The optional error code.

System action: The system writes a logrec data set error record.

Source: Input/output supervisor (IOS)

Module: IOSRSLH

Routing code: 2,10

IOS054I *sddd,chp* ERRORS DETECTED BY *component* [, *component*]...

Explanation: This message is preceded by message IOS050I or IOS051I and identifies the hardware component(s) that detected the error. This information may be used to isolate the faulty hardware component.

The errors on device [*s*]*dev* and channel *chp* were detected by the components indicated.

In the message text:

sddd The subchannel set identifier and device number.

chp The channel path identifier (CHPID), if known; otherwise, this field is set to asterisks.

component
The detecting component and can be one or more of the following:

- CHANNEL
- CHAN SWITCH PORT

IOS062E • IOS063E

- CU SWITCH PORT
- CONTROL UNIT

System action: The system writes a logrec data set error record.

Operator response: See the operator response for message IOS050I or IOS051I.

Source: Input/output supervisor (IOS)

Module: IOSRSLH

Routing code: 2,10

Descriptor code: 4

IOS062E **ERROR ON CHANNEL PATHS - STOP I/O REQUESTS FROM SHARING SYSTEMS OR USE IOACTION STOP, DEV=(xxxx) TO STOP I/O TO SHARED DEVICES {—SINGLE CHANNEL PATH (*chp*) BEING RECOVERED | —MULTIPLE CHANNEL PATHS BEING RECOVERED }**

Explanation: An error occurred on the specified channel path, which has reserved devices (such as DASD) or assigned devices (such as tapes).

In the message text:

chp The channel path identifier (CHPID).

System action: The system does not use the channel path until recovery is complete. Recovery waits until the operator restarts the system. The system issues message IOS204E (or IOS201E) when the I/O on other processors that share devices can be started.

Note: IOS062E is issued via disabled console communication (DCCF) processing when a DASD device has been found on the channel path undergoing recovery, or message IOS063E was issued but a response was not received within a 3 minute interval.

Operator response: Do the following:

1. Attempt to prevent the other processors that share devices from initiating I/O by entering the IOACTION STOP command. If the IOACTION STOP command fails, or multiple channel paths are being recovered, sharing processors need to be stopped to prevent I/O activity to the shared devices.
2. After the IOACTION STOP command is successful or sharing processors have been stopped, restart the system in error.

For more information, see the Reconfiguring the System Directly and IOACTION Command of *z/OS MVS System Commands*.

Source: Input/output supervisor (IOS)

Module: IOSRCHPR

Routing code: 2,10

Descriptor code: 2

IOS063E **ERROR ON CHANNEL PATHS - STOP I/O REQUESTS FROM SHARING SYSTEMS OR USE IOACTION STOP, DEV=(xxxx) TO STOP I/O TO SHARED DEVICES {—SINGLE CHANNEL PATH (*chp*) BEING RECOVERED | —MULTIPLE CHANNEL PATHS BEING RECOVERED }**

Explanation: An error occurred on the specified channel path, which has reserved devices (such as DASD) or assigned devices (such as tapes).

In the message text:

chp The channel path identifier (CHPID).

System action: The system does not use the channel path until recovery is complete. Recovery waits until the operator replies to message IOS206A. The system issues message IOS204E (or IOS201E) when the I/O on other processors that share devices can be started.

The system issues message IOS206A to wait for the operator reply. Once replied to, messages IOS063E and IOS206A are deleted using the DOM macro, and processing continues. If the IOS063E/IOS206A message combination is not

replied to within 3 minutes, message IOS062E is issued via disabled console communication (DCCF) processing.

Operator response: Do the following:

1. Attempt to prevent the other processors that share devices from initiating I/O by entering the IOACTION STOP command. If the IOACTION STOP command fails, or multiple channel paths are being recovered, sharing processors need to be stopped to prevent I/O activity to the shared devices.
2. After the IOACTION STOP command is successful or sharing processors have been stopped, reply to the message to continue.

Source: Input/output supervisor (IOS)

Module: IOSRCHPR

Routing code: 1,10

Descriptor code: 1,7

IOS070E *dev*, MOUNT PENDING

Explanation: The system found that a mount is pending for a device.

In the message text:

dev The device number.

System action: The system continues processing other work. The mount remains pending.

Operator response: Do the following:

- Mount the required volume.
- Ready the device.
- Enter a VARY ONLINE command to continue mount processing.

Source: Input/output supervisor (IOS)

Module: IOSRMIHP

Routing code: 1,3,4,10

Descriptor code: 3

IOS071I **IOS1071I** *devn,chn,jobname,text*[STATUS:statustext]

Explanation: The system found the condition appearing in the message text. One of the following occurred:

- The condition existed for a longer time than the acceptable time defined by the installation.
- A missing interrupt handler (MIH) exit routine indicates that the system will not reset the device with a Clear Subchannel (CSCH) instruction.

In the message text:

devn

The device number. The device number is prefixed by the subchannel set identifier when appropriate.

chn

The channel path identifier (CHPID) of the channel path that was used for the I/O operation, or a residual channel path from the last I/O operation for the device, or asterisks if a channel path cannot be determined.

This field contains the CHPID used for the I/O operation that appears in the message under the following conditions:

- MISSING CHANNEL AND DEVICE END appears in the message
- MISSING DEVICE END appears in the message
- START PENDING appears in the message and this is a zHPF I/O operation
- START PENDING appears in the message, this is a non-zHPF I/O operation, and the I/O operation was directed to a specific channel path.
- HYPERSWAP INITIATED TIMEOUT appears in the message.

IOS071I

This field contains a residual CHPID from the last I/O operation for the device under the following conditions. This is not necessarily the channel path where an error occurred.

- IDLE WITH WORK QUEUED
- HALT SUBCHANNEL INTERRUPT MISSING
- CLEAR SUBCHANNEL INTERRUPT MISSING

This field contains asterisks when:

- No channel path is associated with the missing interruption. For example, when START PENDING appears in the message, this is a non-zHPF I/O request, and the I/O request was not directed to a specific channel path.
- The last path used mask (LPUM) is not valid.

jobname

The name of the job associated with the device.

text

A description of the missing interruption condition. It can be one of the following:

MISSING CHANNEL AND DEVICE END or MISSING DEVICE END

A hardware error occurred.

START PENDING

A hardware error occurred. The channel has an I/O request to process. The device is not active or it is busy on another channel path interface. If the device is reserved by another system, message IOS431I might follow; it identifies the system holding the reserve.

If message IOS431I is issued, the system routes the D U,VOL and then the D GRS,DEV commands to the failing system to identify the jobs holding the reserve. It identifies the jobs in message ISG020I if:

- The failing system is in the sysplex
- The failing system responds to the D GRS command within 30 seconds
- No other system is attempting this at the same time.

IDLE WITH WORK QUEUED

A hardware or software error occurred. The channel has no active I/O requests.

HALT SUBCHANNEL INTERRUPT MISSING

CLEAR SUBCHANNEL INTERRUPT MISSING

A hardware error occurred.

HYPERSWAP INITIATED TIMEOUT

A HyperSwap[®] was in progress. MIH detects this condition and immediately times out any active I/O for any device being swapped. The I/O request is cancelled and requeued for later execution once the swap is complete.

statustext

The state of the I/O operation prior to detecting the missing interruption condition. It can be one of the following:

NO I/O OPERATION IS IN PROGRESS

The device does not know about this I/O operation. This can occur for one of the following reasons:

- The I/O operation was lost in transit to the device.
- The I/O operation ended just before the device was queried to determine the state.

I/O OPERATION IS EXECUTING

The I/O operation is currently active for this device. This might occur for a long running channel program.

I/O WAITING FOR I/O OPER FROM ANOTHER SYSTEM

The I/O operation is delayed because it is waiting for the completion of another I/O operation (other than a device reserve) from another system.

I/O WAITING FOR EXTENT CONFLICT

The I/O operation is delayed because it is attempting to access a DASD extent that is in use by another I/O operation.

I/O WAITING FOR DEVICE DEPENDENT OPERATION

The I/O operation is delayed because it is waiting for completion of a device dependent operation. For example, data needs to be staged into the cache from disk.

DEVICE RESERVED BY ANOTHER SYSTEM

The I/O operation is delayed because the device is reserved by another system. Message IOS431I is also issued to identify the system holding the reserve.

DEVICE RESERVED TO THIS SYSTEM

The I/O operation is delayed because the device is reserved to this system on one or more channel paths for the device, but the I/O operation used a different path. This occurs during a path group out of synch condition, where some online paths are in the path group and some are not. Recovery will be performed to correct this condition.

DEVICE RESERVED

The I/O operation is delayed because the device is reserved. This message is issued when z/OS is running as a guest under VM and it is unable to determine whether the current system or another system holds the reserve.

DEVICE IS LONG BUSY

The I/O operation is delayed because the device is in a long busy state.

DEVICE RECOVERY IS IN PROGRESS

The I/O operation is delayed because device recovery is in progress. For example, a disk drive failed and RAID recovery is in progress to reconstruct the data.

CONTROL UNIT IS BUSY

The I/O operation is delayed because the control unit is busy.

CONTROL UNIT RECOVERY IS IN PROGRESS

The I/O operation is delayed because control unit recovery is in progress.

System action: The system action depends on the message text. It is one of the following:

MISSING CHANNEL AND DEVICE END**MISSING DEVICE END**

The system issues a Clear Subchannel (CSCH) instruction to reset the device.

START PENDING

If the status text is present and indicates that the device is reserved to another system, the I/O operation is allowed to continue, and the system issues message IOS431I, identifying the system holding the reserve.

Otherwise, the system resets the device and restarts the I/O request.

IDLE WITH WORK QUEUED

The system resets the device and passes an I/O request to the channel. The system sends work to the device. The system may issue message IOS075E.

HALT SUBCHANNEL INTERRUPT MISSING

The system does not reset the device.

CLEAR SUBCHANNEL INTERRUPT MISSING

The system does not do any further processing on the device until a clear subchannel interruption occurs.

HYPERSWAP INITIATED TIMEOUT

The system cancels the I/O and requeues it so the HyperSwap can proceed.

Operator response: Depending on the message text, do the following:

START PENDING

Do the following:

- Determine whether the affected devices are reserved for the failing system.
- Perform the recovery procedures defined by your installation.

Note: If no devices are reserved for the failing system, resetting the reserves may cause integrity problems.

- If the system is in a check stop state or restartable wait state, initiate an interface reset from the system console of the nonoperational system.
- If the interface reset is unsuccessful, initiate a system reset from the system console of the nonoperational system.

IOS072E

- Notify the system programmer.

Note: If the system issued message IOS431I, take the actions described in the operator response for that message.

IDLE WITH WORK QUEUED

If the system issued message IOS075E, notify the system programmer.

HYPERSWAP INITIATED TIMEOUT

A HyperSwap is in progress. No action is necessary.

For other values in the message text, contact hardware support.

System programmer response: If the error persists, dynamically adjust the MIH values.

Source: Input/output supervisor (IOS)

Module: IOSRMIHP

Routing code: 2,3,4,7,10,11

Descriptor code: 4

IOS072E **MIH TERMINATED, *text* MIH NOT RUNNING. TRY 'SETIOS MIH,MOUNTMSG=YES | NO'**

Explanation: *text* is one of the following:

- INITIALIZATION FAILED
- INTERNAL PROCESSING ERROR

One of the following occurred:

- The system found an error while processing a missing interrupt.
- The system found that missing interrupt processing is not running.

In the message text:

INITIALIZATION FAILED

An unexpected program error occurred during missing interrupt initialization. Missing interrupts will not be processed.

INTERNAL PROCESSING ERROR

The system ran the maximum number of retries while scanning for missing interruptions.

System action: The system ends missing interrupt processing. If the operator cannot reactivate missing interrupt processing, it is not available for this initial program load (IPL). Depending on the message text, the system does the following:

INITIALIZATION FAILED

The system writes an SVC dump.

INTERNAL PROCESSING ERROR

The system writes a logrec data set error record for each retry.

Operator response: Enter a SETIOS command to try to activate missing interrupt processing. If this is not successful, notify the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Tell the operator to reIPL the system.

Source: Input/output supervisor (IOS)

Module: IOSRMIHP

Routing code: 1,10

Descriptor code: 3

IOS073E MIH MESSAGE PROCESSING TERMINATED

Explanation: Because of repeated errors, the system ended missing interrupt processing.

System action: The system writes an SVC dump. The system writes a logrec data set error record. The system may continue to detect missing interrupts, but it does not report them to the operator.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Input/output supervisor (IOS)

Routing code: 1,10

Descriptor code: 3

IOS074E MIH LOGREC RECORDING PROCESSING TERMINATED

Explanation: Because of repeated errors, the system stopped recording the logrec data set error records for missing interrupts.

System action: The system writes an SVC dump. The system does not record missing interrupts in the logrec data set. The system may continue to detect missing interrupts.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Input/output supervisor (IOS)

Module: IOSRMIHT

Routing code: 1,10

Descriptor code: 3

IOS075E IOS1075E *devn*, RECURRING MIH CONDITION FOR THIS DEVICE

Explanation: The system found a recurring missing interruption for a device.

In the message text:

devn The device number. The device number is prefixed by the subchannel set identifier when appropriate.

System action: The system writes a logrec data set error record. The system previously issued message IOS071I, IOS077E, or IOS076E.

Operator response: See the operator response for message IOS071I, IOS077E, or IOS076E.

If message IOS075E recurs without intervening IOS071E or IOS077E messages, vary the device offline. Notify the system programmer.

System programmer response: See the system programmer response for message IOS071I, IOS077E, or IOS076E.

Source: Input/output supervisor (IOS)

Routing code: 2,5,6,7,10,11

Descriptor code: 3

IOS076E IOS1076E *devn,chn,jobname,text*,[STATUS:*statustext*]

Explanation: One of the following occurred:

- The condition in the message text existed for a longer time than the time specified by the installation.
- A clear subchannel interruption is missing.

In the message text:

devn

The device number. The device number is prefixed by the subchannel set identifier when appropriate.

IOS076E

chp

The channel path identifier (CHPID) of the channel path that was used for the I/O operation, or a residual channel path from the last I/O operation for the device, or asterisks if a channel path cannot be determined.

This field contains the CHPID used for the I/O operation appears in the message under the following conditions:

- MISSING CHANNEL AND DEVICE END appears in the message
- MISSING DEVICE END appears in the message
- START PENDING appears in the message and this is a zHPF I/O operation
- START PENDING appears in the message, this is a non-zHPF I/O operation, and the I/O operation was directed to a specific channel path.
- HYPERSWAP INITIATED TIMEOUT appears in the message.

This field contains a residual CHPID from the last I/O operation for the device under the following conditions. This is not necessarily the channel path where an error occurred:

- IDLE WITH WORK QUEUED
- HALT SUBCHANNEL INTERRUPT MISSING
- CLEAR SUBCHANNEL INTERRUPT MISSING

This field contains asterisks when:

- No channel path is associated with the missing interruption. For example, when START PENDING appears in the message, this is a non-zHPF I/O request, and the I/O request was not directed to a specific channel path.
- The last path used mask (LPUM) is not valid

jobname

The name of the job associated with the device.

text

A description of the missing interruption condition. It can be one of the following:

MISSING CHANNEL AND DEVICE END or MISSING DEVICE END

A hardware error occurred.

START PENDING

A hardware error occurred. The channel has an I/O request to process. The device is not active or it is busy on another channel path interface. If the device is reserved by another system, message IOS431I might follow; it identifies the system holding the reserve.

If message IOS431I is issued, the system routes the D U,VOL and then the D GRS,DEV commands to the failing system to identify the jobs holding the reserve. It identifies the jobs in message ISG020I if:

- The failing system is in the sysplex
- The failing system responds to the D GRS command within 30 seconds
- No other system is attempting this at the same time.

IDLE WITH WORK QUEUED

A hardware or software error occurred. The channel has no active I/O requests.

HALT SUBCHANNEL INTERRUPT MISSING CLEAR SUBCHANNEL INTERRUPT MISSING

A hardware error occurred.

HYPERSWAP INITIATED TIMEOUT

A HyperSwap was in progress. MIH detects this condition and immediately times out any active I/O for any device being swapped. The I/O request is cancelled and requeued for later execution once the swap is complete.

statustext

The state of the I/O operation prior to detecting the missing interruption condition. It can be one of the following:

NO I/O OPERATION IS IN PROGRESS

The device does not know about this I/O operation. This can occur for one of the following reasons:

- The I/O operation was lost in transit to the device.
- The I/O operation ended just before the device was queried to determine the state.

I/O OPERATION IS EXECUTING

The I/O operation is currently active for this device. This might occur for a long running channel program.

I/O WAITING FOR I/O OPER FROM ANOTHER SYSTEM

The I/O operation is delayed because it is waiting for the completion of another I/O operation (other than a device reserve) from another system.

I/O WAITING FOR EXTENT CONFLICT

The I/O operation is delayed because it is attempting to access a DASD extent that is in use by another I/O operation.

I/O WAITING FOR DEVICE DEPENDENT OPERATION

The I/O operation is delayed because it is waiting for completion of a device dependent operation. For example, data needs to be staged into the cache from disk.

DEVICE RESERVED BY ANOTHER SYSTEM

The I/O operation is delayed because the device is reserved by another system. Message IOS431I is also issued to identify the system holding the reserve.

DEVICE RESERVED TO THIS SYSTEM

The I/O operation is delayed because the device is reserved to this system on one or more channel paths for the device, but the I/O operation used a different path. This occurs during a path group out of synch condition, where some online paths are in the path group and some are not. Recovery will be performed to correct this condition.

DEVICE RESERVED

The I/O operation is delayed because the device is reserved. This message is issued when z/OS is running as a guest under VM and it is unable to determine whether the current system or another system holds the reserve.

DEVICE IS LONG BUSY

The I/O operation is delayed because the device is in a long busy state.

DEVICE RECOVERY IS IN PROGRESS

The I/O operation is delayed because device recovery is in progress. For example, a disk drive failed and RAID recovery is in progress to reconstruct the data.

CONTROL UNIT IS BUSY

The I/O operation is delayed because the control unit is busy.

CONTROL UNIT RECOVERY IS IN PROGRESS

The I/O operation is delayed because control unit recovery is in progress.

System action: The system action depends on the message text. It is one of the following:

MISSING CHANNEL AND DEVICE END**MISSING DEVICE END**

The system issues a Clear Subchannel (CSCH) instruction to reset the device.

START PENDING

If status text is present and indicates that the device is reserved to another system, the I/O operation is allowed to continue, and the system issues message IOS431I, identifying the system holding the reserve.

Otherwise, the system resets the device and restarts the I/O request.

IDLE WITH WORK QUEUED

The system resets the device and passes an I/O request to the channel.

HALT SUBCHANNEL INTERRUPT MISSING

The system does not reset the device.

CLEAR SUBCHANNEL INTERRUPT MISSING

The system does no further processing on the device until a clear subchannel interruption occurs.

HYPERSWAP INITIATED TIMEOUT

The system cancels the I/O and requeues it so the HyperSwap can proceed.

Operator response: Depending on the message text, do one of the following:

IOS077E

MISSING DEVICE END

Do the following:

- Check the device for hardware problems. Look for the SELECT light on for a tape drive. Check if the SELECT LOCK is on for a disk device. Check for proper connections to control and switching units.
- If you just finished rewinding a tape or mounting a volume, enter a VARY *dev*,ONLINE command to generate a simulated device end. Do not issue the VARY *dev*,ONLINE command under other circumstances; it could damage data on the device.
- If you did not just finish rewinding a tape or mounting a volume, cancel the jobs that are using the device.

START PENDING

Do the following:

- Determine whether the affected devices are reserved for the failing system.
- Perform the recovery procedures defined by your installation.

Note: If no devices are reserved for the failing system, resetting the reserves may cause integrity problems.

- If the system is in a check stop state or restartable wait state, initiate an interface reset from the system console of the nonoperational system.
- If the interface reset is unsuccessful, initiate a system reset from the system console of the nonoperational system.
- Notify the system programmer.

IDLE WITH WORK QUEUED

If the system issued message IOS075E, notify the system programmer.

HYPERSWAP INITIATED TIMEOUT

A HyperSwap is in progress. No action is necessary.

For other values in the message text, contact hardware support.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Input/output supervisor (IOS)

Module: IOSRMIHP

Routing code: 2,5,6,7,10,11

Descriptor code: 3

IOS077E **IOS1077E** *devn,chn,jobname,text*

Explanation: *text* is one of the following:

- MISSING CHANNEL AND DEVICE END
- START PENDING
- IDLE WITH WORK QUEUED
- HALT SUBCHANNEL INTERRUPT MISSING
- CLEAR SUBCHANNEL INTERRUPT MISSING
- HYPERSWAP INITIATED TIMEOUT

The system found a condition that existed for longer time than the acceptable time defined by the installation.

This message indicates a recurring condition that message IOS071I previously indicated. The system did not reset the device.

In the message text:

dev

The device number. The device number is prefixed by the subchannel set identifier when appropriate.

chp

The channel path identifier (CHPID) of the path with the missing channel end, device end, or both. This path is the last path to be used by the subchannel. This field contains asterisks when there is no channel path associated with the missing interruption, or when the last path used mask (LPUM) is zero.

jobname

The name of the job associated with the device.

MISSING CHANNEL AND DEVICE END**MISSING DEVICE END**

A hardware error occurred.

START PENDING

One of the following occurred:

- In a loosely coupled multiprocessing complex, another processor reserved the device for longer than the time limit specified by the installation.
- A hardware error. The channel has an I/O request to process. The device is not active or it is busy on another channel path interface.

IDLE WITH WORK QUEUED

A hardware or software error occurred. The system sends work to the device, but the channel has no active I/O requests.

HALT SUBCHANNEL INTERRUPT MISSING

A hardware error occurred.

CLEAR SUBCHANNEL INTERRUPT MISSING

A recurring missing clear subchannel interrupt has occurred. See description in IOS076E for missing clear subchannel interrupts.

HYPERSWAP INITIATED TIMEOUT

A HyperSwap was in progress. MIH detects this condition and immediately times out any active I/O for any device being swapped. The I/O request is cancelled and requeued for later execution once the swap is complete.

System action: The system continues to issue the Clear Subchannel (CSCCH) instruction. The system also issues message IOS075E.

Operator response: Depending on the message text, do one of the following:

MISSING DEVICE END

Do the following:

- Check the device for hardware problems. Look for the SELECT light on for a tape drive. Check if the SELECT LOCK is on for a disk device. Check for proper connections to control and switching units.
- If you just finished rewinding a tape or mounting a volume, enter a VARY *dev*,ONLINE command to generate a simulated device end. Do not issue the VARY *dev*,ONLINE command under other circumstances; it could damage data on the device.
- If you did not just finish rewinding a tape or mounting a volume, cancel the jobs that are using the device.

START PENDING

Do the following:

- Determine whether the affected devices are reserved for the failing system.
- Perform the recovery procedures defined by your installation.

Note: If no devices are reserved for the failing system, resetting the reserves may cause integrity problems.

- If the system is in a check stop state or restartable wait state, initiate an interface reset from the system console of the nonoperational system.
- If the interface reset is unsuccessful, initiate a system reset from the system console of the nonoperational system.
- Notify the system programmer.

IDLE WITH WORK QUEUED

If the system issued message IOS075E, notify the system programmer.

IOS078I • IOS079I

HYPERSWAP INITIATED TIMEOUT

A HyperSwap is in progress. No action is necessary.

For other values in the message text, contact hardware support.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Input/output supervisor (IOS)

Module: IOSRMIHP

Routing code: 2,5,6,7,10,11

Descriptor code: 3

IOS078I **IOS1078I** *devn,chnpid,[jobname]*, I/O TIMEOUT INTERVAL HAS BEEN EXCEEDED FOR AN ACTIVE REQUEST. THE ACTIVE REQUEST HAS BEEN TERMINATED, QUEUED REQUESTS MAY HAVE ALSO BEEN TERMINATED.

Explanation: The input/output (I/O) timing facility found that an active I/O request exceeded the the installation-specified or I/O driver-specified time interval for the specified device.

The error was caused by one or more of the following:

- Long running error recovery in the hardware due to some device or control unit error
- Long running error recovery in the software (possibly device support routines and/or applications software attempting to recover from an error) due to some device or control unit error
- A missing interrupt
- A normally long running channel program.

In the message text:

devn The device number. The device number is prefixed by the subchannel set identifier when appropriate.

chnpid The channel path identifier of the last path used by the subchannel. ** appears in this field when the last path used mask is zero.

jobname The name of the job associated with the device.

System action: The system ends the request with a permanent error, writes this message to the system hardcopy log, and writes a logrec data set error record.

Operator response: Notify the system programmer.

System programmer response: Run a utility that dumps the data from SYS1.LOGREC. Contact hardware support. Provide the SYS1.LOGREC error records.

Source: Input/output supervisor (IOS)

Module: IOSRMIHP, IECVPST

Routing code: 2,10,11

Descriptor code: 4

IOS079I **IOS1079I** *devn,chnpid,[jobname]*, I/O TIMEOUT INTERVAL HAS BEEN EXCEEDED FOR A QUEUED REQUEST. THE QUEUED REQUEST HAS BEEN TERMINATED.

Explanation: The input/output (I/O) timing facility found that a queued I/O request exceeded the installation-specified time interval for the specified device.

The error was caused by one or more of the following:

- Long running error recovery in the hardware due to some device or control unit error
- Long running error recovery in the software (possibly device support routines and/or applications software attempting to recover from an error) due to some device or control unit error
- A missing interrupt

- A normally long running channel program.

In the message text:

devn The device number. The device number is prefixed by the subchannel set identifier when appropriate.

chpid The channel path identifier of the last path used by the subchannel. ** appears in this field when the last path used mask is zero.

jobname The name of the job associated with the device.

System action: The system ends the request with a permanent error, writes this message to the system hardcopy log, and writes a logrec data set error record.

Operator response: Notify the system programmer.

System programmer response: Run a utility that dumps the data from the logrec data set. Contact hardware support. Provide the logrec data set error records.

Source: Input/output supervisor (IOS)

Module: IOSRMIHP

Routing code: Note 13

Descriptor code: 4

IOS080I IOS1080I *devn,chpid,[jobname]*, I/O TIMEOUT INTERVAL HAS BEEN EXCEEDED FOR {AN ACTIVE | A QUEUED} REQUEST. [DATASET NAME=*dsname*]

Explanation: The input/output (I/O) timing facility found that a queued I/O request exceeded the installation-specified I/O timing interval limit for the device. The I/O timing message-only recovery processing was active for the device at the time that the I/O timeout condition was detected.

The I/O timeout condition was caused by one or more of the following:

- Long running error recovery in the hardware due to some device or control unit error
- Long running error recovery in the software (possibly device support routines and/or applications software attempting to recover from an error) due to some device or control unit error
- A missing interrupt
- A normally long running channel program.

In the message text:

devn The device number. The device number is prefixed by the subchannel set identifier when appropriate.

chpid The channel path identifier of the last path used by the subchannel. ** appears in this field when the last path used mask is zero.

jobname The name of the job associated with the device.

dsname The data set name associated with the I/O operation. This text line does not appear when the data set name is not available.

System action: Since message-only processing was active on this device at the time of the I/O timeout condition, the system does not end the I/O request with a permanent error. Instead, the request is left in the system and I/O timing counters are reset. The system writes this message to the system hardcopy log and writes a logrec data set record.

Note that this message will reappear if the I/O condition persists for another device-specified I/O timing interval.

Operator response: Notify the system programmer.

System programmer response: If the I/O request should be terminated, consider resetting the I/O timeout interval for the device in order to have full I/O timing recovery active for the device. Once the next I/O timing limit for the device is reached, I/O timing will end the I/O request with a permanent error if full recovery is active.

Contact hardware support. Provide the logrec dataset records.

Source: Input/output supervisor (IOS)

IOS084I

Module: IOSRMIHP, IECVPST

IOS084I IOACTION SYNTAX {ERROR | CORRECTION}: -- *text*

Explanation: *text* may be one of the following:

- ["rrrrrrrrrrrrrrrrrr" EXPECTED BEFORE "eeeeeeeeeeeeeeee"]
- ["iiiiiiiiiiiiiiii" SEEN; "aaaaaaaaaaaaaaaa", ... "zzzzzzzzzzzzzzzz", EXPECTED]
- [INPUT SKIPPED UP TO "ssssssssssssssss"]
- ["kkkkkkkkkkkkkkkkkk" HAS BEEN DELETED]
- ["ssssssssssssssss" INSERTED]

The system issues this message in response to one of the following:

- The operator entered an IOACTION command with syntax errors.
- The system automatically performed a correction in response to a syntax error in a previously entered IOACTION command. The syntax error involved was indicated in a previous IOACTION SYNTAX ERROR message.

In the message text:

"rrrrrrrrrrrrrrrrrr" **EXPECTED BEFORE** "eeeeeeeeeeeeeeee"

The required input was missing from the command line. The expected location was before eeeeeeeeeeeeeeee.

In the message text:

rrrrrrrrrrrrrrrrrr

The required input.

eeeeeeeeeeeeeeee

The input that follows the required input.

"iiiiiiiiiiiiiiii" **SEEN;** "aaaaaaaaaaaaaaaa", ... "zzzzzzzzzzzzzzzz", **EXPECTED**

Incorrect input was entered.

In the message text:

iiiiiiiiiiiiiiii

Incorrect input.

aaaaaaaaaaaaaaaa ... zzzzzzzzzzzzzzzzz

The choices for valid input.

INPUT SKIPPED UP TO "ssssssssssssssss"

Incorrect input was entered and ignored up until sssssssssssssss was located.

ssssssssssssssss

The first input recognized by the system after the incorrect input.

"kkkkkkkkkkkkkkkkkk" **HAS BEEN DELETED**

An extraneous keyword was entered. The system ignores the keyword.

kkkkkkkkkkkkkkkkkk

The extraneous keyword.

"ssssssssssssssss" **INSERTED**

ssssssssssssssss was expected as input and was inserted to correct the command line. This will be performed only when there is one unique insertion which will correct the syntax.

ssssssssssssssss

The inserted input.

System action: When the system issues an IOACTION SYNTAX CORRECTION message, the system has previously issued an IOACTION SYNTAX ERROR message. In this case, the system has performed simple error correction on the entered command and the command is accepted.

If an IOACTION SYNTAX ERROR message is issued with no corresponding IOACTION SYNTAX CORRECTION message, the system rejects the IOACTION command.

Operator response: If the syntax was not corrected, correct the syntax and enter the command again.

Source: Input/output supervisor (IOS)

Module: IOSIPAR

Routing code: -

Descriptor code: 4

IOS085I [source] text

Explanation: text is one of the following:

- cccc IS AN INCORRECT VERB
- cccc VERB HAS NO KEYWORDS
- cccc INCORRECT DIGIT AT COL nn
- cccc MUST BE 3 OR 4 DIGITS
- cccc MUST BE 1 TO 5 DIGITS
- cccc MUST BE LESS THAN 32768
- cccc MUST BE =24 or 31
- cccc IS AN INCORRECT CTRACE RECORD
- cccc EXTRA COMMA DELIMITER(S) IGNORED
- cccc MIDAW FACILITY NOT SUPPORTED BY PROCESSOR
-)cccc RIGHT PAREN NOT FOLLOWED BY COMMA OR BLANK
- cccc MISSING "(" OR ","
- cccc EKM IMPROPER HOSTNAME SPECIFICATION
- cccc MUST BE PRIMARY, SECONDARY, OR ALL
- ccccccccc IS AN INCORRECT KEYWORD
- dev2 IS LESS THAN PREDECESSOR
- keynm, MUST BE =NO, YES, OR BASEONLY
- keynm OPERAND FIELD BLANK
- keynm TOO NEAR CARD END
- keywd LEFT OPTION IS NOT VALID
- name NOT IN MIH TABLES
-)operand RIGHT PAREN MISSING
- ATTACH FOR name FAILED
- CTRACE IS NOT VALID AFTER NIP. ISSUE THE MVS 'TRACE CT' COMMAND
- DISPLAY DEVICE REQUEST. ALL WERE INCORRECT.
- DISPLAY IOS,GROUP - THIS SYSTEM IS NOT CURRENTLY IN A GROUP
- DISPLAY IOS,GROUP - IXCQUERY FAILED - RETURN CODE rc REASON CODE rsn
- DUPLICATE dev/time KEYWORD IGNORED
- EKM INCORRECT CONNECTION NUMBER
- ESTAE FAILED FOR command COMMAND
- ESTAE ENTERED FOR command COMMAND
- FCX FACILITY IS NOT SUPPORTED BY PROCESSOR
- card IS NOT VALID AFTER NIP
- "IOTTERM" IS IGNORED. VALID ONLY WITH IOTHSWAP=YES.
- REQUEST REJECTED. CHANGE/DISPLAY ACTIVE
- REQUEST REJECTED. EKM CHANGE ACTIVE
- REQUIRED KEYWORD dev/time/limited_rectime MISSING OR INCORRECT
- cccc MUST BE BETWEEN 2 AND 14 SECONDS
- cccc MUST BE EITHER DASD OR IOTIMING
- TESTING MIH KEYWORDS

IOS085I

- TEST KEYWORD IS IGNORED DURING NIP
- ZHPF FACILITY NOT SUPPORTED BY PROCESSOR
- *cccc* MUST BE 3 OR 4 DIGITS
- *cccc* IS A DUPLICATE KEYWORD
- THERE ARE NO CONTROL UNIT GROUPS
- CONTROL UNIT GROUP *cccc* WAS NOT FOUND
- UNABLE TO RETRIEVE CONTROL UNIT GROUP INFORMATION
- MUST BE =CU/DEVICE
- MUST BE BETWEEN 1 AND 10 MINUTES
- MUST BE 1 TO 2 DIGITS
- MUST BE BETWEEN 1 AND 100
- INTERVAL OR THRESHOLD NOT VALID WITH SCOPE=DEVICE
- | • MUST BE EITHER MESSAGE OR WAIT_STATE

This message appears when one of the following occurs:

- When there is a syntax error in IECIOS*xx* parmlib member. The message appears on the nucleus initialization program (NIP) console.
- When the operator entered one of the following commands, the message appears on any active console:
 - DISPLAY IOS, ACTIVATE ...
 - DISPLAY IOS, CONFIG
 - DISPLAY IOS, MIH,...
 - SET IOS=*xx*
 - SETIOS MIH,...
 - SETIOS FICON®
 - SETIOS MIDAW
 - SETIOS CAPTUCB
 - SETIOS STORAGE,IOSBLKS...
 - SETIOS HYPERPAV
 - SETIOS RECOVERY
 - SETIOS ZHPF

In the message text:

source

The identifier for the record containing the syntax error.

When the source is from IECIOS*xx*, this field has the format '*xx,rrrr*'.

xx The parmlib member, with suffix *xx*.

rrrr The record number.

When the source is from the SETIOS MIH,... command, the value in this field is 'SETIOS'.

When the source is from the SETIOS HYPERPAV command, the value in this field is 'SETIOS'.

When the source is from one of the following commands, this field does not appear in the message text:

- SET IOS=*xx*
- DISPLAY IOS, ACTIVATE ...
- DISPLAY IOS, CONFIG
- DISPLAY IOS,MIH,...

cccc IS AN INCORRECT VERB

Only HOTIO, MIH, and CTRACE are valid verbs. HOTIO and CTRACE are not allowed after system initialization.

cccc The relevant text copied from the input record.

***cccc* VERB HAS NO KEYWORDS**

The verb is followed by blanks; no keywords are specified.

cccc The relevant text copied from the input record.

cccc* INCORRECT DIGIT AT COL *nn

A number for the specified value is incorrect. For example, it may be decimal when a hexadecimal digit is required.

cccc The incorrect digit.

nn The column number where the system found the incorrect digit.

***cccc* MUST BE 3 OR 4 DIGITS**

A number is either less than 3 or greater than 4 digits.

cccc The number.

***cccc* MUST BE 1 TO 5 DIGITS**

cccc is either less than 1 or greater than 5 digits. The DVTHRSH keyword value has this restriction.

cccc The number.

***cccc* MUST BE LESS THAN 32768**

A number is greater than 32768. Only lesser values may be specified on the DVTHRSH keyword.

cccc The number.

***cccc* MUST BE =24 or 31**

The IOS large block (IOSBLKS) value is incorrect; valid values are 24 or 31.

cccc The IOSBLKS number.

***cccc* IS AN INCORRECT CTRACE RECORD**

The CTRACE specification for IOS component trace was not in the correct format. The specification must be in the form:

CTRACE(CTnIOSxx)

Where:

- *n* is an alphanumeric character that specifies the source of the member. IBM-supplied members use "I".
- *xx* is any two alphanumeric characters.

***cccc* EXTRA COMMA DELIMITER(S) IGNORED**

The system found extra commas between the keywords. The system ignores the extra commas.

cccc The number of extra commas.

***cccc* MIDAW FACILITY NOT SUPPORTED BY PROCESSOR**

The processor does not support the MIDAW facility.

***cccc* RIGHT OPTION IS NOT VALID**

The HOTIO keyword DFLT11x=(*lll,rrr*) contains an incorrect right option.

lll The left option.

rrr The right option.

***cccc* MISSING "(" OR ","**

The HOTIO keyword DFLT11x=(*lll,rrr*) contains a syntax error. The options printed at *cccc* are missing either the left parenthesis or the comma.

lll The left option.

rrr The right option.

***cccc* EKM IMPROPER HOSTNAME SPECIFICATION**

A SETIOS EKM request contains an improper host name or port number syntax.

cccc The relevant text copied from the input record.

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cccc MUST BE PRIMARY, SECONDARY, OR ALL

A DISPLAY IOS,EKM,VERIFY= must be set to one of PRIMARY, SECONDARY or ALL.

cccc The relevant text copied from the input record.

cccccccc IS AN INCORRECT KEYWORD

An incorrect keyword was specified. If the system finds a valid keyword in the 10 characters of the incorrect keyword, it will process the valid keyword.

cccccccc

The first 10 characters of the keyword.

dev2 IS LESS THAN PREDECESSOR

When describing a range of device numbers in the form DEV=(*dev1-dev2*), *dev2* must be equal to or greater than *dev1*.

dev1 The beginning device number of the device range.

dev2 The end device number of the device range.

keynm, MUST BE =NO, YES, OR BASEONLY

An incorrect value was given for the keyword that requires a 'NO' or 'YES' or 'BASEONLY'.

keynm The keyword name.

keynm OPERAND FIELD BLANK

No operands were specified. The keyword is followed by blanks.

keynm The keyword name.

keynm TOO NEAR CARD END

A keyword is too close to the right margin to contain an operand. The right margin is column 72 in the IECIOSxx parmlib member, or column 126 in the SETIOS command.

keynm The keyword name.

keywd LEFT OPTION IS NOT VALID

The HOTIO keyword DFLT11x=(*lll,rrr*) contains an incorrect left option.

lll The left option.

rrr The right option.

name NOT IN MIH TABLES

A time interval was not spelled correctly.

)operand RIGHT PAREN MISSING

A left parenthesis did not have the matching right parenthesis to end an operand.

operand The operand.

)operand RIGHT PAREN NOT FOLLOWED BY COMMA OR BLANK

An operand that is ended by a right parenthesis is not followed by a comma or a blank.

operand The operand.

ATTACH FOR name FAILED

Depending on the value of *name*, one of the following:

HCD The system could not attach the hardware configuration definition (HCD).

MIH The system could not attach the MIH routine. All MIH updates are left pending until the system attaches the routine.

CTRACE IS NOT VALID AFTER NIP. ISSUE THE MVS 'TRACE CT' COMMAND

MVS does not support using the SET IOS=xx command to change the IOS component trace SYS1.PARMLIB member after system initialization. Changes made to the parmlib member, after system initialization, must be done using the TRACE CT command. For more information on the TRACE CT command, see *z/OS MVS System Commands*.

DISPLAY DEVICE REQUEST. ALL WERE INCORRECT.

The system could not find the requested display device(s).

DISPLAY IOS,GROUP - THIS SYSTEM IS NOT CURRENTLY IN A GROUP

The system on which the operator issued a DISPLAY IOS,GROUP command is not part of an IOS group.

DISPLAY IOS,GROUP - IXCQUERY FAILED - RETURN CODE *rc* REASON CODE *rsn*

The command processor for the DISPLAY IOS,GROUP command encountered an unexpected return/reason code from the IXCQUERY service. The return/reason code received from IXCQUERY appear in the message.

DUPLICATE DEV/TIME KEYWORD IGNORED

The DEV and TIME keywords are required as a single pair in one input record.

DEV The DEV keyword is missing or incorrect.

TIME The TIME keyword is missing or incorrect.

EKM INCORRECT CONNECTION NUMBER

A SETIOS EKM request specified an incorrect number for maximum connections or permanent connections. This might be due to one of the following error conditions:

- MAXCONN was set to 0.
- MAXPCONN is greater than MAXCONN.
- MAXCONN or MAXPCONN is greater than 255.

ESTAE FAILED FOR *command* COMMAND

The system could not enter the recovery routine for the specified command.

In the message text:

command

One of the following:

- SET IOS=
- SETIOS
- ACTIVATE
- DISPLAY IOS,CONFIG
- DISPLAY IOS,DCM
- DISPLAY IOS,GROUP
- DISPLAY IOS,MIH

ESTAE ENTERED FOR *command* COMMAND

The system entered the recovery routine for the specified command

In the message text:

command

One of the following:

- SET IOS=
- SETIOS
- ACTIVATE
- DISPLAY IOS,CONFIG
- DISPLAY IOS,MIH

card IS NOT VALID AFTER NIP

The system does not support dynamic HOTIO updates after system initialization. card the HOTIO option is specified on the input record.

"IOTTERM" IS IGNORED. VALID ONLY WITH IOTHSWAP=YES.

The IOTTERM keyword is only valid when accompanied by the IOTHSWAP=YES keyword.

REQUEST REJECTED. CHANGE/DISPLAY ACTIVE

The system is currently processing a previous change or display request, a DDR request is active, or an ACTIVATE request is active.

REQUEST REJECTED. EKM CHANGE ACTIVE

A SETIOS EKM and DISPLAY IOS,EKM has failed because the host information is currently being updated.

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REQUIRED KEYWORD DEV/TIME MISSING OR INCORRECT

The keywords DEV, TIME, or both appear as more than one pair in one input record. Only one keyword pair is allowed per input record.

DEV The DEV keyword was duplicated.

TIME The TIME keyword was duplicated.

REQUIRED KEYWORD LIMITED_RECTIME MISSING OR INCORRECT

The LIMITED_RECTIME is a required keyword for the RECOVERY verb. Specified value for LIMITED_RECTIME is either missing or incorrect.

cccc MUST BE BETWEEN 2 AND 14 SECONDS

The time specified for LIMITED_RECTIME is incorrect. A valid time is between 2 and 14 seconds.

cccc The relevant text copied from the input record.

cccc MUST BE EITHER DASD OR IOTIMING

The device specification for the RECOVERY function is incorrect. Valid values are DASD or IOTIMING.

cccc The relevant text copied from the input record.

TESTING MIH KEYWORDS

The operator is testing the IECIOSxx parmlib member. If the TEST word is not removed from the parmlib member before the system processes the member, the system ignores the TEST word and updates MIH processing at system initialization.

TEST KEYWORD IS IGNORED DURING NIP

The system ignored the TEST keyword during system initialization.

cccc ZHPF FACILITY NOT SUPPORTED BY PROCESSOR

The processor does not support the zHPF facility.

cccc MUST BE 3 OR 4 DIGITS

The specified keyword must be 3 or 4 hex digits.

cccc

The relevant text copied from the input record.

cccc IS A DUPLICATE KEYWORD

The specified keyword must appear only once in the command.

cccc

The relevant text copied from the input record.

THERE ARE NO CONTROL UNIT GROUPS

A D IOS,CUGRP command was issued and there are no control unit groups.

CONTROL UNIT GROUP cccc WAS NOT FOUND

A D IOS,CUGRP command was issued and the control unit group specified by the ID= keyword does not exist.

cccc

The control unit group identifier specified on the D IOS,CUGRP command.

UNABLE TO RETRIEVE CONTROL UNIT GROUP INFORMATION

A D IOS,CUGRP command was issued and the system was unable to retrieve information about the control unit groups.

MUST BE =CU/DEVICE

A RECOVERY,PATH_SCOPE command was issued and the scope of the recovery must be either CU (control unit) or DEVICE.

MUST BE BETWEEN 1 AND 10 MINUTES

A RECOVERY,PATH_INTERVAL command was issued and length of the monitoring interval must be between 1 and 10 minutes.

MUST BE 1 OR 2 DIGITS

A RECOVERY,PATH_INTERVAL command was issued and the specified threshold must be between 1 and 2 digits long, or the time value specified for LIMITED_RECTIME must be 1 or 2 digits long.

MUST BE BETWEEN 1 AND 100

A RECOVERY,PATH_THRESHOLD command was issued and number of errors that must be seen for each minute in the specified interval must be between 1 and 100 errors.

INTERVAL OR THRESHOLD NOT VALID WITH SCOPE=DEVICE

A RECOVERY command was issued with either the PATH_INTERVAL keyword, the PATH_THRESHOLD keyword, or both of these keywords specified, and one of the following is true:

- PATH_SCOPE=DEVICE was specified on the command.
- PATH_SCOPE=DEVICE was not specified on the command, but the current PATH_SCOPE is set to DEVICE.

The PATH_INTERVAL and PATH_THRESHOLD keywords can only be used when PATH_SCOPE=CU is specified or when the current PATH_SCOPE is set to CU.

MUST BE EITHER MESSAGE OR WAIT_STATE

A RECOVERY,DCCF= command was issued, and the DCCF usage must be either MESSAGE or WAIT_STATE.

System action: The system continues processing. The system may issue more than one message for a particular error.

Operator response: If a command was in error, enter the command correctly. Depending on the message text, one of the following:

name **NOT IN MIH TABLES**

Enter a DISPLAY IOS,MIH command to display the correct table names.

MIH, ESTAE ENTERED FOR IOSCPARZ

Notify the system programmer.

DISPLAY IOS,GROUP - THIS SYSTEM IS NOT CURRENTLY IN A GROUP

Notify the system programmer.

DISPLAY IOS,GROUP - IXCQUERY FAILED - RETURN CODE *rc* REASON CODE *rsn*

Notify the system programmer.

System programmer response: If the error is in the IECIOSxx parmlib member, correct the parmlib member. If the SETIOS command was entered in error, correct the syntax and reissue the command. Otherwise, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Input/output supervisor (IOS)

Module: IOSCPARZ

Routing code: 2

Descriptor code: 12

```
IOS086I    {hh.mm.ss MIH & IOT TIMES MOUNTMSG = {YES | NO}
           UREC=mm:ss  DASD=mm:ss
           HALT=mm:ss  TAPE=mm:ss
           GRAF=mm:ss  MNTS=mm:ss
           CTC =mm:ss  COMM=mm:ss
           CHAR=mm:ss  IOTDASD=mm:ss
           USnn=mm:ss
           UDEV=xxx | TDEV=xxx
           --or--
           hh.mm.ss MIH DEVICE TIMES dev=time}
           --or--
           hh.mm.ss IOT DEVICE TIMES tdev=time}
           --or--
           hh.mm.ss IOT HSWAP OPTIONS
           IO TIMING TRIGGER: text1
           TERMINATE IO OPERATIONS: text2
```

Explanation: One of the following:

In response to the DISPLAY IOS,MIH command, this message displays a list of device classes and user defined device groups with their associated time intervals.

IOS086I

The device classes and user defined device groups are defined as internal parameters for the missing interrupt handler (MIH) and the I/O timing (IOT) facility in an IECIOSxx parmlib member.

In response to a DISPLAY IOS,MIH,IOTHSWAP, this message provides status about the IO Timing HyperSwap options. See *z/OS MVS System Commands* for information about how to enable and disable the IO Timing HyperSwap options.

In the message text:

hh.mm.ss

The time that the operator entered the command, in hours (00-23), minutes (00-59), and seconds (00-59).

MOUNTMSG = YES

The system will issue a mount message.

MOUNTMSG = NO

The system will not issue a mount message.

mm:ss The time interval for the device class, in minutes (00-99), and seconds (00-59).

UREC The unit record device class.

DASD The direct storage access device (DASD) class for MIH.

IOTDASD

The direct storage access device (DASD) class for IOT.

HALT The monitoring of Halt Subchannel (HSCH) and Clear (CSCH) instructions.

TAPE The tape device class.

GRAF The graphics reader device class.

MNTS The function that monitors 'mount pending' conditions for DASD and tape devices.

CTC The channel-to-channel (CTC) device class.

COMM

The communications device class.

CHAR The character reader device class.

US nn The name of a user-specified time interval for a group of devices that are monitored by MIH or by I/O timing.

UDEV= dev

The device number of a device that was specified to run under the specified time for the MIH function.

TDEV= dev

The device number of a device that was specified to run under the specified time for the I/O timing function.

dev=time

The output for the DISPLAY IOS,MIH,<DEV= | DEVX=> command, which displays the device number and the MIH time interval associated with the device identified by the device number. If DEV is used, this display is formatted. If DEVX is used, this display is unformatted.

tdev=time

The output for the DISPLAY IOS,MIH,<TDEV= | TDEVX=> command, which displays the device number and the I/O timing timeout interval associated with the device identified by the device number. If TDEV is used, the display is formatted. If TDEVX is used, the display is unformatted.

text1

ENABLED

The IO Timing HyperSwap trigger is enabled.

DISABLED

The IO Timing HyperSwap trigger is disabled.

text2

ENABLED

Timed out IO operations triggering a HyperSwap are terminated with permanent error.

DISABLED

Timed out IO operations triggering a HyperSwap are not terminated with permanent error.

The following example shows what the system may display when the operator enters a DISPLAY IOS,MIH,TIME=ALL command:

```
IOS086I hh.mm.ss MIH & IOT TIMES
MOUNTMSG = YES,          HALT=00:05, MNTS=03:00, UREC=03:00,
DASD=00:15, TAPE=03:00, GRAF=03:00, CTC =03:00, COMM=03:00,
CHAR=03:00, IOTDASD=00:00
US01=00:05 UDEV= 0420, 0421, 0422, 0423, 0424, 0425, 0426, 0427,
                0428, 0429, 042A, 042B, 042C, 042D, 042E, 042F,
US02=00:11 UDEV= 0420, 0421, 0422, 0423, 0424, 0425, 0426, 0427,
                0428, 0429, 042A, 042B, 042C, 042D, 042E, 042F,
US03=00:00 UDEV= 0490, 0491, 0492, 0493.
```

In this example, the installation used the IBM supplied defaults for all device classes. Since devices 0420-042F need special timing requirements, the installation specified an MIH time interval of 5 seconds and an I/O timing timeout interval of 11 seconds. With an MIH time interval of 5 seconds and a HALT time interval of 5 seconds, recovery will usually complete prior to timing out with the I/O timeout interval. Because devices 0490-0493 have the MIH time interval set to zero, the system turns off MIH processing for those devices. Because I/O timing DASD device class name, IOTDASD, is set to zero, all DASD devices, except those in user class US02, have I/O timing processing turned off.

The following example shows what the system may display when the operator enters a DISPLAY IOS,MIH,DEV=(0000-0010) command:

```
IOS086I hh.mm.ss MIH DEVICE TIMES
0002=03:00, 0003=03:00, 0004=03:00, 0005=03:00, 0006=03:00,
0007=03:00, 0008=03:00, 000A=03:00, 000B=03:00, 000C=03:00,
000D=03:00, 000E=03:00, 000F=03:00, 0010=00:15
```

In this example, devices 0000, 0001, and 0009 do not exist. The MIH time interval for devices 0002-000F, which do exist, is 3 minutes and 0 seconds. For device 0010, the MIH time interval is 0 minutes and 15 seconds.

The following example shows what the system displays when the operator enters a DISPLAY IOS,MIH,TDEVX=(000-010) command:

```
IOS086I hh.mm.ss IOT DEVICE TIMES
0002=00:10, (0003-0008)=00:20, (000A-000F)=00:20, 0010=00:15.
```

In this example, devices 0000, 0001, and 0009 do not exist. The I/O timing timeout interval for device 0002 is 0 minutes, 10 seconds. The I/O timing timeout intervals for devices 0003-0008 and 000A-000F is 0 minutes, 20 seconds. The I/O timing timeout interval for device 0010 is 0 minutes, 15 seconds.

The following example shows what the system might display when the operator enters a DISPLAY command that causes the number of returned output lines to exceed the maximum of 255 lines:

```
⋮
0E89, 0E8A, 0E8B, 0E8C, 0E8D, 0E8E, 0E8F, 0E90,
0E91, 0E92, 0E93, 0E94, 0E95, 0E96, 0E97, 0E98,
... MAXIMUM DISPLAY OF 255 LINES EXCEEDED
```

In this example, the system displays the first 254 lines of output and reserves line 255 for the informational "lines exceeded" message.

Note: If the returned output was less than or exactly 255 lines, the system would display it all because it would have no need to include the "lines exceeded" message.

System action: The system continues processing.

IOS087I • IOS089I

Operator response: Do one of the following:

- If an MIH or IOT time interval for a device class is unacceptable, enter a "SETIOS MIH,CLASS=*mm:ss*" command to change the value of the MIH or IOT time interval for the device class.
- If an MIH time interval for an individual device is unacceptable, enter a SETIOS MIH,DEV=(*dev*),TIME=*mm:ss* command.
- If an I/O timing timeout interval is unacceptable, enter a SETIOS MIH,DEV=(*dev*),IOTIMING=*mm:ss* command.
- If the response is to a DISPLAY IOS,MIH,IOTHSWAP command, no operator response is required.

System programmer response: If an MIH or I/O timing time interval for a device class or an individual device is unacceptable, change the value for the time interval in the IECIOSxx parmlib member.

Source: Input/output supervisor (IOS)

Routing code: -

Descriptor code: -

IOS087I *{hh:mm:ss* **FICON DATA**
 FICON SWITCH STATISTICS GATHERING IS *text*

Explanation: The system displays this message in response to a D IOS,FICON command. See *z/OS MVS System Commands* for information on how to enable and disable FICON switch statistics gathering.

In the message text:

hh:mm:ss

The time in hours, minutes, and seconds.

text

The text can be:

ENABLED

FICON switch statistics gathering is enabled.

DISABLED

FICON switch statistics gathering is disabled.

System action: The system continues processing.

Operator response: None.

Source: Input/output supervisor (IOS)

Module: IOSCPARZ

IOS088I *hh:mm:ss* **CAPTURED UCB DATA CAPTURED UCB PROTECTION IS** {*ENABLED*|*DISABLED*}

Explanation: The system issues this message in response to a D IOS,CAPTUCB command. For information about dynamically enabling or disabling captured UCB protection, see the SETIOS command in *z/OS MVS System Commands*.

In the message text:

hh.mm.ss

The time in hours, minutes, and seconds.

System action: The system continues processing.

Source: Input/output supervisor (IOS)

Module: IOSCPARZ

IOS089I *hh:mm:ss* **STORAGE DATAIOS BLOCKS RESIDE IN 24|31 Bit STORAGE**

Explanation: The system displays this message in response to a DISPLAY IOS,STORAGE command and indicates whether IOS control blocks will be obtained in 24 or 31 bit storage. See *z/OS MVS System Commands* for information on how to set IOS block residency.

In the message text:

hh:mm:ss

The time in hours, minutes, and seconds.

31 bit

IOS control blocks are to be obtained in 31 bit storage.

24 bit

IOS control blocks are to be obtained in 24 bit storage.

System action: The system continues processing.

Operator response: None.

Source: Input/output supervisor (IOS)

Module: IOSCPARZ

IOS090I {*xx,rrrr.* | SETIOS.} *dev* IS AN INVALID DEVICE
 or
 {IECIOS*xx.* | SETIOS.} *text* UPDATE(S) COMPLETE

| **Explanation:** In response to the SET IOS=*xx* or SETIOS command, the system displays this message.

In the message text:

xx The parmlib member suffix.

rrrr

The record affected by the SET IOS=*xx* command.

SETIOS

| The operator entered the SETIOS MIH | HYPERWRITE | FICON | STORAGE | CAPTUCB | MIDAW | EKM |
 | HYPERPAV | RECOVERY command.

dev

The device number specified on the command was not defined or was typed incorrectly.

IECIOS*xx*

The parmlib member with the suffix *xx*.

text

One of the following:

- MIH
- FICON
- STORAGE
- CAPTUCB
- MIDAW
- EKM
- HYPERPAV
- RECOVERY
- | • ZHPF
- | • HYPERWRITE

System action: If NOT RUNNING appears in the message text, the system does not monitor devices. If NOT UPDATED appears, the system continues to monitor devices.

Operator response: Use the DISPLAY command to determine the state of the missing interrupt handler (MIH). Notify the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Input/output supervisor (IOS)

IOS091I **MIH. START TIMER FAILED FOR NAME** *name*.

Explanation: In response to the SET IOS=*xx* or SETIOS MIH,... command, the system displays this message. The system did not start the timer for a missing interrupt handler (MIH) time interval.

In the message text:

name The name of the MIH time interval control block.

System action: The system continues processing. The system does not monitor the devices in the specified MIH device class.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Input/output supervisor (IOS)

IOS092I **[INITIALIZATION ESTAE FAILED | INTERNAL PROCESSING ERROR] MIH NOT {RUNNING | UPDATED}**

Explanation: In response to the SET IOS=*xx* or SETIOS MIH,... command, the system displays this message.

The message text contains one of the following variations:

INITIALIZATION ESTAE FAILED, MIH NOT RUNNING

The system did not start any timers at system initialization.

INITIALIZATION ESTAE FAILED, MIH NOT UPDATED

The SET or SETIOS command produced no changes.

INTERNAL PROCESSING ERROR, MIH NOT RUNNING

An internal error occurred at system initialization. The system may not have started one or more timers.

INTERNAL PROCESSING ERROR, MIH NOT UPDATED

During command processing, an internal error occurred.

System action: If **NOT RUNNING** appears in the message text, the system does not monitor devices. If **NOT UPDATED** appears, the system continues to monitor devices.

Operator response: Use the DISPLAY command to determine the state of the missing interrupt handler (MIH). Notify the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Input/output supervisor (IOS)

IOS093I **I/O TIMING NOT SUPPORTED FOR PAGING DEVICE** *dev*

Explanation: The installation asked the I/O timing facility to monitor a device, but the device is a paging device that cannot be timed. Paging devices cannot be timed because the timing would interfere with paging I/O operations and recovery.

In the message text:

dev The device number.

System action: The system continues processing without monitoring the device for I/O timeouts.

Operator response: Notify the system programmer.

System programmer response: Move the data sets to be monitored to a device that is not used for paging. Otherwise, inform the IBM Support Center that support is required for the specified device.

Routing code: 2,10

Descriptor code: 4

IOS094I I/O TIMING IS NOT SUPPORTED FOR DEVICE *dev*

Explanation: The installation asked the input/output (I/O) timing facility to monitor a device, but the device support code is not capable of functioning with the I/O timing facility.

In the message text:

dev The device number.

System action: The system continues processing without monitoring the device for I/O timeouts.

Operator response: Notify the system programmer.

System programmer response: Move the data sets to be monitored to a device that is supported by the I/O timing facility. Otherwise, inform the IBM Support Center that support is required for the specified device.

Routing code: 2,10

Descriptor code: 4

IOS095I I/O TIMING IS NOT SUPPORTED FOR SWAPPABLE DEVICE *dev*

Explanation: The installation asked the I/O timing facility to monitor a device. The device is a swappable non-DASD that does not support the I/O timing facility.

In the message text:

dev The device number.

System action: The system continues processing without monitoring the device for I/O timeouts.

Operator response: Notify the system programmer.

System programmer response: Move the data sets to be monitored to a non-DASD that is not swappable or to a DASD device that supports the I/O timing facility. Otherwise, inform the IBM Support Center that support is required for the specified device.

Routing code: 2,10

Descriptor code: 4

IOS096I MIH INTERNAL PROCESSING ERROR

Explanation: During command processing for the SET IOS=*xx* or SETIOS MIH, ... command, an internal error occurred.

System action: The system continues to monitor devices.

Operator response: Use the DISPLAY IOS,MIH command to determine the state of the missing interrupt handler (MIH). Notify the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM support center.

Source: Input/Output supervisor (IOS)

Routing code: 2,10

Descriptor code: 4

IOS097I *{hh:mm:ss}* MIDAW FACILITY MIDAW FACILITY *text*

Explanation: The system displays this message in response to a D IOS,MIDAW command. See *z/OS MVS System Commands* on how to enable and disable the MIDAW facility.

In the message text:

hh:mm:ss

The time in hours, minutes, and seconds.

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text

The text can be:

IS ENABLED

The MIDA facility is enabled.

IS DISABLED

The MIDA facility is disabled.

NOT SUPPORTED BY PROCESSOR

The MIDA facility is not supported by the processor.

Note: Attempted use of the MIDA facility while disabled will cause a channel program check.

System action: The system continues processing.

Operator response: None.

Source: Input/output supervisor (IOS)

Routing code: 2

Descriptor code: 12

IOS098I *hh:mm:ss* **HYPERPAV DATA HYPERPAV MODE IS SET TO NO/YES/BASEONLY**

Explanation: In response to a DISPLAY IOS, HYPERPAV, this message provides status about the HyperPAV mode. See *z/OS MVS System Commands* for information about how to change the HyperPAV mode.

In the message text:

hh:mm:ss

The time in hours, minutes, and seconds.

NO HyperPAV mode is not employed.

YES

HyperPAV mode is employed.

BASEONLY

HyperPAV mode is employed, but I/O is only to be run on non-PAV-alias devices.

System action: The system continues processing.

Operator response: No operator response is required.

System programmer response: No system programmer response is required.

Source: Input/output supervisor (IOS)

Module: IOSCPARZ

Routing code: -

Descriptor code: -

IOS099I *{hh:mm:ss}* **EKM HOSTS**
PRIMARY HOSTNAME=*text1*
SECONDARY HOSTNAME=*text2*
MAX CONNECTIONS = *dd1*
PERMANENT CONNECTIONS = *dd2*
[VERIFICATION WILL COMPLETE ASYNCHRONOUSLY]

Explanation: The system displays this message in response to a D IOS, EKM command. When this message is displayed in response to a D IOS, EKM, VERIFY = command, this message does not indicate that the connection is valid. Expect either an IOS631I indicating a successful connection or an IOS627E indicating connection errors to be issued as well. Note: these messages might appear several minutes later and are not connected to the IOS099I display.

Host names and IP addresses are displayed in the following formats, where 3801 is the port number.


```
hostname
  HOSTNAME=comp.domain.com:3801
IP Version 4 address
  HOSTNAME=127.0.0.1:3801
IP Version 6 address
  HOSTNAME=2001:db8::1428:57ab..3801
```

See *z/OS MVS System Commands* for information about how to set the host names for a primary and secondary encryption key manager.

In the message text:

hh:mm:ss

The time in hours, minutes, and seconds.

text1

The current set hostname and port number if specified for the primary encryption key manager or NONE. If it is longer than 51 characters, it will be truncated.

text2

The current set hostname and port number if specified for the secondary encryption key manager or NONE. If it is longer than 51 characters, it will be truncated.

dd1

A decimal number up to 255 that signifies the current maximum socket connections allowed for encryption key management processing.

dd2

A decimal number up to 255 that signifies the current number of permanent (always connected) socket connections allowed for encryption key management processing.

System action: When this message is issued in response to a D IOS,EKM,VERIFY= command, the system has initiated an asynchronous test exchange with the primary, or secondary, or both encryption key managers to verify its usability. Expect the system to issue either an IOS631I message indicating the encryption key manager was successfully connected, or an IOS627E message indicating there was a failure with the connection. These messages will be issued after the IOS099I message is issued and the asynchronous verification is complete. This might take several minutes, especially if there is an error with the connection.

Operator response: When this message is issued in response to a D IOS,EKM,VERIFY= command, wait for message IOS631I or IOS627E to be issued to determine the connection status; otherwise, none.

Source: Input/output supervisor (IOS)

Routing code: 2, 10

Descriptor code: 4

IOS100I **DEVICE** *dev* {**BOXED**,} [**LAST PATH** *yy* **LOST**,] [*text*]

Explanation: *text* is one of the following:

- RESERVE LOST
- CANNOT RE-RESERVE
- STILL RESERVED
- RESERVE MAY BE LOST
- MAY BE RESERVED
- ASSIGN LOST
- CANNOT RE-ASSIGN
- STILL ASSIGNED
- SELF-DESCRIPTION RECOVERY

An error occurred on the last channel path to a device.

In the message text:

IOS100I

LAST PATH *yy* LOST

The device was not reserved or assigned when the channel path error occurred.

dev

The device number.

RESERVE LOST

The reserve status of the device is lost. Other processors that share the device can access it.

CANNOT RE-RESERVE

The system removed the reserve status from the device. The system stops other processors that share the device. The system could not reserve the device again.

STILL RESERVED

The device is still reserved; other processors that share the device cannot access it.

RESERVE MAY BE LOST

MAY BE RESERVED

A reserve or release to the device was in progress over the specified channel path when the channel path error occurred. The system did not update the volume on the device.

For **RESERVE MAY BE LOST**, the reserve status of the device may be lost. Other processors that share the device may be able to access it.

For **MAY BE RESERVED**, the device may still be reserved. Other processors that share the device may not be able to access it.

ASSIGN LOST

The assign status of the device is lost. Other processors that share the device can assign it.

CANNOT RE-ASSIGN

The system removed the assign status from the device. The system stopped other processors that share the device. The system could not reassign the device. When the system restarts other processors that share the device, the processors can assign the device.

STILL ASSIGNED

The device is assigned. Other processors that share the device cannot assign it.

SELF-DESCRIPTION RECOVERY

An error has occurred in a self-description recovery routine and the system has boxed the device.

System action: The system forces the device offline, or boxes the device, as follows:

- The I/O on the device is ended.
- Any new I/O requests result in permanent I/O errors.
- The system does not perform new allocations for the device.
- If the device was online, the system marks it pending offline. A pending offline device goes offline when the following conditions occur, in this order:
 1. The device is no longer allocated to any job.
 2. Allocation can get the necessary resources to process the request.
- If the device was offline, it remains offline.

Operator response: If the message text ends with **LAST PATH *yy* LOST**, do one of the following:

- If channel paths are available to the device, **VARY** them online.
- If no channel paths are available, and the device has a volume that you can dismount, move the volume to an online device using the **DDR SWAP** command.
- Enter the **VARY DEVICE ONLINE** command to bring the device online. However, you must wait for the device to go entirely offline, since it was pending offline.

If the system boxed the device, do the following:

1. Vary the boxed device offline to all sharing systems.
2. Isolate the failing control unit for repair.
3. Determine the range of affected devices.
4. Contact hardware support.

5. Bring the device online to allow hardware support personnel to verify the data on the boxed device. Do one of the following:
 - Enter a DISPLAY UNITS command to see if the device is one of the following:
 - Offline and boxed (F-BOX)
 - Allocated and boxed (A-BOX)
 - If the device is offline and boxed, vary the device online by entering the following command:
VARY *dev*,ONLINE
 - If the device is allocated and boxed, display the using job steps that are allocated to the device by entering the following command:
DISPLAY U,,ALLOC,*dev*,1
Follow your installation's procedures for unallocating using job steps.
Vary the device offline, using the following command:
VARY *dev*,OFFLINE
Vary the device online, using the following command:
VARY *dev*,ONLINE
 - Verify the data on the volume.
6. Identify and recover failing tasks.

Source: Input/output supervisor (IOS)

Module: IOS

Routing code: 2,10

Descriptor code: 4

IOS101I **DEVICE** *dev* {**FORCED OFFLINE** | **BOXED**,} {*text*}

Explanation: *text* is one of the following:

- RESERVE LOST
- CANNOT RE-RESERVE
- RESERVED ON FAILING PATH *yy*
- RESERVE MAY BE LOST
- MAY BE RESERVED ON PATH *yy*
- ASSIGN LOST
- CANNOT RE-ASSIGN
- WAS RESERVED
- WAS ASSIGNED
- STILL RESERVED
- STILL ASSIGNED
- ASSIGNED ON FAILING PATH *yy*

An error occurred on the specified channel path when the system:

- Reserved a device
- Assigned a device
- Was trying to reserve or release a device

Either the device is no longer reserved or assigned, or the system cannot use the channel path.

In the message text:

dev

The device number.

BOXED

The system boxed the device.

IOS101I

FORCED OFFLINE

The system forced the device offline.

RESERVE LOST

The reserve status of the device is lost. Other processors that share the device can access it.

CANNOT RE-RESERVE

The system removed the reserve status from the device. The system stops other processors that share the device. The system could not reserve the device again. When the system restarts other processors that share the device, these processors can access the device.

RESERVED ON FAILING PATH *yy*

The device is reserved on the failing channel path. Other processors that share the device cannot access it.

RESERVE MAY BE LOST

The reserve status of the device may be lost. Other processors that share the device may be able to access it.

MAY BE RESERVED ON PATH *yy*

A reserve or release to the device was in progress over the specified channel path when the channel path error occurred. The system did not update the volume on the device. The device may still be reserved. Other processors that share the device may not be able to access it.

ASSIGN LOST

The assign status of the device is lost. Other processors that share the device can assign it.

CANNOT RE-ASSIGN

The system removed the assign status from the device. The system stopped other processors that share the device. The system could not re-assign the device. When the system restarts other processors that share the device, these processors can assign the device.

WAS RESERVED or WAS ASSIGNED

The status of the device is no longer reserved or assigned.

STILL RESERVED or STILL ASSIGNED

The status of the device remains reserved or assigned.

ASSIGNED ON FAILING PATH *yy*

The device is still assigned on the failing channel path. Other processors that share the device cannot assign it.

System action: The system forces the device offline, or boxes the device, as follows:

- The I/O on the device is ended.
- Any new I/O requests result in permanent I/O errors.
- The system does not perform new allocations for the device.
- If the device was online, the system marks it pending offline. A pending offline device goes offline when the following conditions occur, in this order:
 1. The device is no longer allocated to any job.
 2. Allocation can get the necessary resources to process the request.
- If the device was offline, it remains offline.

Operator response: If the system forced the device offline, do the following:

- Consult your installation's operating procedures.
- Enter a VARY *dev*,ONLINE command to bring the device online. Wait for the device to go entirely offline before doing so.
- Contact hardware support.

If the system boxed the device, recover the device as follows:

1. Vary the boxed device offline to all sharing systems.
2. Isolate the failing control unit for repair.
3. Determine the range of affected devices.
4. Contact hardware support.
5. Bring the device online to allow hardware support personnel to verify the data on the boxed device. Do one of the following:

- Enter a DISPLAY UNITS command to see if the device is one of the following:
 - Offline and boxed (F-BOX)
 - Allocated and boxed (A-BOX)
 - If the device is offline and boxed, vary the device online by entering the following command:
VARY *dev*,ONLINE
 - If the device is allocated and boxed, display the using job steps that are allocated to the device by entering the following command:
DISPLAY U,,ALLOC,*dev*,1
Follow your installation's procedures for unallocating using job steps.
Vary the device offline, using the following command:
VARY *dev*,OFFLINE
Vary the device online, using the following command:
VARY *dev*,ONLINE
 - Verify the data on the volume.
6. Identify and recover failing tasks.

Source: Input/output supervisor (IOS)

Module: IOS

Routing code: 2,10

Descriptor code: 4

IOS102I IOS1102I DEVICE *dev* {BOXED | FORCED OFFLINE}, {OPERATOR REQUEST, | PERMANENT ERROR | C.U.I.R. REQUEST} [*text*] or DEVICE *dev* BOXED, DEFERRED BOX PROCESSING COMPLETE

Explanation: *text* is one of the following:

- WAS RESERVED
- STILL RESERVED
- MAY BE RESERVED
- WAS ASSIGNED
- STILL ASSIGNED
- ASSIGN LOST
- NO PATHS
- RESERVE LOST
- MOVE ALIAS FAILURE

The system boxed a device or forced the device offline.

In the message text:

dev

The device number. The device number is prefixed by the subchannel set identifier when appropriate.

BOXED

The system boxed the device. The box processing for this device is deferred. This message is issued to indicate that deferred box processing is now complete and the device is now in the boxed state. See the description of message IOS107I for more information on deferred boxing.

FORCED OFFLINE

The system forced the device offline.

OPERATOR REQUEST

The operator did one of the following:

- Entered the VARY *dev*,OFFLINE,FORCE command.

IOS102I

- Replied CU to message IOS110D, specifying the device as one that is attached to the control unit that was taken offline.
- Invoked the dynamic pathing validation to verify the state of the path group.

The device was not reserved or assigned when it was forced offline.

PERMANENT ERROR

A device support routine detected a permanent error on the device. The device was not reserved or assigned when it was forced offline.

C.U.I.R. REQUEST

C.U.I.R. (control unit initiated recovery) has received a request to fence a device or the last path to the device.

WAS RESERVED

A device was reserved when it was forced offline. The release was successful. Other processors that share the device can access it.

STILL RESERVED

A device was reserved when the system forced it offline. The release was unsuccessful. Other processors that share the device cannot access it.

MAY BE RESERVED

A reserve or release to a device was in progress when the system forced the device offline. The release was unsuccessful. The volume on the device was not partially updated. Other processors that share the device may not be able to access it.

WAS ASSIGNED

The system assigned a device when the device was boxed. The assign was successful. Other processors that share the device can assign it.

STILL ASSIGNED

The system assigned a device when the device was boxed. The assign was unsuccessful. Other processors that share the device cannot assign it.

ASSIGN LOST

The assign status of a device is lost. Other processors that share the device can assign it.

NO PATHS

The online paths to a device did not respond when the operator tried to validate the status of a path.

RESERVE LOST

The system cannot locate a device that was specified as reserved.

MOVE ALIAS FAILURE

WLM has requested that a Parallel Access Volume (PAV) Alias device be moved from one base device to another. The I/O required to successfully move the alias has failed repeatedly. IOS boxes the alias to prevent WLM from continuously selecting this same Alias to be moved.

DEFERRED BOX PROCESSING COMPLETE

The system deferred its box processing in order to allow recovery processing to run. Certain recovery processing, such as HyperSwap operations, may be able to provide continuous availability to the device by swapping the faulty device (that is, the primary device) with a fully operation "backup" device (that is, the secondary device) prior to permanently boxing the faulty device.

System action: One of the following:

- If the system can no longer use the device, it forces the device offline.
- If the device is reserved, the system tries to release it.
- If the device is assigned, the system tries to unassign it.
- The system boxes the device, as follows:
 - The I/O on the device is ended.
 - Any new I/O requests result in permanent I/O errors.
 - The system does not perform new allocations for the device.
 - If the device was online, the system marks it pending offline. A pending offline device goes offline when the following conditions occur, in this order:
 1. The device is no longer allocated to any job.

2. Allocation can get the necessary resources to process the request.
 - If the device was offline, it remains offline.

Operator response: If the message text ends with **OPERATOR REQUEST** or **PERMANENT ERROR**, and the device has a dismountable volume, move the volume to an online device.

Otherwise, do one of the following:

- If the system forced the device offline, do the following:
 - Consult your installation's operating procedures.
 - Enter a **VARY DEVICE ONLINE** command to bring the device online. Wait for the device to go entirely offline before doing so.
 - Contact hardware support.
- If the system boxed the device, recover the device as follows:
 1. Vary the boxed device offline to all sharing systems.
 2. Isolate the failing control unit for repair.
 3. Determine the range of affected devices.
 4. Contact hardware support.
 5. Bring the device online to allow hardware support personnel to verify the data on the boxed device. Do one of the following:
 - Enter a **DISPLAY UNITS** command to see if the device is one of the following:
 - Offline and boxed (F-BOX)
 - Allocated and boxed (A-BOX)
 - If the device is offline and boxed, vary the device online by entering the following command:
VARY dev,ONLINE
 - If the device is allocated and boxed, display the using job steps that are allocated to the device by entering the following command:
DISPLAY U,,ALLOC,dev,1
 Follow your installation's procedures for unallocating using job steps.
 Vary the device offline, using the following command:
VARY dev,OFFLINE
 Vary the device online, using the following command:
VARY dev,ONLINE
 - Verify the data on the volume.
 6. Identify and recover failing tasks.

If the message text ends with **C.U.I.R. REQUEST** the device was fenced because it is broken. Have service performed.

- If the message text ends with **MOVE ALIAS FAILURE**, contact hardware support to perform analysis on the device. The PAV Alias device can be made available again to the software by issuing the **DEVSERV QPAVS** command with the **UNBOX** keyword.

Source: Input/output supervisor (IOS)

Module: IOSRFDEV

Routing code: 2,10

Descriptor code: 4

IOS103I *hh.mm.ss* RECOVERY OPTIONS
 LIMITED RECOVERY TIME IS *ss* SECONDS
 LIMITED RECOVERY IS REQUESTED FOR IOTIMING DEVICES
 LIMITED RECOVERY IS REQUESTED FOR DASD
 LIMITED RECOVERY FUNCTION IS DISABLED
 PATH RECOVERY SCOPE IS BY {CU | DEVICE}
 PATH RECOVERY INTERVAL IS *interval* MINUTES

IOS104I

PATH RECOVERY THRESHOLD IS *threshold* ERRORS DCCF IS SET TO {MESSAGE | WAIT_STATE}

Explanation: The system displays this message in response to a D IOS,RECOVERY command and

- Indicates which RECOVERY functions are enabled.
- Displays whether the PATH RECOVERY SCOPE is by CU or DEVICE. If the PATH RECOVERY SCOPE is by CU, the interval and threshold parameters are displayed.
- Displays whether IOS enabled interrupt processing will issue the IOS115A WTOR message via DCCF or load a non-restartable WAIT 140 if a 'no paths' or 'intervention required' condition occurs on a paging device.

For information about how to set the RECOVERY options, see *z/OS MVS System Commands*.

In the message text:

hh.mm.ss

The time in hours, minutes and seconds.

ss The limited recovery time in seconds.

PATH RECOVERY SCOPE IS BY {CU | DEVICE}

Indicates that path recovery is by either control unit or device.

interval

The path recovery interval in minutes and is only displayed if PATH RECOVERY SCOPE IS BY CU.

threshold

The path recovery threshold in number of errors per minute and is only displayed if PATH RECOVERY SCOPE IS BY CU.

DCCF IS SET TO {MESSAGE | WAIT_STATE}

Indicates that IOS enabled interrupt processing either uses DCCF to issue the IOS115A WTOR message or loads a non-restartable WAIT 140.

System action: The system continues processing.

Operator response: None.

Source: Input/output supervisor (IOS)

Module: IOSCPARZ

Routing code: 2,10

Descriptor code: 4

IOS104I IOS1104I DEVICE *dev* {BOXED | FORCED OFFLINE}, UNCONDITIONAL RESERVE FAILED

Explanation: An error occurred on a channel path to a device. The system could only access the device through that channel path. For example, there was a reserve or an allegiance on the channel path.

To gain access to the device, the operator entered an unconditional reserve command on another channel path. The command failed.

A partial update to a volume on the device may have occurred. Continued use of the volume may cause data to be lost or written over.

In the message text:

dev

The device number. The device number is prefixed by the subchannel set identifier when appropriate.

BOXED

The system boxed the device.

FORCED OFFLINE

The system forced the device offline.

System action: The system forces the device offline, or boxes the device, as follows:

- The system ends I/O on the device.
- New I/O requests result in permanent I/O errors.
- The system performs no new allocations for the device.
- If the device was online, the system marks it pending offline. A pending offline device goes offline when the following conditions occur in this order:
 1. The device is no longer allocated to any job.
 2. Allocation can get the necessary resources to process the request.
- If the device was offline, it remains offline.

Operator response: If the system forced the device offline, do the following:

- Consult your installation's operating procedures.
- Enter a VARY DEVICE ONLINE command to bring the device online. Wait for the device to go entirely offline before doing so.
- Contact hardware support.

If the system boxed the device, recover the boxed device as follows:

1. Vary the boxed device offline to all sharing systems.
2. Isolate the failing control unit for repair.
3. Determine the range of affected devices.
4. Contact hardware support.
5. Bring the device online to allow hardware support personnel to verify the data on the boxed device. Do one of the following:
 - Enter a DISPLAY UNITS command to see if the device is one of the following:
 - Offline and boxed (F-BOX)
 - Allocated and boxed (A-BOX)
 - If the device is offline and boxed, vary the device online by entering the following command:
VARY *dev*,ONLINE
 - If the device is allocated and boxed, display the using job steps that are allocated to the device by entering the following command:
DISPLAY U,,ALLOC,*dev*,1
Follow your installation's procedures for unallocating using job steps.
Vary the device offline, using the following command:
VARY *dev*,OFFLINE
Vary the device online, using the following command:
VARY *dev*,ONLINE
 - Verify the data on the volume.
6. Identify and recover failing tasks.
7. If you want other processors that share the device to access it, vary the device back online.
8. Isolate the failing storage director for customer engineer.
9. Identify and recover failing tasks.
10. Contact hardware support.

Source: Input/output supervisor (IOS)

Module: IOSVURDT

Routing code: 2,10

Descriptor code: 4

IOS105I IOS1105I
DEVICE *dev* {BOXED | FORCED OFFLINE} BY UNCONDITIONAL RESERVE PROCESSING

Explanation: An error occurred on a channel path to a device. The system could only access the device through that channel path. For example, there was a reserve or an allegiance on the channel path.

One of the following occurred:

- The reply to message IOS427A did not request recovery.
- The device does not support the unconditional reserve command.

In the message text:

dev

The device number. The device number is prefixed by the subchannel set identifier when appropriate.

BOXED

The system boxed the device.

FORCED OFFLINE

The system forced the device offline.

System action: The system forces the device offline, or boxes the device, as follows:

- The system ends I/O on the device.
- New I/O requests result in permanent I/O errors.
- The system performs no new allocations for the device.
- If the device was online, the system marks it pending offline. A pending offline device goes offline when the following conditions occur in this order:
 1. The device is no longer allocated to any job.
 2. Allocation can get the necessary resources to process the request.
- If the device was offline, it remains offline.

Operator response: If the system forced the device offline, do the following:

- Consult your installation's operating procedures.
- Enter a VARY *dev*,ONLINE command to bring the device online. Wait for the device to go entirely offline before doing so.
- Contact hardware support.

If the system boxed the device, recover the boxed device as follows:

1. Vary the boxed device offline to all sharing systems.
2. Isolate the failing control unit for repair.
3. Determine the range of affected devices.
4. Resynchronize dynamic path selection (DPS) array information for all affected devices.
5. Contact hardware support.
6. Bring the device online to allow hardware support personnel to verify the data on the boxed device. Do one of the following:
 - Enter a DISPLAY UNITS command to see if the device is one of the following:
 - Offline and boxed (F-BOX)
 - Allocated and boxed (A-BOX)
 - If the device is offline and boxed, vary the device online by entering the following command:
VARY *dev*,ONLINE
 - If the device is allocated and boxed, display the using job steps that are allocated to the device by entering the following command:
DISPLAY U,,ALLOC,*dev*,1
Follow your installation's procedures for unallocating using job steps.
Vary the device offline, using the following command:
VARY *dev*,OFFLINE

Vary the device online, using the following command:

VARY *dev*,ONLINE

- If the device is allocated and boxed, but not offline, enter the following command:

VARY *dev*,ONLINE,UNCOND

- Verify the data on the volume.

7. Identify and recover failing tasks.
8. If you want other processors that share the device to access it, vary the device back online.
9. Isolate the failing storage director for customer engineer.
10. Identify and recover failing tasks.
11. Contact hardware support.

Source: Input/output supervisor (IOS)

Module: IOSVURDT

Routing code: 2,10

Descriptor code: 4

IOS106E VARY *dev* OFFLINE TO JES3

Explanation: The system boxed a device owned by JES3. The data sets on the device may have been damaged, especially if the device is shared with other systems.

In the message text:

dev The device number.

System action: The system issues message IOS100I, IOS101I, or IOS102I to indicate why the device was boxed. Because the device is owned by JES3 and is not allocated by MVS, the system marked the device offline. The system rejects all requests for this offline device, indicating a permanent I/O error.

Operator response: Enter a JES3 VARY OFFLINE command for the device to keep JES3 from scheduling it. If the device was boxed because of hot I/O, contact hardware support. If the device was boxed for another reason, enter a VARY *dev*,ONLINE command to vary the device back online. Notify the system programmer before using the device again.

System programmer response: Check the data sets on the device for damage.

Source: Input/output supervisor (IOS)

Module: IOSRDBOX

Routing code: 1,10

Descriptor code: 11

IOS107I DEVICE *dev* BOX PROCESSING DEFERRED

Explanation: The system deferred its box processing in order to allow recovery processing to run. Certain recovery processing, such as HyperSwap operations, may be able to provide continuous availability to the device by swapping the faulty device (that is, the primary device) with a fully operational "backup" device (that is, the secondary device) prior to permanently boxing the faulty device.

In the message text:

dev The device number.

System action: The system performs its recovery actions and then boxes the device. When the device is boxed, the following message will be issued:

```
IOS102I DEVICE dev BOXED,
DEFERRED BOX PROCESSING COMPLETE
```

See the description of message IOS102I for more information on device boxing.

Operator response: See the description of message "IOS102I" on page 547 for more information on device boxing.

IOS109E

Source: Input/output supervisor (IOS)

Module: IOSRDBOX

Routing code: 2,10

Descriptor code: 4

IOS109E **IOS1109E**
HOT I/O RECOVERY *rrrrr* **INITIATED FOR** *ttttttt* **DEVICE** *devn* **CHPID** *chp*

Explanation: The system found a hot I/O condition on the specified channel path on a device. The installation specified the recovery action in the hot I/O detection table (HIDT).

In the message text:

rrrrr The recovery action obtained from the HIDT, which is one of the following:

BOX Force the device offline.

CHP,K The system attempted channel path recovery. If recovery is successful, the channel path remains online.

CHP,F Force the channel path offline.

CU,K Try to recover the control unit.

ttttttt The type and status of the device. It is either **RESERVED** or **ASSIGNED**. If this field is blank, the status of the device is not reserved.

devn The device number. The device number is prefixed by the subchannel set identifier when appropriate.

chp The channel path identifier (CHPID).

System action: Depending on the value of *rrrrr*, one of the following:

rrrrr **System Action**

BOX The system boxes the hot device, as follows:

- The system ends I/O on the device.
- New I/O requests result in permanent I/O errors.
- The system performs no new allocations for the device.
- If the device was online, the system marks it pending offline. A pending offline device goes offline when the following conditions occur in this order:
 1. The device is no longer allocated to any job.
 2. Allocation can get the necessary resources to process the request.
- If the device was offline, it remains offline.

CHP,K The system attempts to recover the failing channel path. If any devices are reserved or assigned on the channel path, the system issues message IOS062E.

If channel path recovery is successful, the system issues message IOS203I. The system leaves the channel path online.

If channel path recovery fails, the system issues message IOS202E. The system forces the channel path offline.

CHP,F The system forces the channel path offline. If any devices are reserved or assigned on the channel path, the system issues message IOS062E. The system issues message IOS202E.

CU,K The system tries to recover the control unit. If recovery is successful, the system:

- Issues message IOS208I
- Leaves the device paths online for all devices on the same control unit
- Clears the pending status of the cleared device

If recovery is not successful, the system issues message IOS207I.

Note: This response is only valid if CU,K is displayed in the message text as a valid response.

Operator response: Disable the device if:

- The device recovery action is BOX.
- You can physically disable the device
- The device is not a direct access storage device (DASD) or assigned device. In this case, do not disable the device; reserves or assigns could be lost.

See the operator response for message IOS102I, IOS202E, or IOS203I.

Source: Input/output supervisor (IOS)

Routing code: 1,10

Descriptor code: 3

IOS110D **IOS1110D**
IOS HAS DETECTED HOT I/O ON DEVICE *dev* THE LAST INTERRUPT FROM THIS DEVICE WAS ON CHANNEL PATH *chp*. THE SCD IS AT *aaaaaaaa*. THERE ARE *nnn* DEVICES WITH HOT I/O ON CHP *chp*.
ENTER ONE OF THESE REPLIES TO TELL IOS HOW TO HANDLERECOVERY:
NONE - DO NOT ATTEMPT ANY RECOVERY ACTION
DEV - LOGICALLY REMOVE THE DEVICE (BOX THE DEVICE)
CU - OPERATOR HAS PHYSICALLY REMOVED THE CONTROL UNIT. THE REPLY MUST INCLUDE THE NUMBER OF EACH DEVICE ON THE CONTROL UNIT. FOR EXAMPLE, IF DEVICES 250 THRU 257 and 25E ARE ON THE CONTROL UNIT, REPLY CU,250:257,25E OR CU,25E,250:257
CU,K - ATTEMPT CONTROL UNIT RECOVERY. KEEP CHP ONLINE IF SUCCESSFUL
CHP,K - ATTEMPT CHANNEL PATH RECOVERY.
KEEP CHP ONLINE IF SUCCESSFUL
CHP,F - FORCE THE CHANNEL PATH OFFLINE

Explanation: You must reply to this message in a timely manner. The processor is in a disabled status until this message is replied to as it is issued through Disabled Console Communication Facility (DCCF). If you do not reply within five minutes, there could be an impact to sysplex communications, processor availability, and ultimately a required IPL of the system.

The system detected hot I/O on a direct access storage device (DASD) or assignable device. The last interruption for the device was over the specified channel path. IOS112D is issued through DCCF processing when a DASD device is found on the channel path undergoing recovery, or message IOS117A was issued but a response was not received within 5 minutes.

In the message text:

dev The device number.

chp The channel path identifier (CHPID).

aaaaaaaa
The status collection data control block (SCD) address.

nnn The number of devices with hot I/O on the specified channel path.

System action: The system leaves the device with its status pending. This prevents the device from presenting any additional interruptions until further operator action.

Depending on the operator reply to this message, the system does one of the following:

Response

Action

NONE The system simulates an interruption. The system clears the pending status. The system continues processing. The device remains online.

DEV The system boxes the device, as follows:

- The system ends I/O on the device.

IOS110D

- New I/O requests result in permanent I/O errors.
- The system performs no new allocations for the device.
- If the device was online, the system marks it pending offline. A pending offline device goes offline when the following conditions occur in this order:
 1. The device is no longer allocated to any job.
 2. Allocation processing allocates any device in the system.
- If the device was offline, it remains offline.

CU The system boxes the devices specified in the reply. The system leaves the devices specified in the reply status pending.

CU,K The system tries to recover the control unit. If recovery is successful, the system:

- Issues message IOS208I
- Leaves the device paths online for all devices on the same control unit
- Clears the pending status of the cleared device

If recovery is not successful, the system issues message IOS207I.

This response is only valid if CU,K is displayed in the message text as a valid response.

Only devices connected to the control unit of the same device will be affected by recovery.

CHP,K The system attempts to recover the channel path. If channel path recovery is successful, the system:

- Issues message IOS203I
- Leaves the channel path online
- Clears the pending status of the cleared device

If channel path recovery is not successful, the system issues message IOS202E. The system forces the channel path offline.

Note: If the user indicated to box devices via the HOTIO BOX_LP option in the IECIOSxx parmlib member, then the device may become boxed instead of undergoing channel path recovery processing.

CHP,F The system forces the channel path offline. The system issues message IOS202E.

Operator response: Do the following:

- See your installation's operating procedures. Try to correct the problem at the lowest level of recovery. The levels, from lowest to highest, are:
 1. Device - box the failing device.
 2. Control unit keep - perform recovery on the control unit level and the devices attached to the control unit.
 3. Control unit - boxes the devices specified in the reply.
 4. Channel path keep - perform recovery on the channel path and all control units and devices attached to the channel path.
 5. Channel path force - force the channel path offline.
- Reply with one of the following, as described in the message text:
 - NONE
 - DEV
 - CU
 - CU,K
 - CHP,K
 - CHP,F
- If channel path recovery did not clear the condition causing the device to go hot, reply DEV, CU, or CHP,F the next time this message occurs for the device.
If you reply DEV, physically disable the device.
- Contact hardware support.

When this message is issued before the MVS Console becomes active, IT IS EXTREMELY IMPORTANT to respond promptly. This message is issued as a synchronous WTOR during early IPL processing, which will prevent the system from updating its status on the sysplex couple data set. This, in turn, could lead to Sysplex Failure Management (SFM) deciding that the system is not responding normally, and removing it from the sysplex.

System programmer response: Automation of hot I/O recovery is strongly recommended. When operator involvement is chosen in the IECIOSxx setting, the operator **must** respond to these messages before systems are impacted. See the HOT I/O section of the IECIOSxx parmlib in *z/OS MVS Initialization and Tuning Reference*.

Source: Input/output supervisor (IOS)

Module: IOSRHREC

Routing code: 2,10

Descriptor code: 2

```
IOS111D   IOS1111D
IOS HAS DETECTED HOT I/O ON {DASD | ASSIGNABLE} DEVICE devn. THE LAST
INTERRUPT FROM THIS DEVICE WAS ON CHANNEL PATH chp. THE SCD IS AT aaaaaaaa.
THERE ARE nnn DEVICES WITH HOT I/O ON CHP chp.
ENTER ONE OF THESE REPLIES TO TELL IOS HOW TO HANDLE RECOVERY:
NONE - DO NOT ATTEMPT ANY RECOVERY ACTION
DEV  - LOGICALLY REMOVE THE DEVICE (BOX THE DEVICE)
CU,K - ATTEMPT CONTROL UNIT RECOVERY. KEEP CHP ONLINE
IF SUCCESSFUL
CHP,K - ATTEMPT CHANNEL PATH RECOVERY.
KEEP CHP ONLINE IF SUCCESSFUL
CHP,F - FORCE THE CHANNEL PATH OFFLINE
```

Explanation: You must reply to this message in a timely manner. The processor is in a disabled status until this message is replied to as it is issued through Disabled Console Communication Facility (DCCF). If you do not reply within five minutes, there could be an impact to sysplex communications, processor availability, and ultimately a required IPL of the system.

The system detected hot I/O on a direct access storage device (DASD) or assignable device. The last interruption for the device was over the specified channel path. IOS112D is issued through DCCF processing when a DASD device is found on the channel path undergoing recovery, or message IOS118A was issued but a response was not received within 5 minutes.

In the message text:

devn The device number. The device number is prefixed by the subchannel set identifier when appropriate.

chp The channel path identifier (CHPID).

aaaaaaaa

The status collection data control block (SCD) address.

nnn The number of devices with hot I/O on the specified channel path.

System action: The system leaves the device with its status pending. This prevents the device from presenting any additional interruptions until further operator action.

Depending on the operator reply to this message, the system does one of the following:

Response

Action

NONE The system simulates an interruption. The system clears the pending status. The system continues processing. The device remains online.

DEV The system boxes the device, as follows:

- The system ends I/O on the device.
- New I/O requests result in permanent I/O errors.
- The system performs no new allocations for the device.

IOS111D

- If the device was online, the system marks it pending offline. A pending offline device goes offline when the following conditions occur in this order:
 1. The device is no longer allocated to any job.
 2. Allocation processing allocates any device in the system.
- If the device was offline, it remains offline.

CU The system boxes the devices specified in the reply. The system leaves the devices specified in the reply status pending.

CU,K The system tries to recover the control unit. If recovery is successful, the system:

- Issues message IOS208I
- Leaves the channel path online
- Clears the pending status of the cleared device

If recovery is not successful, the system issues message IOS207I.

This response is only valid if CU,K is displayed in the message text as a valid response.

Only devices connected to the control unit of the same device will be affected by recovery.

CHP,K The system attempts to recover the channel path. If channel path recovery is successful, the system:

- Issues message IOS203I
- Leaves the channel path online
- Clears the pending status of the cleared device

If channel path recovery is not successful, the system issues message IOS202E. The system forces the channel path offline.

Note: If the user indicated to box devices via the HOTTIO BOX_LP option in the IECIOSxx parmlib member, then the device may become boxed instead of undergoing channel path recovery processing.

CHP,F The system forces the channel path offline. The system issues message IOS202E.

Operator response: Do the following:

- See your installation's operating procedures. Try to correct the problem at the lowest level of recovery. The levels, from lowest to highest, are:
 1. Device - box the failing device.
 2. Control unit keep - perform recovery on the control unit level and the devices attached to the control unit.
 3. Control unit - boxes the devices specified in the reply.
 4. Channel path keep - perform recovery on the channel path and all control units and devices attached to the channel path.
 5. Channel path force - force the channel path offline.
- Reply one of the following, as described in the message text:
 - NONE
 - DEV
 - CU
 - CU,K
 - CHP,K
 - CHP,F
- If channel path recovery did not clear the condition causing the device to go hot, reply DEV, CU, or CHP,F the next time this message occurs for the device.

If you reply DEV, physically disable the device.
- Contact hardware support.

When this message is issued before the MVS Console becomes active, it is **EXTREMELY IMPORTANT** to respond promptly. This message is issued as a synchronous WTOR during early IPL processing, which will prevent the

system from updating its status on the sysplex couple data set. This, in turn, could lead to Sysplex Failure Management (SFM) deciding that the system is not responding normally, and removing it from the sysplex.

Note: DO NOT reset the control unit. This could cause reserves or assigns to be lost to other processors.

System programmer response: Automation of hot I/O recovery is strongly suggested. When operator involvement is chosen in the IECIOSxx setting, the operator **must** respond to these messages before systems are impacted. See the HOT I/O section of the IECIOSxx parmlib in *z/OS MVS Initialization and Tuning Reference*.

Source: Input/output supervisor (IOS)

Module: IOSRHREC

Routing code: 2,10

Descriptor code: 2

IOS112D IOS1112D
 IOS HAS DETECTED HOT I/O ON {RESERVED | ASSIGNED} DEVICE *devn*. THE LAST INTERRUPT FROM THIS DEVICE WAS ON CHANNEL PATH *chp*. THE SCD IS AT *aaaaaaaa*. THERE ARE *nnn* DEVICES WITH HOT I/O ON CHP *chp*.
 ENTER ONE OF THESE REPLIES TO TELL IOS HOW TO HANDLE RECOVERY:
 NONE - DO NOT ATTEMPT ANY RECOVERY ACTION
 DEV - LOGICALLY REMOVE THE DEVICE (BOX THE DEVICE)
 CU,K - ATTEMPT CONTROL UNIT RECOVERY. KEEP CHP ONLINE IF SUCCESSFUL
 CHP,K - ATTEMPT CHANNEL PATH RECOVERY. KEEP CHP ONLINE IF SUCCESSFUL
 CHP,F - FORCE THE CHANNEL PATH OFFLINE

Explanation: You must reply to this message in a timely manner. The processor is in a disabled status until this message is replied to as it is issued through Disabled Console Communication Facility (DCCF). If you do not reply within five minutes, there could be an impact to sysplex communications, processor availability, and ultimately a required IPL of the system.

The system detected hot I/O on a direct access storage device (DASD) or assignable device. The last interruption for the device was over the specified channel path. IOS112D is issued through DCCF processing when a DASD device is found on the channel path undergoing recovery, or message IOS119A was issued but a response was not received within 5 minutes.

In the message text:

devn The device number. The device number is prefixed by the subchannel set identifier when appropriate.

chp The channel path identifier (CHPID).

aaaaaaaa
 The status collection data control block (SCD) address.

nnn The number of devices with hot I/O on the specified channel path.

System action: The system leaves the device with its status pending. This prevents the device from presenting any additional interruptions until further operator action.

Depending on the operator reply to this message, the system does one of the following:

Response

Action

NONE The system simulates an interruption. The system clears the pending status. The system continues processing. The device remains online.

DEV The system boxes the device, as follows:

- The system ends I/O on the device.
- New I/O requests result in permanent I/O errors.
- The system performs no new allocations for the device.

IOS112D

- If the device was online, the system marks it pending offline. A pending offline device goes offline when the following conditions occur in this order:
 1. The device is no longer allocated to any job.
 2. Allocation processing allocates any device in the system.
- If the device was offline, it remains offline.

CU The system boxes the devices specified in the reply. The system leaves the devices specified in the reply status pending.

CU,K The system tries to recover the control unit. If recovery is successful, the system:

- Issues message IOS208I
- Leaves the channel path online
- Clears the pending status of the cleared device

If recovery is not successful, the system issues message IOS207I.

This response is only valid if CU,K is displayed in the message text as a valid response.

Only devices connected to the control unit of the same device will be affected by recovery.

CHP,K The system attempts to recover the channel path. If channel path recovery is successful, the system:

- Issues message IOS203I
- Leaves the channel path online
- Clears the pending status of the cleared device.

If channel path recovery is not successful, the system issues message IOS202E. The system forces the channel path offline.

Note: If the user indicated to box devices via the HOTTIO BOX_LP option in the IECIOSxx parmlib member, then the device may become boxed instead of undergoing channel path recovery processing.

CHP,F The system forces the channel path offline. The system issues message IOS202E.

Operator response: Do the following:

- See your installation's operating procedures. Try to correct the problem at the lowest level of recovery. The levels, from lowest to highest, are:
 1. Device - box the failing device.
 2. Control unit keep - perform recovery on the control unit level and the devices attached to the control unit.
 3. Control unit - boxes the devices specified in the reply.
 4. Channel path keep - perform recovery on the channel path and all control units and devices attached to the channel path.
 5. Channel path force - force the channel path offline.
- Reply one of the following, as described in the message text:
 - NONE
 - DEV
 - CU
 - CU,K
 - CHP,K
 - CHP,F
- If channel path recovery did not clear the condition causing the device to go hot, reply DEV, CU, or CHP,F the next time this message occurs for the device.

If you reply DEV, physically disable the device.
- Contact hardware support.

When this message is issued before the MVS Console becomes active, it is **EXTREMELY IMPORTANT** to respond promptly. This message is issued as a synchronous WTOR during early IPL processing, which will prevent the

system from updating its status on the sysplex couple data set. This, in turn, could lead to Sysplex Failure Management (SFM) deciding that the system is not responding normally, and removing it from the sysplex.

System programmer response: Automation of hot I/O recovery is strongly suggested. When operator involvement is chosen in the IECIOSxx setting, the operator **must** respond to these messages before systems are impacted. See the Hot I/O (HOTIO) section of the IECIOSxx parmlib in *z/OS MVS Initialization and Tuning Reference*.

Source: Input/output supervisor (IOS)

Routing code: 2,10

Descriptor code: 2

IOS113W IOS RECOVERY FAILURE - RESERVES MAY BE LOST

Explanation: The input/output supervisor (IOS) was performing channel recovery when an error occurred from which IOS could not recover. The system may have released reserved devices, so data may be lost or have been written over.

The system on which the error occurred may have inadvertently stolen reserved devices. This could even happen when the sharing systems are stopped because this system issued message IOS062E.

System action: The system enters wait state X'113'.

Operator response: See the operator response for wait state X'113'.

System programmer response: See the system programmer response for wait state X'113'.

Source: Input/output supervisor (IOS)

Routing code: 2,10,Note 12

Descriptor code: 1

IOS115A *devn*, PAGE DATA SET - *text* [REPLY U TO CONTINUE AFTER CORRECTING THE PROBLEM | RESTART THE SYSTEM TO CONTINUE AFTER CORRECTING THE PROBLEM]

Explanation: *text* is one of the following:

- NO PATHS AVAILABLE
- *ser* NOT MOUNTED
- I/O ERROR READING VOLUME LABEL
- INTERVENTION REQUIRED

The system cannot use the page data set.

In the message text:

devn

The device number. The device number is prefixed by the subchannel set identifier when appropriate.

ser

The serial number of the volume containing the page data set.

NO PATHS AVAILABLE

No paths were available to the device.

ser **NOT MOUNTED**

The volume serial for the device was not mounted.

ser The volume serial.

I/O ERROR READING VOLUME LABEL

An I/O error occurred when the system tried to read the volume label.

INTERVENTION REQUIRED

The operator must manually repair something.

System action: Using the DOM macro, the system deletes message IOS115A after ten seconds. However, the system

IOS117A

only resumes normal processing once the problem with the paging device is corrected.

Operator response: Do the following:

- Isolate the failing channel path for repair.
- Identify and recover failing tasks.
- Depending on the message text, do one of the following:

NO PATHS AVAILABLE

Physically restore a path to the device. For example, turn on a control unit switch or a channel switch.

ser **NOT MOUNTED**

Mount the correct volume on the specified device.

I/O ERROR READING VOLUME LABEL

Ensure that the correct volume is mounted on the specified device.

INTERVENTION REQUIRED

Ready the unit.

When this message is issued before the MVS Console becomes active, IT IS EXTREMELY IMPORTANT to respond promptly. This message is issued as a synchronous WTOR during early IPL processing, which will prevent the system from updating its status on the sysplex couple data set. This, in turn, could lead to Sysplex Failure Management (SFM) deciding that the system is not responding normally, and removing it from the sysplex.

Note: If you do not respond within the maximum response time of two minutes, the master console might not accept the reply. Go to the system or service console and respond from there.

Source: Input/output supervisor (IOS)

Module: IECVPST

Routing code: 1,10,Note 12

Descriptor code: 2

IOS117A **IOS117A**
IOS HAS DETECTED HOT I/O ON DEVICE *devn*. THE LAST INTERRUPT FROM THIS DEVICE WAS ON CHANNEL PATH *chp*. THE SCD IS AT *aaaaaaaa*. THERE ARE *nnn* DEVICES WITH HOT I/O ON CHP *chp*.
ENTER ONE OF THESE REPLIES TO TELL IOS HOW TO HANDLE RECOVERY:
NONE - DO NOT ATTEMPT ANY RECOVERY ACTION
DEV - LOGICALLY REMOVE THE DEVICE (BOX THE DEVICE)
CU - OPERATOR HAS PHYSICALLY REMOVED THE CONTROL UNIT.
THE REPLY MUST INCLUDE THE NUMBER OF EACH DEVICE OR PAV-BASE DEVICE ON THE CU. FOR EXAMPLE, IF DEVICES 250-257 AND 25E ARE ON THE CU, REPLY CU,250:257,25E OR CU,25E,250:257
CHP,K - ATTEMPT CHP RECOVERY. KEEP CHP ONLINE IF SUCCESSFUL
CHP,F - FORCE THE CHANNEL PATH OFFLINE

Explanation: The system detected hot I/O on a device. The last interruption for the device was over the specified channel path.

In the message text:

devn The device number. The device number is prefixed by the subchannel set identifier when appropriate.

chp The channel path identifier (CHPID).

aaaaaaaa
The status collection data control block (SCD) address.

nnn The number of devices with hot I/O on the specified channel path.

System action: The system issues message IOS205A to wait for the operator reply. Once replied to, messages IOS117A and IOS205A are deleted using the DOM macro, and processing continues. If the IOS117A/IOS205A

message combination is not replied to within 5 minutes, message IOS110D is issued via disabled console communication (DCCF) processing.

The system leaves the device with its status pending. This prevents the device from presenting any additional interruptions until further operator action.

Depending on the operator reply to this message, the system does one of the following:

Response

Action

NONE The system simulates an interruption. The system clears the pending status. The system continues processing. The device remains online.

DEV The system boxes the device, as follows:

- The system ends I/O on the device.
- New I/O requests result in permanent I/O errors.
- The system performs no new allocations for the device.
- If the device was online, the system marks it pending offline. A pending offline device goes offline when the following conditions occur in this order:
 1. The device is no longer allocated to any job.
 2. Allocation processing allocates any device in the system.
- If the device was offline, it remains offline.

CU The system boxes the devices specified in the reply. The system leaves the devices specified in the reply status pending.

CU,K The system tries to recover the control unit. If recovery is successful, the system:

- Issues message IOS208I
- Leaves the device paths online for all devices on the same control unit
- Clears the pending status of the cleared device

If recovery is not successful, the system issues message IOS207I.

This response is only valid if CU,K is displayed in the message text as a valid response.

Only devices connected to the control unit of the same device will be affected by recovery.

CHP,K The system attempts to recover the channel path. If channel path recovery is successful, the system:

- Issues message IOS203I
- Leaves the channel path online
- Clears the pending status of the cleared device

If channel path recovery is not successful, the system issues message IOS202E. The system forces the channel path offline.

Note: If the user indicated to box devices via the HOTIO BOX_LP option in the IECIOSxx parmlib member, the device may become boxed instead of undergoing channel path recovery processing.

CHP,F The system forces the channel path offline. The system issues message IOS202E.

Operator response: Do the following:

- See your installation's operating procedures. Try to correct the problem at the lowest level of recovery. The levels, from lowest to highest, are:
 1. Device - box the failing device.
 2. Control unit keep - perform recovery on the control unit level and the devices attached to the control unit.
 3. Control unit - boxes the devices specified in the reply.
 4. Channel path keep - perform recovery on the channel path and all control units and devices attached to the channel path.
 5. Channel path force - force the channel path offline.
- Reply with one of the following, as described in the message text:

IOS118A

- NONE
 - DEV
 - CU
 - CU,K
 - CHP,K
 - CHP,F
- If channel path recovery did not clear the condition causing the device to go hot, reply DEV, CU, or CHP,F the next time this message occurs for the device.
If you reply DEV, physically disable the device.
 - Contact hardware support.

Source: Input/output supervisor (IOS)

Module: IOSRHREC

Routing code: 1,10

Descriptor code: 1,7

IOS118A **IOS118A**
IOS HAS DETECTED HOT I/O ON {DASD | ASSIGNABLE} DEVICE *devn*. THE LAST INTERRUPT FROM THIS DEVICE WAS ON CHANNEL PATH *chp*. THE SCD IS AT *aaaaaaaa*. THERE ARE *nnn* DEVICES WITH HOT I/O ON CHP *chp*. ENTER ONE OF THESE REPLIES TO TELL IOS HOW TO HANDLE RECOVERY:
NONE - DO NOT ATTEMPT ANY RECOVERY ACTION
DEV - LOGICALLY REMOVE THE DEVICE (BOX THE DEVICE)
CU,K - ATTEMPT CU RECOVERY. KEEP CHP ONLINE
IF SUCCESSFUL
CHP,K - ATTEMPT CHP RECOVERY. KEEP CHP ONLINE
IF SUCCESSFUL
CHP,F - FORCE THE CHANNEL PATH OFFLINE

Explanation: The system detected hot I/O on a direct access storage device (DASD) or assignable device. The last interruption for the device was over the specified channel path.

In the message text:

devn The device number. The device number is prefixed by the subchannel set identifier when appropriate.

chp The channel path identifier (CHPID).

aaaaaaaa
The status collection data control block (SCD) address.

nnn The number of devices with hot I/O on the specified channel path.

System action: The system issues message IOS205A to wait for the operator reply. Once replied to, messages IOS118A and IOS205A are deleted using the DOM macro, and processing continues. If the IOS118A/IOS205A message combination is not replied to within 5 minutes, message IOS111D is issued via disabled console communication (DCCF) processing.

The system leaves the device with its status pending. This prevents the device from presenting any additional interruptions until further operator action.

Depending on the operator reply to this message, the system does one of the following:

Response

Action

NONE The system simulates an interruption. The system clears the pending status. The system continues processing. The device remains online.

DEV The system boxes the device, as follows:

- The system ends I/O on the device.
- New I/O requests result in permanent I/O errors.

- The system performs no new allocations for the device.
- If the device was online, the system marks it pending offline. A pending offline device goes offline when the following conditions occur in this order:
 1. The device is no longer allocated to any job.
 2. Allocation processing allocates any device in the system.
- If the device was offline, it remains offline.

CU The system boxes the devices specified in the reply. The system leaves the devices specified in the reply status pending.

CU,K The system tries to recover the control unit. If recovery is successful, the system:

- Issues message IOS208I
- Leaves the channel path online
- Clears the pending status of the cleared device

If recovery is not successful, the system issues message IOS207I.

This response is only valid if CU,K is displayed in the message text as a valid response.

Only devices connected to the control unit of the same device will be affected by recovery.

CHP,K The system attempts to recover the channel path. If channel path recovery is successful, the system:

- Issues message IOS203I
- Leaves the channel path online
- Clears the pending status of the cleared device

If channel path recovery is not successful, the system issues message IOS202E. The system forces the channel path offline.

Note: If the user indicated to box devices via the HOTIO BOX_LP option in the IECIOSxx parmlib member, then the device may become boxed instead of undergoing channel path recovery processing.

CHP,F The system forces the channel path offline. The system issues message IOS202E.

Operator response: Do the following:

- See your installation's operating procedures. Try to correct the problem at the lowest level of recovery. The levels, from lowest to highest, are:
 1. Device - box the failing device.
 2. Control unit keep - perform recovery on the control unit level and the devices attached to the control unit.
 3. Control unit - boxes the devices specified in the reply.
 4. Channel path keep - perform recovery on the channel path and all control units and devices attached to the channel path.
 5. Channel path force - force the channel path offline.
- Reply one of the following, as described in the message text:
 - NONE
 - DEV
 - CU
 - CU,K
 - CHP,K
 - CHP,F
- If channel path recovery did not clear the condition causing the device to go hot, reply DEV, CU, or CHP,F the next time this message occurs for the device.

If you reply DEV, physically disable the device.
- Contact hardware support.

Note: DO NOT reset the control unit. This could cause reserves or assigns to be lost to other processors.

IOS119A

Source: Input/output supervisor (IOS)

Module: IOSRHREC

Routing code: 1,10

Descriptor code: 1,7

IOS119A **IOS119A**
IOS HAS DETECTED HOT I/O ON {RESERVED | ASSIGNED} DEVICE *devn*. THE LAST INTERRUPT FROM THIS DEVICE WAS ON CHANNEL PATH *chp*. THE SCD IS AT *aaaaaaaa*. THERE ARE *nnn* DEVICES WITH HOT I/O ON CHP *chp*.
ENTER ONE OF THESE REPLIES TO TELL IOS HOW TO HANDLE RECOVERY:
NONE - DO NOT ATTEMPT ANY RECOVERY ACTION
DEV - LOGICALLY REMOVE THE DEVICE (BOX THE DEVICE)
CU,K - ATTEMPT CU RECOVERY. KEEP CHP ONLINE
IF SUCCESSFUL
CHP,K - ATTEMPT CHP RECOVERY. KEEP CHP ONLINE
IF SUCCESSFUL
CHP,F - FORCE THE CHANNEL PATH OFFLINE

Explanation: The system detected hot I/O on a direct access storage device (DASD) or assignable device. The last interruption for the device was over the specified channel path.

In the message text:

devn The device number. The device number is prefixed by the subchannel set identifier when appropriate.

chp The channel path identifier (CHPID).

aaaaaaaa
The status collection data control block (SCD) address.

nnn The number of devices with hot I/O on the specified channel path.

System action: The system issues message IOS205A to wait for the operator reply. Once replied to, messages IOS119A and IOS205A are deleted using the DOM macro, and processing continues. If the IOS119A/IOS205A message combination is not replied to within 5 minutes, message IOS112D is issued via disabled console communication (DCCF) processing.

The system leaves the device with its status pending. This prevents the device from presenting any additional interruptions until further operator action.

Depending on the operator reply to this message, the system does one of the following:

Response

Action

NONE The system simulates an interruption. The system clears the pending status. The system continues processing. The device remains online.

DEV The system boxes the device, as follows:

- The system ends I/O on the device.
- New I/O requests result in permanent I/O errors.
- The system performs no new allocations for the device.
- If the device was online, the system marks it pending offline. A pending offline device goes offline when the following conditions occur in this order:
 1. The device is no longer allocated to any job.
 2. Allocation processing allocates any device in the system.
- If the device was offline, it remains offline.

CU The system boxes the devices specified in the reply. The system leaves the devices specified in the reply status pending.

CU,K The system tries to recover the control unit. If recovery is successful, the system:

- Issues message IOS208I

- Leaves the channel path online
- Clears the pending status of the cleared device

If recovery is not successful, the system issues message IOS207I.

This response is only valid if CU,K is displayed in the message text as a valid response.

Only devices connected to the control unit of the same device will be affected by recovery.

CHP,K The system attempts to recover the channel path. If channel path recovery is successful, the system:

- Issues message IOS203I
- Leaves the channel path online
- Clears the pending status of the cleared device.

If channel path recovery is not successful, the system issues message IOS202E. The system forces the channel path offline.

Note: If the user indicated to box devices via the HOTIO BOX_LP option in the IECIOSxx parmlib member, then the device may become boxed instead of undergoing channel path recovery processing.

CHP,F The system forces the channel path offline. The system issues message IOS202E.

Operator response: Do the following:

- See your installation's operating procedures. Try to correct the problem at the lowest level of recovery. The levels, from lowest to highest, are:
 1. Device - box the failing device.
 2. Control unit keep - perform recovery on the control unit level and the devices attached to the control unit.
 3. Control unit - boxes the devices specified in the reply.
 4. Channel path keep - perform recovery on the channel path and all control units and devices attached to the channel path.
 5. Channel path force - force the channel path offline.
- Reply one of the following, as described in the message text:
 - NONE
 - DEV
 - CU
 - CU,K
 - CHP,K
 - CHP,F
- If channel path recovery did not clear the condition causing the device to go hot, reply DEV, CU, or CHP,F the next time this message occurs for the device.

If you reply DEV, physically disable the device.
- Contact hardware support.

Source: Input/output supervisor (IOS)

Routing code: 1,10

Descriptor code: 1,7

IOS120D IOS1120D I/O TIMED OUT FOR DEVICE *devn*. REPLY 'WAIT' FOR I/O COMPLETION OR 'CONT' TO CONTINUE WITH DEVICE OFFLINE

Explanation: The device *dev* did not respond to a request to initiate I/O to validate a device path, read self description data or perform additional device dependent validation.

The device or control unit timed out (an I/O interrupt expected from a device or control unit was not returned within the specified time limit). Possible causes include:

- The device is shared and is reserved by a processor other than the initializing processor.
- A hardware malfunction has occurred causing the device to appear busy.

IOS121I • IOS122I

- The device or control unit took too long to initialize.

In the message text:

devn The device number. The device number is prefixed by the subchannel set identifier when appropriate.

System action: The system waits for the operator to reply.

Operator response: Contact the system programmer. Take one of the following actions:

- Enter REPLY id, 'WAIT' to cause the system to wait for the device to become available. If the device is still not available after 15 seconds, the system issues message IOS124A to prompt the operator again.
- Enter REPLY id, 'CONT' to purge outstanding I/O requests and mark the device offline. Replying CONT means that the device is no longer available; processing continues without it.

Because the device is no longer available, replying CONT can cause later errors if the message is issued during Nucleus initialization processing (NIP) and the device, such as the SYSRES device, is required for NIP processing. Thus, reply 'CONT' only when the device is not available because of a hardware problem that can not be corrected and the device is not required for NIP processing.

While it is also possible to take no action (which the system considers an implicit 'WAIT'), do so only at the direction of the system programmer. Taking no action is an appropriate response only for a device that times out and is not required for NIP processing.

System programmer response: Determine the cause of the problem. If replying WAIT does not resolve the problem, then determine if the system can continue without the device. If it can, tell the operator to reply 'CONT'. If the device is required for NIP processing, tell the operator to reIPL the system using the appropriate backup device.

Source: Input/output supervisor (IOS)

Module: IEAVNP02 (NIP), IOSVNPTH (NIP), and IOSVSLFD.

Routing code: 1

Descriptor code: 2

**IOS121I UNABLE TO OBTAIN CHANNEL SUBSYSTEM INFORMATION DUE TO A BUSY CONDITION.
IPL CONTINUES.**

Explanation: An attempt was made to use the read channel-subsystem information command, but one of the following occurred:

- The system returned a busy condition.
- The service call control block (SCCB) was in use.

System action: System initialization continues.

Source: Input/output supervisor (IOS)

Routing code: 2

Descriptor code: 4

**IOS122I ERROR OBTAINING CHANNEL SUBSYSTEM INFORMATION DUE TO HARDWARE FAILURE.
IPL CONTINUES.**

Explanation: An attempt was made to use the read channel-subsystem information command, but a hardware failure occurred.

System action: System initialization continues.

Operator response: Contact hardware support.

Source: Input/output supervisor (IOS)

Routing code: 2.

Descriptor code: 4

IOS123I **WAITING FOR RESPONSE(S) FROM THE FOLLOWING DEVICE(S): devn[,dev,dev,...]**

Explanation: During IPL processing, IOS issued an I/O request to each device in a set of devices for one of the following reasons:

- To read the volume labels
- To validate the device paths
- To read self description data
- To perform additional device dependent validation.

The devices in the set have not responded to the I/O request.

In the message text:

dev The device number.

System action: IOS123I may be followed by message IOS120D or IEA120D. If the system does not issue IOS120D or IEA120D for a device, the device has responded to the I/O request since IOS123I was issued.

Operator response: For each listed device, that is critical to the IPL, determine why the device is not responding to the I/O request and fix the problem. Contact hardware support for hardware problems.

If the problem is that the device is still reserved by a processor other than the one on which system initialization is occurring, release the reserve on the other system. To release the reserve, cancel the application or applications allocated to the device.

Source: Input/output supervisor (IOS)

Routing code: 2

Descriptor code: 12

IOS124A **IOS1124A STILL WAITING FOR RESPONSE FROM DEVICE *dev*. TOTAL WAIT TIME IS *xxx* SECONDS. REPLY 'CONT' OR 'WAIT'**

Explanation: At least 15 seconds have passed since the operator replied 'WAIT' to message IOS120D or IEA120D, or a device has not responded to an I/O request to:

- Read the volume label.
- Validate the device paths.
- Read self description data.
- Perform additional device dependent validation.

One of the following might have occurred:

- The device is shared and reserved by a processor other than the initializing processor.
- A hardware malfunction is causing the device to appear busy.

In the message text:

dev The device number.

xxx Approximate total time in seconds the system has waited for device *devn*. If time is *****, then the time has exceeded 999 seconds.

System action: The system waits for the operator to reply.

Operator response: Take one of the following actions:

- Enter REPLY id, 'WAIT' to wait for the device to respond to the outstanding I/O request. If 15 seconds or more pass and the device is still not available, the system will issue message IOS124A again.
- Enter REPLY id, 'CONT' to purge outstanding I/O requests and mark the device offline. Replying CONT means that the device is no longer available; processing continues without it.

Because the device is no longer available, replying CONT can cause later errors if the message is issued during Nucleus initialization processing (NIP) and the device, such as the SYSRES device, is required for NIP processing. Thus, reply CONT only when the device is not available because of a hardware problem that cannot be corrected and the device is not required for NIP processing.

IOS125I

While it is also possible to take no action (which the system considers an implicit 'WAIT'), taking no action is an appropriate response only for a device that times out and is not required for NIP processing.

System programmer response: Determine the cause of the problem.

Problem determination: If replying 'WAIT' does not resolve the problem, then determine if the system can continue without the device. If it can, tell the operator to reply 'CONT'. If the device is required for NIP processing, tell the operator to reIPL the system using the appropriate backup device.

Source: Input/output supervisor (IOS)

Module: IEAVNP02 and IOSVSLFD

Routing code: 1

Descriptor code: 2

IOS125I IOS1125I CHPID *cc* IS EXPERIENCING MULTIPLE I/O TIMEOUTS CAUSING PROLONGED INITIALIZATION

Explanation: During NIP, multiple devices have not responded in a reasonable amount of time to an I/O request for path validation that was initiated down a specific channel path. This might have occurred due to a hardware malfunction.

In the message text:

cc The channel path causing the I/O timeouts.

System action: The system purges the outstanding I/O requests and does not take any action on the channel path specified in the message. If no external action is taken, timeouts might continue to occur for devices which use the affected channel path.

Operator response: Contact the system programmer.

System programmer response: If there are many devices attached to this channel path, you can take action to prevent the system from continuing to experience timeouts on this channel path. To do this, the channel path can be configured offline from the Hardware Management Console (HMC).

Note: Be aware that configuring a channel path offline from the HMC at this time might have some adverse effects on the system:

- When a channel path is configured on or off via the HMC, the operating system might not be notified causing the operating system's (S/W) view of the channel path's state to be out of sync with the actual state (H/W). Therefore, as IPL continues after this point, there might be inconsistencies between hardware and software with respect to the channel path causing possible software errors. You can use the `D M=CHP(cc) MVS` operator command to determine if such inconsistencies are present.
- In certain circumstances, there is a chance the console might become flooded with IOS error messages. One case where this might occur is when the last path to a set of devices is configured offline by the HMC.

Due to these effects, a re-IPL should be done after action has been taken at the HMC to configure the faulty channel path. Note that as NIP path validation continues, timeouts as a result of other faulty channel paths might cause additional IOS125I messages to be issued. Therefore, the re-IPL should be done when action has been taken to address all faulty channel paths. As the channel paths are now offline, they will not be used for the re-IPL and will not cause additional timeouts. If a re-IPL absolutely cannot be tolerated, it is possible to sync up the operating system's (S/W) view of the channel path with the actual state (H/W) of the channel path by issuing a `CONFIG CHP(cc),OFFLINE` MVS operator command after IPL has completed and MVS is ready to accept commands. However, take note that allowing the system to continue to IPL at this point may result in software errors during IPL due to the inconsistencies explained in the note above.

You should determine the cause of the hardware problem. If an IPL is needed prior to fixing the problem, keep the problematic CHPID out of the configuration, or ensure it is offline prior to IPL.

Note: In all other circumstances, IBM strongly recommends that you use the operating system facilities, when fully available, rather than the Hardware Management Console to configure channel paths on and off. See the z/OS Hardware Management Console Operations Guide for more information.

Problem determination: Contact hardware support.

Source: Input/output supervisor (IOS)

Module: IEAVNP02

Routing code: 2

Descriptor code: 12

IOS126I **DEVICE *sddd* IS KEPT OFFLINE.** *text*

Explanation: During IPL, it was determined that a device was kept offline for a specific reason. The reason is described by the message text.

In the message text:

sddd The subchannel set ID and device number of the device kept offline.

text Describes the reason the device is kept offline and is as follows:

A PRIMARY OF A SPECIAL PAIR IS ONLY EXPECTED IN SUBCHANNEL SET *y*

Where '*y*' is the subchannel set selected for IPL.

During device initialization, this device was found to be operating in Primary mode as part of a Special pair and was found in a subchannel set that was not selected for IPL. Devices operating in Primary mode are only expected in the subchannel set that was selected for IPL. See *z/OS HCD Planning* for information on Special pairs.

During IPL, the system determines which subchannel set to use for devices that are accessible from multiple subchannel sets based on:

- The SCHSET parameter specified in the LOADxx parmlib member. See *z/OS MVS Initialization and Tuning Reference*.
- The operator's response to IEA111D if it was issued. See *z/OS MVS System Messages, Vol 6 (GOS-IEA)*.

System action: The system has kept this device offline.

Operator response: This condition can happen when a system is re-IPLed after a HyperSwap has occurred and the PPRC relationship has not been re-established in the reverse direction. This means devices in both subchannel sets may be in the suspended primary state. If this is not the case, determine if the PPRC relationship is correct or if the correct subchannel set was specified for IPL.

Source: Input/output supervisor (IOS)

Module: IEAVNP02

Routing code: 2

Descriptor code: 4

IOS127I **THE THRESHOLD FOR THE NUMBER OF *msgid* MESSAGES HAS BEEN EXCEEDED.**
REMAINING MESSAGES ARE SUPPRESSED

Explanation: During IPL, to avoid message flooding, the system only allows a certain number of the referenced message to be issued. Once that number of messages is reached, the referenced message will no longer be issued and IOS127I will be issued.

See the referenced message for more information.

In the message text:

msgid The message ID of the message that has now been suppressed.

System action: The system stops issuing the referenced message.

Operator response: See the referenced message.

Source: Input/output supervisor (IOS)

Module: IEAVNP02

Routing code: 2

IOS140W • IOS151I

Descriptor code: 4

| **IOS140W** IOS Detected Failure - System Terminated, WAIT140 RSN=*rrrr* *rsntext*

| **Explanation:** IOS detected a non-recoverable error and stopped the system.

| In the message text:

| *rrrr* The wait state reason code indicating why the wait state was loaded.

| *rsntext* A description of why the system was terminated. It is one of the following:

- | • Device *sdddd* contains a page data set and has no paths available.
- | • Device *sdddd* contains a page data set and intervention is required.

| *sdddd* The subchannel set identifier and device number.

| **System action:** The system enters non-restartable wait state X'140'.

| **Operator response:** See the operator response for wait state X'140' for the indicated reason code.

| **System programmer response:** See the system programmer response for wait state X'140' for the indicated reason code.

| **Source:** Input/output supervisor (IOS)

| **Routing code:** 1,10

| **Descriptor code:** 2

IOS150I IOS1150I DEVICE *dev* NOW AVAILABLE FOR USE

Explanation: The channel reported that a device is now available.

In the message text:

dev The device number.

Note: If more than one device is now available, then message IOS156I is displayed.

System action: The system marks the device available for I/O requests.

Operator response: Enter a VARY command to vary the device online.

Source: Input/output supervisor (IOS)

Module: IOSRSCH

Routing code: 2,10

Descriptor code: 4

IOS151I IOS1151I DEVICE *dev* NOT AVAILABLE FOR USE

Explanation: The channel has reported that a device is not available.

In the message text:

dev The device number.

Note: If more than one device is not available, then message IOS157I is displayed.

System action: The system marks the device disconnected and not available for I/O requests.

Operator response: None.

Source: Input/output supervisor (IOS)

Module: IOSRSCH

Routing code: 2,10

Descriptor code: 4

IOS152E IOS1152E DEVICE *dev* BOXED BY SUBCHANNEL RECOVERY, DEVICE STATE UNKNOWN

Explanation: The system does not know if a device is available or unavailable.

In making the device available, the system boxed the device because the device is:

- Online
- Allocated
- In use by a system component
- A JES3 device that is assigned or reserved

In the message text:

dev The device number.

System action: The system issues message IOS150I or IOS151I before this message. The system marks the device boxed and not connected to the system, as follows:

- The I/O on the device is ended.
- Any new I/O requests result in permanent I/O errors.
- The system does not perform new allocations for the device.
- If the device was online, the system marks it pending offline. A pending offline device goes offline when the following conditions occur, in this order:
 1. The device is no longer allocated to any job.
 2. Allocation can get the necessary resources to process the request.
- If the device was offline, it remains offline.

Operator response: To recover a boxed device, do the following:

1. Vary the boxed device offline to all sharing systems.
2. Isolate the failing control unit for repair.
3. Determine the range of affected devices.
4. Contact hardware support.
5. Bring the device online to allow hardware support personnel to verify the data on the boxed device. Do one of the following:
 - Enter a DISPLAY U command to see if the device is one of the following:
 - Offline and boxed (F-BOX)
 - Allocated and boxed (A-BOX)
 - If the device is offline and boxed, vary the device online by entering the following command:
VARY *dev*,ONLINE
 - If the device is allocated and boxed, display the using job steps that are allocated to the device by entering the following command:
DISPLAY U,,ALLOC,*dev*,1
Follow your installation's procedures for unallocating using job steps.
Vary the device offline, using the following command:
VARY *dev*,OFFLINE
Vary the device online, using the following command:
VARY *dev*,ONLINE
 - Verify the data on the volume.
6. Identify and recover failing tasks.

Source: Input/output supervisor (IOS)

Routing code: 2,10

Descriptor code: 11

IOS153E IOS1153E DEVICE *dev*, BOXED STATE, NOW AVAILABLE FOR USE

Explanation: The channel reported that a device is now available. While making the device available, the system found that the device was boxed. The status of the device is unknown.

In the message text:

dev The device number.

System action: The system marks the device as connected. The system leaves the device in a boxed state. The device is not available for I/O requests.

Operator response: To recover a boxed device, do the following:

1. Vary the boxed device offline to all sharing systems.
2. Isolate the failing control unit for repair.
3. Determine the range of affected devices.
4. Contact hardware support.
5. Bring the device online to allow hardware support personnel to verify the data on the boxed device. Do one of the following:
 - Enter a DISPLAY U command to see if the device is one of the following:
 - Offline and boxed (F-BOX)
 - Allocated and boxed (A-BOX)
 - If the device is offline and boxed, vary the device online by entering the following command:
VARY *dev*,ONLINE
 - If the device is allocated and boxed, display the using job steps that are allocated to the device by entering the following command:
DISPLAY U,,ALLOC,*dev*,1
Follow your installation's procedures for unallocating using job steps.
Vary the device offline, using the following command:
VARY *dev*,OFFLINE
Vary the device online, using the following command:
VARY *dev*,ONLINE
 - Verify the data on the volume.
6. Identify and recover failing tasks.

Source: Input/output supervisor (IOS)

Routing code: 2,10

Descriptor code: 11

IOS154I IOS1154I DEVICE PATH (*dev,chnpid*) NOW AVAILABLE FOR USE

Explanation: As a result of a dynamic configuration change from another partition, the system added a path to a device.

In the message text:

dev The device number.

chnpid The channel path identifier.

Note: If more than one device is available for use, then message IOS158I is displayed.

System action: The system continues processing.

Operator response: Enter a VARY command to vary the path online.

Source: Input/output supervisor (IOS)

Module: IOSRSCH

Routing code: 2,10

Descriptor code: 11

IOS155I **IOS1155I DEVICE PATH(*dev,chnpid*) NOT AVAILABLE FOR USE**

Explanation: A dynamic configuration change from another partition caused the system to delete a path to a device.

In the message text:

dev The device number.

chnpid The channel path identifier.

Note: If more than one device path is not available, then message IOS159I is displayed.

System action: The system marks the path offline. The path definition is removed from the system.

Source: Input/output supervisor (IOS)

Module: IOSRSCH

Routing code: 2,10

Descriptor code: 11

IOS156I **IOS1156I THE FOLLOWING DEVICES ARE NOW AVAILABLE FOR USE: SUBCHANNEL SET: 0**
 | *xxxx,yyyy-zzzz, SUBCHANNEL SET: 1 xxxx,yyyy-zzzz, SUBCHANNEL SET: 2 xxxx,yyyy-zzzz,*
 | **SUBCHANNEL SET: 3** *xxxx,yyyy-zzzz,*

Explanation: The channel reported that the specified devices are now available.

In the message text:

SUBCHANNEL SET: 0

The subchannel set identifier.

SUBCHANNEL SET: 1

The subchannel set identifier.

| **SUBCHANNEL SET: 2**

| The subchannel set identifier.

| **SUBCHANNEL SET: 3**

| The subchannel set identifier.

xxxx,yyyy-zzzz

The device numbers.

Note: If only a single device is now available, then message IOS150I is displayed.

System action: The system marks the devices available for I/O requests.

Operator response: Enter a VARY command to vary the devices online.

Source: Input/output supervisor (IOS)

Module: IOSRSCH

IOS157I **IOS1157I THE FOLLOWING DEVICES ARE NOT AVAILABLE FOR USE: SUBCHANNEL SET: 0**
 | *xxxx,yyyy-zzzz, SUBCHANNEL SET: 1 xxxx,yyyy-zzzz, SUBCHANNEL SET: 2 xxxx,yyyy-zzzz,*
 | **SUBCHANNEL SET: 3** *xxxx,yyyy-zzzz,*

Explanation: The channel has reported that the specified devices are not available.

In the message text:

SUBCHANNEL SET: 0

The subchannel set identifier.

SUBCHANNEL SET: 1

The subchannel set identifier.

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| SUBCHANNEL SET: 2
| The subchannel set identifier.

| SUBCHANNEL SET: 3
| The subchannel set identifier.

xxxx,yyyy-zzzz
The device numbers.

Note: If only a single device is not available, then message IOS151I is displayed.

System action: The system marks the devices disconnected and not available for I/O requests.

Operator response: None.

Source: Input/output supervisor (IOS)

Module: IOSRSCH

IOS158I IOS1158I PATH *cc*, THE FOLLOWING DEVICES ARE NOW AVAILABLE FOR USE:
 SUBCHANNEL SET: 0 *xxxx,yyyy-zzzz*, SUBCHANNEL SET: 1 *xxxx,yyyy-zzzz*,
 SUBCHANNEL SET: 2 *xxxx,yyyy-zzzz*, SUBCHANNEL SET: 3 *xxxx,yyyy-zzzz*,

Explanation: As a result of a dynamic configuration change from another partition, the system added a path to the specified devices.

In the message text:

cc The channel path identifier.

SUBCHANNEL SET: 0
 The subchannel set identifier.

SUBCHANNEL SET: 1
 The subchannel set identifier.

| SUBCHANNEL SET: 2
| The subchannel set identifier.

| SUBCHANNEL SET: 3
| The subchannel set identifier.

xxxx,yyyy-zzzz
The specified devices.

Note: If only a single device is available for use, then message IOS154I is displayed.

System action: The system continues processing.

Operator response: Enter VARY commands to vary the path online to the specified devices.

Source: Input/output supervisor (IOS)

Module: IOSRSCH

IOS159I IOS1159I PATH *cc*, THE FOLLOWING DEVICES ARE NOT AVAILABLE FOR USE:
 SUBCHANNEL SET: 0*xxxx,yyyy-zzzz*, SUBCHANNEL SET: 1*xxxx,yyyy-zzzz*,

Explanation: A dynamic configuration change from another partition caused the system to delete a path to the specified devices.

In the message text:

cc The channel path identifier.

SUBCHANNEL SET: 0
 The subchannel set identifier.

SUBCHANNEL SET: 1
 The subchannel set identifier.

xxxx,yyyy-zzzz

The specified devices.

Note: If only a single device is not available, then message IOS155I is displayed.

System action: The system marks the path offline to all specified devices. The path definition is removed from the system.

Source: Input/output supervisor (IOS)

Module: IOSRSCH

IOS160I CHANNEL REPORT WORDS LOST DUE TO OVERFLOW CONDITION

Explanation: The channel indicates a channel report word overflow condition. One or more channel report words are lost and will not be reported to the system.

System action: The system continues processing.

Source: Input/output supervisor (IOS)

Routing code: 2,10

Descriptor code: 4

IOS161I IOS1161I SUBCHANNEL *sssssss*, NO MATCHING UCB FOUND

Explanation: The channel has provided a channel report word with a subchannel number that the system could not recognize.

In the message text:

sss The erroneous subchannel number with the subchannel set identifier.

System action: The system skips the channel report word. The system continues processing.

Source: Input/output supervisor (IOS)

Routing code: 2,10

Descriptor code: 4

IOS162A CHPID *chp* ALERT, UNSOLICITED MALFUNCTION INTERRUPT

Explanation: While trying to service a request from a device, the channel subsystem found an error before the system determined the device number.

In the message text:

chp The channel path identifier (CHPID).

System action: The reporting channel path remains available to the channel subsystem. The system continues processing.

Operator response: Do the following:

1. Isolate the failing channel path for repair.
2. If only one working channel path remains, transfer critical applications to backup.
3. Identify and recover failing tasks.
4. Contact hardware support.

Source: Input/output supervisor (IOS)

Routing code: 2,10

Descriptor code: 2

IOS163A CHPID *chp* ALERT, NO ASSOCIATED SUBCHANNEL FOR DEVICE

Explanation: A hardware error occurred while the system was trying to service a request from a device,

In the message text:

chp The channel path identifier (CHPID).

System action: The system continues processing.

Operator response: Check the system console for return and reason codes indicating the hardware error. Notify the system programmer, providing the return and reason codes.

Note: If this error occurs after a new DASD configuration is implemented and the *chpid* is one involved in that configuration, check to see that the number of devices defined to the ESS (Enterprise Storage Server[®]) matches the devices in the IOCP/HCD gen.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Input/output supervisor (IOS)

Routing code: 2,10

Descriptor code: 2

IOS164I IOS1164I DEVICE *devn*, NO MATCHING UCB FOUND

Explanation: A channel provided a channel report word for a subchannel for the specified device, but the system could not find the device.

In the message text:

devn The device number. The device number is prefixed by the subchannel set identifier when appropriate.

System action: The system skips the channel report word. Channel report word processing continues.

Operator response: If a virtual machine (VM) command generated the channel report word, ensure that the device number specified in the command is defined to the system.

Source: Input/output supervisor (IOS)

IOS165I IOS1165I DEVICE *dev*. PREFERRED PATHING {NOW | NO LONGER} IN USE

Explanation: This message is issued in response to a VARY PATH or CONFIG CHP operator command.

In the message text:

dev The device number.

NOW IN USE

will be issued when a successful VARY PATH or CF CHP online request has occurred and the path that was just brought online is now the first online preferred path to the device.

NO LONGER IN USE

will be issued when a successful VARY PATH or CF CHP offline request has occurred and the path that was just taken offline was the last online preferred path to the device.

System action: The system continues processing.

When preferred pathing is now in use, all I/O requests will be issued to the device's preferred paths only.

When preferred pathing is no longer in use, all I/O requests will be issued to the device's non-preferred paths. When a device is operating in this mode, I/O performance might be impacted.

Operator response: Take whatever steps are necessary to VARY or CF the offline paths to the device back online to allow preferred pathing to be in use again.

Source: Input/output supervisor (IOS)

Module: IOSCFCH2, IEEVPTHR

IOS166E HYPERPAV LSS OF DEVICE *dev* IS NOW IN BASE ONLY MODE DUE TO ONLINE NON-FICON CHANNEL

Explanation: A base device of HyperPAV LSS has at least one online channel that is not FICON. When the device is reconfigured to have only FICON channels online, this message will be deleted.

In the message text:

dev

The device number

System action: The system continues processing.

Operator response: No operator response is required.

System programmer response: Reconfigure the device to have only FICON channels online. Note that it may be required to issue VARY *ddd*,ONLINE,UNCOND to an online base device in each logical control unit to enable HyperPAV aliases.

Source: Input/output supervisor (IOS)

Module: IOSRSCH

Routing code: 2, 10

Descriptor code: 2

IOS167I DEVICE *dev* RESTORED BY SUBCHANNEL RECOVERY

Explanation: The channel subsystem reported that the subchannel for device *dev* has undergone recovery and has been restored to an operational state.

In the message text:

dev

The device number. The device number is prefixed by the subchannel set identifier when appropriate.

System action: None. The system has processed the request from the channel subsystem and no further action is required.

Operator response: None.

System programmer response: None.

Source: Input/output supervisor (IOS)

Module: IOSRSCH, IOSRSCHM

Routing code: 2, 10

Descriptor code: 11

**IOS188I CONTROL UNIT FOR DEVICE *dev* COULD NOT BE TRANSITIONED.IEE763I NAME= *modname*
CODE= *msg_codemsgid1 msg1[msgid2 msg2...]*IEE764I END OF IOS188I RELATED MESSAGES**

Explanation: When the system tried to access a device, an error occurred.

In the message text:

dev

The device number.

IEE763I NAME=*mod_name* CODE=*msg_code*

This message appears at the beginning of the message or messages that describe a problem.

mod_name

The name of the module that generated the message which follow message IEE763I.

msg_code

A diagnostic aid for the issuing module.

IOS189I • IOS191I

msgid1 msg1 [msgid2 msg2...]

Message or messages issued that further describe the problem.

IEE764I END OF IOS188I RELATED MESSAGES

The system issues this message after issuing all messages that are part of message IOS188I.

System action: The system does not perform the requested action on the device.

Operator response: See the operator response for the messages that further describe the problem.

System programmer response: See the system programmer response for the messages that further describe the problem.

Source: Input/output supervisor (IOS)

Module: IOSVHTRN

Routing code: -

Descriptor code: 5

IOS189I HYPERPAV MODE CHANGE INITIATED - CONTROL UNIT CONVERSION WILL COMPLETE ASYNCHRONOUSLY

Explanation: A change in HyperPAV mode has been initiated by the operator using the SET IOS or SETIOS HYPERPAV command. See *z/OS MVS System Commands* for information about changing the HyperPAV mode. The conversion of the control units will occur asynchronously to the completion of the command processing.

System action: The system continues processing.

Operator response: No operator response is required.

System programmer response: No system programmer response is required.

Source: Input/output supervisor (IOS)

Module: IOSCPARZ

Routing code: 2, 10

Descriptor code: 4

IOS190I *dev*, DISMOUNT VOLUME *volser*

Explanation: The system found an incorrect volume mounted on a direct access storage device (DASD).

In the message text:

dev The device number.

volser The volume serial number.

System action: The system issues message IOS192A.

Operator response: Demount the volume with the specified serial number from the device. Then respond to message IOS192A.

Source: Input/output supervisor (IOS)

Module: IOSVDAVV

Routing code: 1,4

Descriptor code: 4

IOS191I *dev*, I/O ERROR READING VOLUME LABEL, *cm*, *stat*, *sensbbbbbb*

Explanation: A permanent I/O error occurred when the system tried to read the volume label for the volume mounted on the specified device.

In the message text:

dev The device number.

cm The operation code of the channel command word (CCW) that was running when the error occurred.

stat The status portion of the subchannel status word (SCSW).

sens The first 2 bytes of sense data for the error condition. The system only provides this data when a unit check occurs.

bbbbbb The remaining sense data. The system only provides this data when a unit check occurs.

System action: The system issues message IOS192A.

Operator response: Dismount the volume on the device. Then respond to message IOS192A.

Source: Input/output supervisor (IOS)

Module: IOSVDAVV

Routing code: 1,4

Descriptor code: 4

IOS192A *dev*, MOUNT VOLUME *volser* OR FORCE DEVICE OFFLINE

Explanation: The system issues this message:

- After issuing message IOS191E
- When the volume mounted on the device does not have the specified volume serial

In the message text:

dev The device number.

volser The volume serial number.

System action: The system does not start I/O requests to the device until the operator mounts the correct volume.

Operator response: Do one of the following:

- Mount the specified volume on the device.
- Force the device offline using the VARY *dev*,OFFLINE,FORCE command.
- Cancel the job that needs the specified volume.

With a parallel access volume, you do not physically mount the device. Do one of the following:

- Rewrite the *volser* back to what it was previously
- Force the device offline using the VARY *dev*,OFFLINE,FORCE command.

For any other type of device, do one of the following:

- Mount the specified volume on the device.
- Force the device offline using the VARY *dev*,OFFLINE,FORCE command.
- Cancel the job that needs the specified volume.

Source: Input/output supervisor (IOS)

Module: IOSVDAVV

Routing code: 1

Descriptor code: 2

IOS201E START PROCESSORS STOPPED FOR MESSAGE {IOS062E | IOS063E}— RESERVES {INTACT | LOST}

Explanation: The system recovered from the error that appeared in message IOS063E, (or IOS062E) which told the operator to stop the processors that share devices with this system. The system issues this message when channel path recovery is complete.

This message is only issued when the asynchronous WTO request to issue IOS204E has failed.

In the message text:

IOS202E

RESERVES INTACT

Indicates that all reserved devices were successfully recovered

RESERVES LOST

Indicates that one or more devices reserved for this system were forced offline

System action: The system has completed channel path recovery.

When the operator replies to message IOS201E, the system might issue one or more additional messages either to indicate which devices are no longer reserved to this system or to indicate which channel paths were successfully recovered.

In addition, the system may abend the jobs using boxed devices.

Operator response: Do the following:

1. Isolate the failing channel path for repair.
2. Identify and recover failing tasks.
3. If RESERVES INTACT appears in the message text, do the following:
 - a. Enter the IOACTION RESUME command for the device on all other sharing systems if the device was stopped, or restart any stopped systems, or vary the device back online. Start the stopped processors by pressing the START key at the system console of each sharing system or logical partition.
 - b. Restart the system that detected the stopped processor.
4. If RESERVES LOST appears in the message text, do the following:
 - a. Enter the IOACTION RESUME command for the device on all other sharing systems if the device was stopped, or restart any stopped systems, or vary the device back online. Start the stopped processor by pressing the START key at the system console of each sharing system or logical partition.
 - b. Restart the system that detected the stopped processor.
 - c. Notify the system programmer.

When this message is issued before the MVS Console becomes active, IT IS EXTREMELY IMPORTANT to respond promptly. This message is issued as a synchronous WTOR during early IPL processing, which will prevent the system from updating its status on the sysplex couple data set. This, in turn, could lead to Sysplex Failure Management (SFM) deciding that the system is not responding normally, and removing it from the sysplex.

System programmer response: Search problem reporting databases for a fix for the problem.

Source: Input/output Supervisor (IOS)

Routing code: 2,10

Descriptor code: 2

IOS202E IOS1202E CHANNEL PATH *chp* FORCED OFFLINE - DEVICE IS: { *devn* | UNKNOWN}

Explanation: Because of a hardware error, a channel path is no longer operational. The error is permanent. External intervention is required to recover the channel path.

This message follows message IOS109E when CHP,F is the automatic recovery action for the HOTIO condition, or when CHP,K initiated unsuccessful channel path recovery.

A partition can now see this message if an ACTIVATE IODF=xx,FORCE=CANDIDATE command was entered in another partition, causing the current partition to be deleted from the access or candidate list of a channel path that was configured online to the current partition.

In the message text:

chp The channel path identifier.

devn The device number. The device number is prefixed by the subchannel set identifier when appropriate.

UNKNOWN

This field appears if the device is unknown or no device is involved.

System action: The system forces the channel path offline. The system issues other messages that tell the status of the devices using the channel path.

Operator response: Do the following:

1. Isolate the failing channel path for repair.
2. Identify and recover any failing tasks.
3. Contact hardware support if the message was not caused by an ACTIVATE=IODF=xx,FORCE=CANDIDATE command.
4. After the hardware problem is corrected, recover the channel path by entering the following command:

```
CONFIG CHP(chp),ONLINE
```

If this message was issued as the result of an ACTIVATE IODF=xx, FORCE=CANDIDATE and the current partition needs the channel path, enter an ACTIVATE command to add the current partition back into the access or candidate list of the channel path followed by configuring the CHPID online.

Source: Input/output supervisor (IOS)

Routing code: 2,10

Descriptor code: 11

IOS203I **IOS1203I CHANNEL PATH *chp* SUCCESSFULLY RECOVERED - DEVICE IS: { *devn* | UNKNOWN}**

Explanation: An error occurred on a channel path to the specified device. One of the following occurred:

- The interface was either hung or broken.
- The device indicated that a reset event occurred.

This message follows message IOS109E when CHP,K is the automatic recovery action for the HOTIO condition, and channel path recovery is successful. This message follows message IOS207I when the system invokes control unit recovery.

In the message text:

chp The channel path identifier (CHPID).

devn The device number. The device number is prefixed by the subchannel set identifier when appropriate.

UNKNOWN

This field appears if the device is unknown or no device is involved

System action: The system continues processing. The system uses the recovered channel path.

Operator response: Do the following:

1. If channel path recovery processing does not clear the HOTIO condition, box the device with the following command:

```
VARY dev,OFFLINE,FORCE
```
2. If the system issues this message several times for the same channel path, enter a CONFIG command to place the channel path offline to prevent the operating system from using it.
3. If this condition occurs for more than one device on a control unit, fence the entire unit by forcing the range of attached devices offline.
4. Contact hardware support.

Source: Input/output supervisor (IOS)

Routing code: 2,10

Descriptor code: 4

IOS204E **START PROCESSORS STOPPED FOR MESSAGE {IOS062E | IOS063E}— RESERVES {INTACT | LOST}**

Explanation: The system recovered from the error that appeared in message IOS063E, (or IOS062E) which told the operator to stop the processors that share devices with this system. The system issues this message when channel path recovery is complete.

If this message cannot be issued successfully via an asynchronous WTO request, then message IOS201E will be

IOS205A

issued via disabled console communication (DCCF) processing.

In the message text:

RESERVES INTACT

Indicates that all reserved devices were successfully recovered

RESERVES LOST

Indicates that one or more devices reserved for this system were forced offline

System action: The system has completed channel path recovery.

When the operator replies to message IOS204E, the system might issue one or more additional messages either to indicate which devices are no longer reserved to this system or to indicate which channel paths were successfully recovered.

In addition, the system may abend the jobs using boxed devices.

Operator response: Do the following:

1. Isolate the failing channel path for repair.
2. Identify and recover failing tasks.
3. If RESERVES INTACT appears in the message text, do the following:
 - a. Enter the IOACTION RESUME command for the device on all other sharing systems if the device was stopped, or restart any stopped systems, or vary the device back online. Start the stopped processors by pressing the START key at the system console of each sharing system or logical partition.
 - b. Restart the system that detected the stopped processor.
4. If RESERVES LOST appears in the message text, do the following:
 - a. Enter the IOACTION RESUME command for the device on all other sharing systems if the device was stopped, or restart any stopped systems, or vary the device back online. Start the stopped processor by pressing the START key at the system console of each sharing system or logical partition.
 - b. Restart the system that detected the stopped processor.
 - c. Notify the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem.

Source: Input/output Supervisor (IOS)

Routing code: 1,10

Descriptor code: 1

IOS205A ENTER REPLY

Explanation: A multiline WTO has been issued and an operator reply is required. The following IOS WTO messages may have been issued:

- IOS117A
- IOS118A
- IOS119A

System action: The system waits for an operator reply.

Operator response: Based on the multiline WTO issued, reply to the outstanding WTOR.

Source: Input/output supervisor (IOS)

Module: IOSVWTOR

Routing code: 1,10

Descriptor code: 1,7

IOS206A REPLY U TO CONTINUE PROCESSING

Explanation: A multiline WTO has been issued and an operator reply is required. The following IOS WTO messages may have been issued:

- IOS063E

System action: The system waits for an operator reply.

Operator response: Based on the multiline WTO issued, reply to continue processing.

Source: Input/output supervisor (IOS)

Module: IOSVWTOR

Routing code: 1,10

Descriptor code: 1,7

IOS207I IOS1207I CONTROL UNIT FOR (*devn,chnp*) NOT SUCCESSFULLY RECOVERED

Explanation: An error occurred on the specified channel path. Recovery failed at the control unit level.

In the message text:

devn The device number. The device number is prefixed by the subchannel set identifier when appropriate.

chnp The channel path identifier (CHPID).

System action: The system does not perform further recovery at the control unit level. Channel path recovery will attempt to recover the channel path.

Source: Input/output supervisor (IOS)

Routing code: 2,10

Descriptor code: 4

IOS208I IOS1208I CONTROL UNIT FOR (*dev,chnp*) SUCCESSFULLY RECOVERED

Explanation: An error occurred on a channel path. Recovery at the control unit level was successful.

In the message text:

dev The device number.

chnp The channel path identifier (CHPID).

System action: The system uses the channel path and the control unit.

Operator response: Contact hardware support.

Source: Input/output supervisor (IOS)

Routing code: 2,10

Descriptor code: 4

IOS210I PATH RECOVERY INITIATED FOR PATH *chnp* ON CU *cccc*, REASON=*rsntext*

Explanation: The system displays this message when a path recovery-related error occurs and the installation has specified PATH_SCOPE=CU option in the IECIOSxx member of SYS1.PARMLIB or via the SETIOS command. The system will attempt to vary the channel path offline for all devices on the control unit.

In the message text:

chnp The channel path identifier (CHPID) that encountered the path recovery error.

cccc The control unit for the device that encountered the path recovery error.

rsntext The reason why the channel path is being varied offline. One of the following:

LINK RECOVERY THRESHOLD REACHED

The hardware FICON link recovery threshold has been reached and the path is no longer available to all devices on the control unit. This message may be preceded by message IOS2001I or IOS2002I.

PATH ERROR THRESHOLD REACHED

The system has determined that the number of errors on a path over a period of time has reached an installation-specified threshold and the path needs to be taken offline to all devices on the control unit. This message may be preceded by message IOS050I or IOS051I.

DYNAMIC PATHING ERROR

The system encountered an error on a path while validating a dynamic pathing device. As a result of the error, the path was taken offline from all devices on the control unit. This message may be preceded by message IOS450E.

REQUESTED BY DEVICE ERP ROUTINE

The device support error recovery procedure routine requested that control unit path error recovery be performed. As a result, the path is taken offline from all devices on the control unit.

System action: The system attempts to vary the path offline to all devices on the control unit. If the reason text does not indicate LINK RECOVERY THRESHOLD REACHED, the path will not be taken offline to a particular device if it is the last path to the device and the device is online, reserved, assigned, or in use by a system component. Otherwise, the path is not operational to all devices for the control unit, so the path will be taken offline.

Operator response: Once the problem that caused the path-related errors to occur has been corrected, you must bring the path online manually; the path is not automatically varied back online by the system. To bring the path back online, issue one of the following commands: VARY CU, VARY PATH, or CONFIG CHP. It is recommended that you first vary the path online to a single device to ensure that the problem has been corrected before varying the path online to the remaining devices.

System programmer response: Correct the errors that caused the path to be taken offline and vary the path back online. See the associated error messages for guidance on how to identify and correct the error.

Source: Input/output supervisor (IOS)

Module: IOSVIOPH

Routing code: 2

Descriptor code: 12

IOS250I IOS1250I PATH *chp* BROUGHT ONLINE FOR DEVICE *dev*

Explanation: An error occurred that would have resulted in the system forcing the specified device offline because the last path to the device was lost. The paths are offline to the device but the corresponding channel paths are online to the system.

In the message text:

chp The channel path identifier (CHPID).

dev The device number.

System action: The system brings the path online only for the specified device.

Source: Input/output supervisor (IOS)

Routing code: 2,10

Descriptor code: 4

IOS251I IOS1251I PATH *chp* TAKEN OFFLINE FROM DEVICE *devn*

Explanation: An error occurred on a channel path. This message is preceded by message IOS444I.

In the message text:

chp The channel path identifier (CHPID).

devn The device number. The device number is prefixed by the subchannel set identifier when appropriate.

System action: The system:

1. Reinitializes the channel path
2. Removes the channel path from the dynamic pathing group for the device
3. Takes the channel path offline for the device

Operator response: Do the following:

1. Isolate the failing channel path for repair.
2. Identify and recover failing tasks.
3. If there is only one remaining path, transfer critical applications to backup.
4. Contact hardware support.

Source: Input/output supervisor (IOS)

Routing code: 2,10

Descriptor code: 4

IOS275I IOS1275I C.U.I.R. REQUEST TO QUIESCE THE FOLLOWING PATH(S): CHPID *xx* TO DEVICE(S) *dev,dev1-dev2, ...* CHPID *yy* TO DEVICE(S) *dev,dev1-dev2, ...*

Explanation: An IBM service representative has initiated a reconfiguration request from a device to quiesce the specified paths so that service can be performed. The Control Unit Initiated Reconfiguration (C.U.I.R.) function has received control to quiesce the specified paths.

Quiescing paths means varying the paths offline and making them unavailable for use, so that they cannot be varied online and used while a service action is being performed.

In the message text:

xx,yy The specified channel path identifier.

dev,dev1,dev2

The device numbers of the specified devices.

System action: C.U.I.R. processes the request.

Operator response: None.

Source: Input/output supervisor (IOS)

Module: IOSVCTSK

Routing code: Note 13

Descriptor code: 4

IOS278I IOS1278I C.U.I.R. REQUEST TO RESUME THE FOLLOWING PATH(S): CHPID *xx* TO DEVICE(S) *dev,dev1-dev2, ...* CHPID *yy* TO DEVICE(S) *dev,dev1-dev2, ...*

Explanation: An IBM service representative has initiated a reconfiguration request from a device to resume the specified paths after a service action has completed. The Control Unit Initiated Reconfiguration (C.U.I.R.) service has received control to perform the request.

Resuming paths means varying the paths back online to make them available for use again when a service action has completed.

In the message text:

xx,yy The specified channel path identifier.

dev,dev1,dev2

The device numbers of the specified devices.

System action: C.U.I.R. processes the request.

Operator response: None.

Source: Input/output supervisor (IOS)

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Module: IOSVCTSK

Routing code: Note 13

Descriptor code: 4

IOS281I C.U.I.R. REQUEST SUCCESSFUL

Explanation: The Control Unit Initiated Reconfiguration (C.U.I.R.) service has successfully completed the reconfiguration request described in message IOS275I or IOS278I.

System action: The system continues processing.

Operator response: None.

Source: Input/output supervisor (IOS)

Module: IOSVCTSK

Routing code: Note 13

Descriptor code: 4

IOS283I IOS1283I C.U.I.R. VARY PATH(*dev,xx*) REJECTED, *text*

Explanation: The Control Unit Initiated Reconfiguration (C.U.I.R.) service attempted to vary CHPID *xx* to device *dev* offline to quiesce the path or online to resume the path, but the system rejected the vary request.

In the message text:

xx The channel path identifier.

dev The device number of the specified device.

text The reason the vary command was rejected, as follows:

LAST PATH TO DEVICE

C.U.I.R. attempted to vary the path offline, but this is the last path to the device, and C.U.I.R. cannot vary the last path to a device offline.

PATH DOES NOT EXIST

C.U.I.R. attempted to vary the path online or offline, but the path does not exist.

PATH RESERVED

C.U.I.R. attempted to vary the path online or offline, but the path or the device was reserved.

DEVICE CANNOT BE ACCESSED

C.U.I.R. attempted to vary the path online or offline, but the device is in a permanent error state and cannot be accessed.

UCB FOR DEVICE NOT CONNECTED

C.U.I.R. attempted to vary the path online, but the specified device is not connected to a subchannel.

I/O TIMED OUT DURING PATH VALIDATION

C.U.I.R. attempted to vary the path online, but the I/O issued to bring the desired path online has timed out. There is a probable hardware error on the specified device or on the control unit it is attached to.

VARY COMMAND PROCESSOR FAILED

C.U.I.R. attempted to vary the path online or offline, but the VARY command processor encountered an unrecoverable internal error.

PATH NOT OPERATIONAL

C.U.I.R. attempted to vary the path online or offline, but the path is not functioning or the specified device is in a permanent error state.

System action: The system rejects the C.U.I.R. vary request. System processing continues.

Operator response: For all *texts*, notify the IBM service representative who initiated the reconfiguration request. Further action depends on the value of *text*, as follows:

LAST PATH TO DEVICE

Do one of the following:

- Vary another available path online to the device so that C.U.I.R. can vary the path(*dev,xx*) offline.
- Explicitly vary path(*dev,xx*) offline unconditionally. After the error is corrected, the request may be re-initiated by the service representative.

Note: Varying the path unconditionally will take the device offline.

PATH DOES NOT EXIST

Contact the IBM Support Center.

PATH RESERVED

The device might be reserved by one or more jobs. To release the device, cancel the jobs that have the device reserved, or wait for these jobs to complete. The service representative can reinitiate the request after the device has been released.

DEVICE CANNOT BE ACCESSED

Contact the IBM Support Center.

UCB FOR DEVICE NOT CONNECTED

Contact the IBM Support Center.

I/O TIMED OUT DURING PATH VALIDATION

There is a probable hardware error on device *dev* or on the control unit to which it is attached. Contact the IBM Support Center.

VARY COMMAND PROCESSOR FAILED

The service representative should retry the request. If the request fails again, contact the IBM Support Center.

PATH NOT OPERATIONAL

Ensure that path(*dev,xx*) is operational, that power is up on the device, and that all switches are enabled. Then have the service representative retry the request. If the request fails again, contact the IBM Support Center.

Source: Input/output supervisor (IOS)

Module: IEEVPTHR

Routing code: Note 13

Descriptor code: 4

IOS284I C.U.I.R. REQUEST REJECTED - VARY COMMAND PROCESSOR FAILED

Explanation: The system rejected the entire Control Unit Initiated Reconfiguration (C.U.I.R.) request described in message IOS275I or IOS278I because the VARY command processor encountered a software failure.

Message IOS284I is similar to message IOS283I except that IOS284I applies to the entire C.U.I.R. request, whereas IOS283I applies to only one of the paths requested.

System action: C.U.I.R. processing for the reconfiguration request ends. System processing continues.

Operator response: Notify the service representative who initiated the reconfiguration request. The service representative should retry the request. If the request fails again, contact the IBM Support Center.

Source: Input/output supervisor (IOS)

Module: IOSVCTSK

Routing code: Note 13

Descriptor code: 4

IOS288A SYSTEM-INITIATED {ONLINE | OFFLINE} RECONFIGURATION IS IN PROGRESS FOR THE FOLLOWING CHPIDS:cc,cc-cc,cc,cc-cc ... cc [WARNING: MESSAGE IS INCOMPLETE DUE TO SYSTEM ERROR.]

Explanation: The system is processing a reconfiguration request issued by the systems operator through the

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Hardware Management Console. The request is either an ONLINE or OFFLINE reconfiguration of the channel-paths specified by CHPID *cc*.

In the message text:

cc The channel path identifier.

WARNING: MESSAGE IS INCOMPLETE DUE TO SYSTEM ERROR.

When this warning is displayed in the message text, it indicates that a system error occurred while the message was being constructed, resulting in an incomplete message.

System action: The system will try to re-configure the channel-paths specified in the message ONLINE or OFFLINE, as specified on the hardware management console. The system will issue message IOS289I once the reconfiguration is complete.

Source: Input/output supervisor (IOS)

Module: IOSVACR

Routing code: 1

Descriptor code: 2

IOS289I SYSTEM-INITIATED {ONLINE | OFFLINE} RECONFIGURATION HAS COMPLETED.
[RECONFIGURATION WAS SUCCESSFUL FOR THE FOLLOWING CHPIDS: *cc,cc-cc,cc,cc-cc ...*]
[RECONFIGURATION FAILED FOR THE FOLLOWING CHPIDS: *cc,cc-cc,cc,cc-cc ...*] [WARNING:
MESSAGE IS INCOMPLETE DUE TO SYSTEM ERROR.]

Explanation: The system has completed processing a reconfiguration request issued by a system operator through the Hardware Management Console. The request is either an ONLINE or OFFLINE reconfiguration of the channel-paths specified by CHPID *cc*.

In the message text:

cc The channel path identifier.

RECONFIGURATION WAS SUCCESSFUL FOR THE FOLLOWING CHPIDS: *cc,cc-cc,cc,cc-cc ... cc*

The channel-paths specified in the message text were successfully reconfigured.

RECONFIGURATION FAILED FOR THE FOLLOWING CHPIDS: *cc,cc-cc,cc,cc-cc ... cc*

Reconfiguration failed for the channel-paths specified by the message text.

WARNING: MESSAGE IS INCOMPLETE DUE TO SYSTEM ERROR.

When this warning is displayed in the message text, it indicates that a system error occurred while the message was being constructed, resulting in an incomplete message.

System action: The system completes the reconfiguration action (either ON- or OFFLINE) for the channel paths specified. Message IOS288A is deleted.

Operator response: If the channel-paths that failed an offline reconfiguration were the last paths to a set of online devices, the operator will have to manually issue a CONFIG CHPID command to re-configure the specified channel-paths offline.

Source: Input/output supervisor (IOS)

Module: IOSVACR

Routing code: 2,10

Descriptor code: 4

IOS290I C.U.I.R. REQUEST UNSUCCESSFUL

Explanation: The Control Unit Initiated Reconfiguration (C.U.I.R.) service was unsuccessful in processing the reconfiguration request described in message IOS275I or IOS278I. C.U.I.R. messages issued before this message describe the reason why the request was unsuccessful.

System action: C.U.I.R. processing for the reconfiguration request ends. System processing continues.

Operator response: See the messages issued before this message to determine why the request was unsuccessful.

Notify the IBM service representative who initiated the reconfiguration request.

Source: Input/output supervisor (IOS)

Module: IOSVCTSK

Routing code: Note 13

Descriptor code: 4

IOS291I IOS1291I CONFIGURATION DATA COULD NOT BE READ ON PATH (*devn, xx*) **RC=rc** *textline1*
[*textline2*]

Explanation: The input/output supervisor (IOS) was unsuccessful in its attempt to process the configuration data for the specified device on the channel path identifier *xx*.

In the message text:

devn The device number. The device number is prefixed by the subchannel set identifier when appropriate.

xx The channel path identifier.

rc The associated hexadecimal reason code (see below)

textline1
Descriptive text detailing the failure (see below)

textline2
Optional descriptive text detailing the failure (see below)

RC	Textline1	Explanation
10	RCD CCW NOT FOUND IN SENSE-ID DATA	The Read Configuration Data (RCD) channel command word (CCW) was not found in the extended sense ID data.
20	TOKEN NED NOT FOUND IN CDR DATA	The configuration data record (CDR) is missing the token node element descriptor (NED).
21	TOKEN NED MISMATCH HAS BEEN DETECTED	The CDR token from the specified device does not match the subsystem token.
22	I/O DEV NED NOT FOUND IN CDR DATA	The CDR is missing the I/O device NED.
23	REQUESTED UCB IS NOT VALID	The requested unit control block (UCB) pointer is not valid.
24	REQUESTED PATH MASK IS NOT VALID	The requested path mask is not valid.
25	CONFIGURATION ERROR - MAXIMUM NUMBER OF NEDS EXCEEDED	The configuration data limit was exceeded. More than the maximum of 16 NEDs were found.
26	CONFIGURATION ERROR - MAXIMUM NUMBER OF PATHS EXCEEDED	The configuration data limit was exceeded. More than the maximum of 8 channel paths were found.
27	I/O DEV NED MISMATCH HAS BEEN DETECTED	The CDR I/O device NED from the specified device does not match the device NED read from a previous channel path.
28	CONFIGURATION DATA TABLE HAS NOT BEEN INITIALIZED	Device self-description initialization has not occurred.
29	I/O DEV NED MATCHES AN I/O DEV NED FOR ANOTHER DEVICE	The CDR I/O device NED from the specified device already exists for another device.
2A	INVALID CDR DATA FOR A PAV-BASE	Device number is defined as a base in the I/O definition file (IODF) but the corresponding unit address is not defined as a base in the parallel access volume (PAV) control unit.
2B	INVALID CDR DATA FOR A PAV-ALIAS	Device number is defined as an alias in the IODF but the corresponding unit address is not defined as an alias in the PAV control unit.
2C	A SOFTWARE PROBLEM HAS OCCURRED	A software failure has occurred during self-description processing.
2D	S/W OUT OF SYNC WITH H/W - PAV-ALIAS NOT BOUND CORRECTLY	Device number is defined as an alias in the IODF but the corresponding unit address is defined as an alias of a different base in the PAV control unit.
2E	GENERAL NEQ NOT FOUND IN CDR DATA	The configuration data record does not end with a general node element qualifier (GNEQ).
2F	PAV-ALIAS CANNOT BE ADDED BECAUSE ITS PAV-BASE WAS NOT FOUND	The system could not find a CDR for the base device number associated with this alias device number.

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RC	Textline1	Explanation
30	I/O ERROR OCCURRED	An I/O error has occurred during self-description processing.
	-or-	
	I/O ERROR: CCW= <i>cc</i> IOSTATUS= <i>ddss</i> IOSCOD= <i>xx[-yy]</i>	An I/O error has occurred during self-description processing, where:
		<i>cc</i> is the OP code of the first CCW in the failing channel program.
		<i>ddss</i> is the device and subchannel status from the IRB
		<i>xx</i> is the IOSCOD field from the IOSB. Note: "- <i>yy</i> " is displayed when there is an associated IOSCOD reason code.
		Note: If the device status indicates a unit check occurred, then textline2 will contain sense data in the form <i>ssss ssss</i>
31	DEVICE SUPPORT CODE RETURNED A RETURN CODE THAT WAS NOT VALID	The system has detected a software error in device support code processing.
32	DEVICE SUPPORT CODE DETECTED INCORRECT CDR DATA	Device support code has detected an illegal change to the device dependent section of the CDR.
	<i>or</i>	
	AUTHENTICATION FAILURE	Device support code has detected a control unit that has not authenticated itself for the use of parallel access volumes.
33	DEVICE SUPPORT CODE DETECTED A PHYSICAL VS. LOGICAL MISMATCH	The device support code has detected that the physical and logical device characteristics do not match.
34	INCORRECT PATH ATTRIBUTE RETURNED IN THE CDR DATA	The path attribute in the CDR is not valid or is not consistent with respect to the other online paths to the device.
35	REQUESTED PATH IS QUIESCED BY C.U.I.R.	Requested path is quiesced by C.U.I.R. processing.
40	A PROGRAM CHECK HAS OCCURRED	A program check occurred.

System action: IOS takes the path offline. If all the paths to a device are taken offline, because the configuration data cannot be read on all the paths, the device is taken offline.

Operator response: If the reason code associated with the message is 21, 27, or 29, then the probable cause is a cabling error. Verify that all channel paths are properly connected to match the configuration defined in the IOCDS/IODF. Refer to the SYMREC in SYS1.LOGREC; the SYMREC contains RIDS/IOSCACDR and refers to the configuration error detected.

For hexadecimal reason code:

Reason Code

Response

- 21 The reason code for the SYMREC is X'8101'. The device token NED and the token NED expected are supplied.
- 27 The reason code for the SYMREC is X'8107'. The device I/O NED and the I/O NED expected are supplied.
- 29 The reason code for the SYMREC is X'8108'. The device token NED and the device UCB that already has the I/O device NED are supplied.

2A, 2B, 2D

Ensure that the definition of the parallel access volume device in the IODF matches the definition of the corresponding unit address in the parallel access volume control unit.

- 2E Probable cause is an error in the vital product data for the device. Verify that a valid general node-element qualifier (GNEQ) occupies the last 32-byte field of the configuration data record. For more information refer to the SYMREC in the logrec recording medium. The SYMREC contains RIDS/IOSCACDR and refers to the configuration error detected. The reason code for the SYMREC is X'810E'. The last 32-byte field of the configuration data record is supplied.

32

For CDR data problems, ensure that the device is offline before making any configuration changes to the device.

For authentication failure, check with the IBM Hardware Support Center or the OEM vendor Hardware Support Center to determine if the correct licensed internal code (LIC) supports parallel access volumes. If the LIC supports PAV, then contact the IBM Software Support Center.

See *Common I/O-Device Commands* for the format of the data being returned.

For other reason codes, contact the IBM Support Center. Provide the reason code.

Source: Input/output supervisor (IOS)

Module: IOSVSLFD

Routing code: 1

Descriptor code: 4

IOS292I **NUMBER OF IOS291I MESSAGES EXCEEDED NIP MAXIMUM - FURTHER IOS291I MESSAGES ARE SUPPRESSED DURING NIP**

Explanation: During nucleus initialization program (NIP), the limit of IOS291I messages was reached. The IOS291I messages are limited during NIP to avoid exhausting initial ESQA.

System action: The system continues with normal device validation. However, no further IOS291I messages are issued until NIP completes.

Operator response: Refer to the description of message IOS291I for those IOS291I messages that were issued. Notify the system programmer that the limit of IOS291I messages during NIP was reached.

System programmer response: Refer to the description of message IOS291I for those IOS291I messages that were issued. The same error might have occurred for all of the affected devices. After IPL, use the D M=CONFIG(xx) and D M=DEV(dddd) commands to determine the full set of devices and paths for which configuration data could not be read during NIP. Check the EREP report for any symptom records for configuration errors that are detected by IOSCACDR during NIP.

Source: Input/output supervisor (IOS)

Module: IOSVSLFD

Routing code: 2

Descriptor code: 4

IOS300I **THE *facility* FACILITY IS {NOW | NO LONGER} SUPPORTED BY THE PROCESSOR**

Explanation: The specified facility is now supported or no longer supported by the processor.

In the message text:

facility The name of the facility. For example, ZHPF for High Performance FICON for System z[®].

System action: The system continues processing.

Operator response: If the facility can be disabled in z/OS via a SYS1.PARMLIB member or an operator command, display the status of the facility to see whether it is disabled. If the facility is disabled and you want to enable it in z/OS, issue the appropriate command to enable the facility. For example, if the facility is ZHPF, you can do the following:

- D IOS,ZHPF -- display the status of zHPF
- SETIOS ZHPF=YES -- enable zHPF if it is disabled

...or...

- Add a ZHPF=YES line to the IECIOSxx member of parmlib
- SET IOS=xx -- cause the system to use the IECIOSxx member and enable zHPF

System programmer response: None.

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Source: Input/output supervisor (IOS)

Module: IOSVCSCN

Routing code: 2

Descriptor code: 4

IOS301I THE *facility* **FACILITY IS {NOW | NO LONGER} SUPPORTED FOR CHPIDS: *xx,yy-zz*,...**

Explanation: The specified facility is now supported or no longer supported for the specified channel path ids (CHPIDs).

In the message text:

facility The name of the facility. For example, ZHPF for High Performance FICON for z Systems.

xx,yy-zz

The list of CHPIDs that are affected.

System action: The system continues processing.

Operator response: If the facility can be disabled in z/OS via a SYS1.PARMLIB member or an operator command, display the status of the facility to see whether it is disabled. If the facility is disabled and you want to enable it in z/OS, issue the appropriate command to enable the facility. For example, if the facility is ZHPF, you can do the following:

- D IOS,ZHPF -- display the status of zHPF
- SETIOS ZHPF=YES -- enable zHPF if it is disabled

...or...

- Add a ZHPF=YES line to the IECIOSxx member of parmlib
- SET IOS=xx -- cause the system to use the IECIOSxx member and enable zHPF

System programmer response: None.

Source: Input/output supervisor (IOS)

Module: IOSVCSCN

Routing code: 2

Descriptor code: 4

IOS306I *dev,I/O ERROR,cmd,chp,stat,ser,text.* [ssssssssssssss...sssss]

Explanation: During system initialization, the system issued an I/O request to a device. The I/O request included a command that resulted in an unsuccessful I/O completion.

In the message text:

dev The device number.

cmd The I/O command that caused the error. (For an INTERCEPT condition, the *cmd* field will contain asterisks.)

chp The channel path identifier (CHPID). (If the Channel path is unknown, the *chp* field will contain asterisks.)

stat The subchannel status word (SCSW) status bytes.

ser The volume label. If the volume label is not available, this field is blank.

text A variable length text string that is one of the following:

SENSE FOLLOWS

This text appears for unit check errors in which the resulting sense data could be successfully read.

ssssssssssssss...sssss

Up to 32 bytes of the resulting sense data.

INVALID SENSE DATA

This text appears for unit check errors in which an I/O error also occurred while trying to read the resulting sense data.

Note: If this situation occurs, no second line of message IOS306I is displayed.

NO SENSE DATA

This text appears for non-unit check errors. Because the error was not a unit check, then no sense data exists.

Note: If this situation occurs, no second line of message IOS306I is displayed.

System action: If the I/O request is critical to the system initialization process, the system issues message IEA304W and enters a disabled wait state. Otherwise, the system continues processing.

Operator response: Notify the system programmer of the I/O error that occurred while the system was reading the volume label for the specified device.

System programmer response: Contact hardware support.

Source: Input/output supervisor (IOS)

Module: IOSVNPTH

Routing code: 2

Descriptor code: 12

IOS307I **TIMED OUT FOR DEVICE *dddd*. THE DEVICE IS OFFLINE.**

Explanation: I/O to a device has timed out and been purged preventing device initialization from completing.

In the message text:

dddd

The device number.

System action: The device is left offline.

Operator response: Resolve the problem causing the I/O timeout and issue the VARY *dddd*,ONLINE command.

Source: Input/output supervisor (IOS)

Module: IOSVNPTH

Routing code: 2

Descriptor code: 12

IOS310A **INCORRECT REPLY**

Explanation: During nucleus initialization, the last reply to message IOS120D did not contain the information that the system requested.

System action: The system ignores the reply. The system issues message IOS120D again.

Operator response: Reply to message IOS120D correctly.

Source: Input/output supervisor (IOS)

Module: IOSVNPTH

Routing code: 1

Descriptor code: 2

| **IOS320I** **SWITCH PORT DECOMMISSION REQUEST FOR CHPID *chp* WWPN *wwwwwwwwwwwwwwwwww***

| **Explanation:** A DECOMMISSION request, specifying the Worldwide Port Name (WWPN), was made for the switch port attached to the channel.

| In the message text:

| *chp* The channel path identifier (CHPID).

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| *wwwwwwwwwwwwwwwwww*
| The WWPN, shown as 16 hexadecimal digits.

| **Source:** Input/output supervisor (IOS)

| **Routing code:** None.

| **Descriptor code:** 4

| **IOS321I** **SWITCH PORT RECOMMISSION REQUEST FOR CHPID** *chp* **WWPN** *wwwwwwwwwwwwwwwwww*

| **Explanation:** A RECOMMISSION request, specifying the Worldwide Port Name (WWPN), was made for the switch port attached to the channel.

| In the message text:

| *chp* The channel path identifier (CHPID).

| *wwwwwwwwwwwwwwwwww*
| The WWPN, shown as 16 hexadecimal digits.

| **Source:** Input/output supervisor (IOS)

| **Routing code:** None.

| **Descriptor code:** 4

| **IOS322I** **SWITCH PORT DECOMMISSION REQUEST FOR WWPN** *wwwwwwwwwwwwwwwwww* **FOR THE**
| **FOLLOWING PATHS: CHPID** *chp* **TO DEVICE(S)** *xxx,yyy-zzz,...,xxx,yyy-*
| *zzz***CHPID** *chp* **TO DEVICE(S)** *xxx,yyy-zzz,...,xxx,yyy-zzz*

| **Explanation:** A DECOMMISSION request, specifying the Worldwide Port Name (WWPN), was made for the switch port attached to the devices.

| In the message text:

| *chp* The channel path identifier (CHPID).

| *wwwwwwwwwwwwwwwwww*
| The WWPN, shown as 16 hexadecimal digits.

| *xxx,yyy-zzz*
| The device number.

| **Source:** Input/output supervisor (IOS)

| **Routing code:** None.

| **Descriptor code:** 4

| **IOS323I** **SWITCH PORT RECOMMISSION REQUEST FOR WWPN** *wwwwwwwwwwwwwwwwww* **FOR THE**
| **FOLLOWING PATHS: CHPID** *chp* **TO DEVICE(S)** *xxx,yyy-zzz,...,xxx,yyy-*
| *zzz***CHPID** *chp* **TO DEVICE(S)** *xxx,yyy-zzz,...,xxx,yyy-zzz*

| **Explanation:** A RECOMMISSION request, specifying the Worldwide Port Name (WWPN), was made for the switch port attached to the devices.

| In the message text:

| *chp* The channel path identifier (CHPID).

| *wwwwwwwwwwwwwwwwww*
| The WWPN, shown as 16 hexadecimal digits.

| *xxx,yyy-zzz*
| The device number.

| **Source:** Input/output supervisor (IOS)

| **Routing code:** None.

| **Descriptor code:** 4

| **IOS324I SWITCH PORT *request_type* REQUEST SUCCESSFUL FOR WWPN *wwwwwwwwwwwwwwww***

| **Explanation:** The DECOMMISSION or RECOMMISSION request for the specified Worldwide Port Name (WWPN) was successful.

| In the message text:

| *request_type*

| The type of request, either DECOMMISSION or RECOMMISSION.

| *wwwwwwwwwwwwwwww*

| The WWPN, shown as 16 hexadecimal digits.

| **Source:** Input/output supervisor (IOS)

| **Routing code:** None.

| **Descriptor code:** 4

| **IOS325I SWITCH PORT *request_type* REQUEST UNSUCCESSFUL FOR WWPN *wwwwwwwwwwwwwwww***

| **Explanation:** The DECOMMISSION or RECOMMISSION request for the specified Worldwide Port Name (WWPN) was unsuccessful.

| In the message text:

| *request_type*

| The type of request, either DECOMMISSION or RECOMMISSION.

| *wwwwwwwwwwwwwwww*

| The WWPN, shown as 16 hexadecimal digits.

| **Source:** Input/output supervisor (IOS)

| **Routing code:** None.

| **Descriptor code:** 4

| **IOS326I SWITCH PORT VARY PATH(S) REJECTED, LAST PATH TO
DEVICECHPID *chp* TO DEVICE(S) *xxx,yyy-zzz,...,xxx,yyy-zzz*CHPID *chp* TO DEVICE(S) *xxx,yyy-
zzz,...,xxx,yyy-zzz***

| **Explanation:** The DECOMMISSION service was unable to vary the specified channel path(s) offline because they are the last path(s) to the device.

| In the message text:

| *chp* The channel path identifier (CHPID).

| *xxx,yyy-zzz*

| The device number.

| **Source:** Input/output supervisor (IOS)

| **Routing code:** None.

| **Descriptor code:** 4

| **IOS327I SWITCH PORT VARY PATH(S) REJECTED, PATH DOES NOT
EXISTCHPID *chp* TO DEVICE(S) *xxx,yyy-zzz,...,xxx,yyy-zzz*CHPID *chp* TO DEVICE(S) *xxx,yyy-
zzz,...,xxx,yyy-zzz***

| **Explanation:** The DECOMMISSION or the RECOMMISSION service was unable to vary the specified channel path(s) offline or online because the path(s) do not exist.

| In the message text:

| *chp* The channel path identifier (CHPID).

IOS328I • IOS330I

| *xxx,yyy-zzz*
| The device number.
| **Source:** Input/output supervisor (IOS)
| **Routing code:** None.
| **Descriptor code:** 4

| **IOS328I** **SWITCH PORT VARY PATH(S) REJECTED, PATH RESERVED**CHPID *chp* **TO DEVICE(S)** *xxx,yyy-*
| *zzz,...,xxx,yyy-zzz*CHPID *chp* **TO DEVICE(S)** *xxx,yyy-zzz,...,xxx,yyy-zzz*

| **Explanation:** The DECOMMISSION or the RECOMMISSION service was unable to vary the specified channel path(s) offline or online because the path(s) or the device(s) were reserved.

| In the message text:

| *chp* The channel path identifier (CHPID).

| *xxx,yyy-zzz*
| The device number.

| **Source:** Input/output supervisor (IOS)
| **Routing code:** None.
| **Descriptor code:** 4

| **IOS329I** **SWITCH PORT VARY PATH(S) REJECTED, DEVICE CANNOT BE**
| **ACCESSED**CHPID *chp* **TO DEVICE(S)** *xxx,yyy-zzz,...,xxx,yyy-*
| *zzz*CHPID *chp* **TO DEVICE(S)** *xxx,yyy-zzz,...,xxx,yyy-zzz*

| **Explanation:** The DECOMMISSION or the RECOMMISSION service was unable to vary the specified channel path(s) offline or online because the device(s) are in a permanent error state and cannot be accessed.

| In the message text:

| *chp* The channel path identifier (CHPID).

| *xxx,yyy-zzz*
| The device number.

| **Source:** Input/output supervisor (IOS)
| **Routing code:** None.
| **Descriptor code:** 4

| **IOS330I** **SWITCH PORT VARY PATH(S) REJECTED, DEVICE UCB NOT**
| **CONNECTED**CHPID *chp* **TO DEVICE(S)** *xxx,yyy-zzz,...,xxx,yyy-*
| *zzz*CHPID *chp* **TO DEVICE(S)** *xxx,yyy-zzz,...,xxx,yyy-zzz*

| **Explanation:** The DECOMMISSION or the RECOMMISSION service was unable to vary the specified channel path(s) offline or online because the specified device(s) are not connected to a subchannel.

| In the message text:

| *chp* The channel path identifier (CHPID).

| *xxx,yyy-zzz*
| The device number.

| **Source:** Input/output supervisor (IOS)
| **Routing code:** None.
| **Descriptor code:** 4

IOS331I SWITCH PORT VARY PATH(S) REJECTED, VALIDATE PATH I/O TIMED
 OUTCHPID *chp* TO DEVICE(S) *xxx,yyy-zzz,...,xxx,yyy-zzz*CHPID *chp* TO DEVICE(S) *xxx,yyy-
 zzz,...,xxx,yyy-zzz*

Explanation: The RECOMMISSION service was unable to vary the specified channel path(s) online because the I/O issued to bring the desired path(s) online has timed out. There may be a hardware error on the specified device(s) or on the control unit(s) that the specified device(s) are attached to.

In the message text:

chp The channel path identifier (CHPID).

xxx,yyy-zzz

The device number.

Source: Input/output supervisor (IOS)

Routing code: None.

Descriptor code: 4

IOS332I SWITCH PORT VARY PATH(S) REJECTED, VARY PROCESSOR
 FAILEDCHPID *chp* TO DEVICE(S) *xxx,yyy-zzz,...,xxx,yyy-zzz*CHPID *chp* TO DEVICE(S) *xxx,yyy-
 zzz,...,xxx,yyy-zzz*

Explanation: The DECOMMISSION or the RECOMMISSION service was unable to vary the specified channel path(s) offline or online because the VARY command processor encountered an unrecoverable internal error.

In the message text:

chp The channel path identifier (CHPID).

xxx,yyy-zzz

The device number.

Source: Input/output supervisor (IOS)

Routing code: None.

Descriptor code: 4

IOS333I SWITCH PORT VARY PATH(S) REJECTED, PATH NOT
 OPERATIONALCHPID *chp* TO DEVICE(S) *xxx,yyy-zzz,...,xxx,yyy-
 zzz*CHPID *chp* TO DEVICE(S) *xxx,yyy-zzz,...,xxx,yyy-zzz*

Explanation: The DECOMMISSION or the RECOMMISSION service was unable to vary the specified channel path(s) offline or online because the path(s) are not functioning or the specified device(s) are in a permanent error state.

In the message text:

chp The channel path identifier (CHPID).

xxx,yyy-zzz

The device number.

Source: Input/output supervisor (IOS)

Routing code: None.

Descriptor code: 4

IOS334I UNABLE TO CONFIGURE CHPID *chp* ONLINE|OFFLINE

Explanation: For a DECOMMISSION request, configuration of the specified CHPID OFFLINE failed. For a RECOMMISSION request, configuration of the specified CHPID ONLINE failed.

In the message text:

chp The channel path identifier (CHPID).

IOS350I • IOS352I

- | **Source:** Input/output supervisor (IOS)
- | **Routing code:** None.
- | **Descriptor code:** 4

IOS350I DEVICE *dev* REQUESTED *yy:yy* for MIH *xx:xx* WILL BE USED.

Explanation: The system's attempt to set the MIH time interval for device *dev* to *yy:yy* was unsuccessful. The system attempted to set the device's MIH timer interval when the device was varied online. The maximum allowable user MIH time interval settings are in use and the MIH time interval requested by the device does not match either the default class MIH time that the device belongs to or any of the user MIH times.

In the message text:

dev The device number of the requested device.

yy:yy The requested MIH time.

xx:xx The MIH time set for the device.

System action: The system sets the MIH time interval for device *dev* to *xx:xx*. *xx:xx* is the closest default class MIH time or user MIH time that is higher than the device requested time. If no time higher than the device requested time exists, the closest time less than the device requested time is used.

Operator response: Determine if the time used is acceptable for the device. If the time is not acceptable, do one of the following:

- Free up a user time.
 1. Issue a D IOS,MIH command to find a user time that can be combined with another user time or moved to the default class.
 2. Issue a SETIOS command to free up the user time identified in step 1.
 3. Vary device *dev* offline and then online. If the device cannot be varied offline, issue a SETIOS MIH,DEV=*dev*,TIME=*yy:yy* command to set the MIH time for the device to what the device requested.
- Use a different user time than *xx:xx*
 1. Issue a D IOS,MIH command to find the existing user time *zz:zz*
 2. Issue a SETIOS MIH,DEV=*dev*,TIME=*zz:zz* command to set the MIH time for the device.

Programmer response: None.

IOS351I DYNAMIC CHANNEL PATH MANAGEMENT {ACTIVE/NOT ACTIVE}

Explanation: Initialization of DYNAMIC CHANNEL PATH management completed either successfully or not successfully.

System action: None.

Operator response: If NOT ACTIVE, issue the DISPLAY IOS,DCM command to determine why dynamic channel path management is not active. See message IOS353I for the response from that command.

Source: Input/output supervisor (IOS)

Module: IOSVROUT, IOSCCDCM, IOSCACDR IOSCDCDR, IOSVXBEG, IOSVCHPT, IOSVCUMP

IOS352I *hh.mm.ss* IOS GROUP DATA*text*

Explanation: Where *text* is:

GROUP	NODE	DESCRIPTOR	SYSTEM NAMES
SYSIOS <i>xx</i>	<i>xxxxxx</i>	<i>.xxx.xx.xxxxx</i>	<i>xxxxxxxx xxxxxxxx xxxxxxxx</i> <i>xxxxxxxx xxxxxxxx xxxxxxxx</i>

This multi-line message appears on the console from which the operator issued a DISPLAY IOS,GROUP command. In addition to the two header lines, which contain a timestamp, up to 253 data lines are displayed. The first data line contains an IOS group name, the node descriptor of the group, and up to three system names of members of the IOS group. Each additional data line contains up to three more system names.

System action: Processing continues.

Operator response: None.

Source: Input/output supervisor (IOS)

Module: IOSCDGRP

IOS353I *hh.mm.ss* **DCM STATUS***text*

Explanation: The D IOS,DCM command displays the status of dynamic channel-path management (DCM). The following status information is displayed:

- Whether DCM is active in the LPAR cluster. If not, the reasons are listed.
- Whether DCM is capable of managing within the current partition. If not, the reasons are listed.
- Whether DCM is active for managed FICON control units. If not, the reasons are listed.
- Whether one or more devices are not collecting measurement data.

If DCM is active, the following line is displayed:

DYNAMIC CHANNEL PATH MANAGEMENT IS[ACTIVE | ACTIVE IN BALANCE MODE| ACTIVE IN GOAL MODE]

If DCM is inactive, the following line is displayed:

DYNAMIC CHANNEL PATH MANAGEMENT IS INACTIVE

If DCM is not capable of managing within a specific partition, the following line is displayed following the DCM active or inactive line:

DYNAMIC CHANNEL PATH MANAGEMENT DECISIONS CAN NOT BE MADE ON SYSTEM = sys_name

If DCM is not active or not capable of managing within a partition, one or more of the following reason text lines are displayed:

FACILITY IS NOT SUPPORTED

Dynamic channel path management facility is not supported.

NO MANAGED CHANNEL PATHS DEFINED

No managed channel paths are defined.

NO CONFIGURATION TOKEN OR AN INCOMPATIBLE TOKEN IN HSA

Configuration token is not defined or there is an incompatible token in hardware system area.

TURNED OFF BY A COMMAND

Dynamic channel path management was turned off by a command.

CHANNEL TABLE COULD NOT BE BUILT

There was an error building the channel table on the system on which the command was issued.

SWITCH TABLE COULD NOT BE BUILT

There was an error building the switch table on the system on which the command was issued.

NO MANAGED SUBSYSTEMS ARE DEFINED OR ACCESSIBLE

There are no managed subsystems defined or managed subsystems are not accessible.

NO MANAGED SUBSYSTEMS ARE DEFINED OR ACCESSIBLE IN THIS LOGICAL PARTITION

There are no managed subsystems defined or managed subsystems are not accessible in this logical partition of the LPAR cluster.

FUNCTION IS NOT AUTHORIZED

Dynamic channel path management function is not authorized on this logical partition of the LPAR cluster.

FUNCTION IS NOT AUTHORIZED IN THIS LOGICAL PARTITION

Dynamic channel path management function is not authorized in this logical partition of the system.

CF CONNECTIVITY ERROR IN MULTISYSTEM CONFIGURATION

CF connectivity error exists in the configuration of the multisystem LPAR cluster. At least one system does not have connectivity to the SYSZWLM_xxxxxxxx structure.

IOS354I

DYNAMIC CHANGES TO THE CHANNEL SUBSYSTEM NOT ALLOWED

Allow dynamic changes to the channel subsystem has not been enabled in the Support Element (SE) activation profile.

DYNAMIC CHANGES TO THE CHANNEL SUBSYSTEM NOT ALLOWED IN THIS LOGICAL PARTITION

Allow dynamic changes to the channel subsystem has not been enabled in the Support Element (SE) activation profile in this logical partition of the system.

SYSTEM IS NOT A MEMBER OF A DYNAMIC CHANNEL PATH MANAGEMENT GROUP

The Dynamic Channel Path Management group has not been joined by this system.

NEIGHBOR NODE TOPOLOGY COULD NOT BE BUILT

There was an error building the neighbor node descriptor topology on the system on which the command was issued.

SWITCH TABLES ARE NOT SYNCHRONIZED

The switch table status has not been synchronized with the other members of the LPAR cluster.

If DCM is active but is disabled for FICON managed control units in this logical channel subsystem (LCSS), the following lines are displayed:

DYNAMIC CHANNEL PATH MANAGEMENT IS NOT ACTIVE FOR FICON rsntextwhere rsntext is:

ONE OR MORE SYSTEMS ARE DOWNLEVEL

There is at least one system in the current LPAR cluster and logical channel subsystem that does not support DCM for FICON control units.

If there are one or more devices that are not collecting measurement data, then the following is displayed:

THE FOLLOWING DEVICE(S) DO NOT HAVE MEASUREMENT DATA:dddd {, dddd-dddd}where dddd is a single device number and dddd-dddd is a range of device numbers.

If an error occurred while displaying the multiline message, the following is displayed:

WARNING: DISPLAY IS INCOMPLETE DUE TO SYSTEM ERROR.

System action: Processing continues.

Operator response: Notify the system programmer.

Source: Input/output supervisor (IOS)

Module: IOSCCDCM

IOS354I SWITCH DEVICE *dddd* TAKEN OFFLINE TO DCM DUE TO *reason*

Explanation: A port of a switch device has had its participation in Dynamic Channel Path Management affected.

Note: This message may appear for FICON attached devices even though they do not support DCM. In the message text:

dddd The switch device number.

reason Can be one of the following:

SWITCH TABLE BUILD ATTACH FAILURE

A software error has occurred. An attach of a task by the software failed.

IOSVSWRB ESTAE FAILURE

A software error has occurred. An ESTAE recovery routine was not able to be established. Contact system programmer.

IOSVSWRB ABNORMAL TERMINATION

A software error has occurred. The software abnormally terminated.

SWITCH NODE DESCRIPTOR NOT VALID

A hardware error has occurred. A valid node descriptor was not able to be obtained from the switch device.

MISSING CONFIGURATION DATA RECORD

A hardware or software error has occurred. The configuration data record was not able to be obtained for the switch device.

TOKEN NED MISSING FROM CDR

A probable software error has occurred. The token NED was not able to be obtained from the switch device's configuration data record.

GENERAL NEQ MISSING FROM CDR

A probable software error has occurred. The general NEQ was not able to be obtained from the switch device's configuration data record.

I/O COMMAND CODES NOT OBTAINED

A hardware error has occurred. The I/O command codes were not able to be obtained from the switch device.

I/O ERROR

A hardware error has occurred. An I/O error has occurred while trying to obtain self description data from the switch device.

System action: Processing continues.

Operator response: None. When the problem with the switch has been corrected, the switch will automatically become available to dynamic channel path management.

Source: Input/output supervisor (IOS)

Module: IOSVSWTB, IOSVSWRB

IOS355I PORT ADDRESS *pp* OF SWITCH DEVICE *dddd text*

Explanation: A port of a switch device has had its participation in dynamic channel path management affected.

Note: This message may appear for FICON attached devices even though they do not support DCM. In the message text:

pp The port address of the switch device.

dddd The switch device number.

text Can be one of the following:

TAKEN OFFLINE TO DCM - NODE DESCRIPTOR NOT CURRENT

The port of the switch device has been taken offline from participating in dynamic channel path management because the node descriptor of the channel or subsystem attached to the port is not current.

BROUGHT ONLINE TO DCM - NODE DESCRIPTOR NOW CURRENT

The port of the switch device has been brought online to participate in dynamic channel path management because the node descriptor of the channel or subsystem attached to the port is now current.

System action: Processing continues.

Operator response: None.

Source: Input/output supervisor (IOS)

Module: IOSVSWRB

IOS356I DYNAMIC CHANNEL PATH MANAGEMENT {NOT MANAGING/MANAGING} ON SYSTEM = *yyyyyyyy*

Explanation: Message will be issued only when the system is in LPAR multi-system mode.

In the message text:

yyyyyyyy is the name of the system image in the LPAR.

System action: Processing continues.

Operator response: If "NOT MANAGING" is issued, then enter the DISPLAY IOS,DCM command and determine the reason. Take the appropriate action as described under the DISPLAY IOS,DCM command.

IOS357I • IOS361I

Source: Input/output supervisor (IOS)

Module: IOSVROUT, IOSCCDCM, IOSVCHPT, IOSACADR, IOSCDCDR

IOS357I MANUFACTURER *mmm* LOAD MODULE IOST mmm NOT FOUND IN THE LNKLST

Explanation: A Configuration Data Record (CDR) provided a manufacturer *mmm* device but no corresponding load module IOST mmm was found in the LNKLST concatenation. This is an informational message and if Dynamic Channel Path Management (DCM) is not being used it may be ignored. If DCM is being used, the manufacturer provided load module needs to be linked into the LNKLST concatenation and the operator needs to issue the SETIOS DCM=REFRESH MVS operator command to refresh the Control Unit Model Table (CUMT).

System action: Processing continues.

Operator response: If DCM is active, load the manufacturer's IOST mmm module into SYS1.LINKLIB and issue the SETIOS DCM=REFRESH command to rebuild/refresh the Control Unit Model Table (CUMT). If DCM is not active, no immediate action is required, however, it is recommended to obtain this module as the system may utilize the CUMT to support future functions. Note the SETIOS DCM=REFRESH command is independent of the use of DCM.

Source: Input/output supervisor (IOS)

Module: IOSVCUMT

IOS358I DYNAMIC CHANNEL PATH MANAGEMENT HAS BEEN TURNED OFF

Explanation: Dynamic Channel Path Management has been turned off in response to a command request.

System action: Processing continues.

Operator response: None.

Source: Input/output supervisor (IOS)

Module: IOSCCDCM

IOS359I SETIOS DCM COMMAND WAS NOT PROCESSED. DCM STATUS WAS NOT CHANGED.

Explanation: The SETIOS DCM command request to turn DCM ON or OFF was not processed, so DCM status has not changed.

System action: Processing continues.

Operator response: None.

Source: Input/output supervisor (IOS)

Module: IOSCCDCM

IOS360I SETIOS DCM COMMAND MAY HAVE NOT BEEN PROCESSED ON ALL SYSTEMS. DCM STATUS MAY NOT BE CONSISTENT ON ALL SYSTEMS.

Explanation: Dynamic channel path management status may not be consistent on all systems in a multisystem environment, as the SETIOS DCM command request may not have been processed on all systems.

System action: Processing continues.

Operator response: None.

Source: Input/output supervisor (IOS)

Module: IOSCCDCM

IOS361I CONTROL UNIT MODEL TABLE REFRESH COMPLETE

Explanation: This message is in response to the operator SETIOS DCM=REFRESH command.

System action: Processing continues.

Operator response: None.

Source: Input/output supervisor (IOS)

Module: IOSVCUMT

IOS363I SWITCH DEVICE *dddd* NOW AVAILABLE TO DCM

Explanation: A switch device has become available to participate in dynamic channel path management.

Note: This message may appear for FICON attached devices even though they do not support DCM. In the message text:

dddd is the switch device number.

System action: Processing continues.

Operator response: None.

Source: Input/output supervisor (IOS)

Module: IOSVSWRB

IOS426I IOS1426I *devn, chp* RESET ALLEGIANCE FAILURE

Explanation: The system found a hardware error on the specified device

In the message text:

devn The device number.

chp The channel path identifier (CHPID) through which the system was accessing the device. If the system could not determine the channel path, asterisks appear in this field.

System action: The system retries the original I/O request. If the failure occurs again, the system issues IOS426I again.

Operator response: If the error persists, vary the path or device offline. Contact hardware support.

Source: Input/output supervisor (IOS)

Routing code: 1,4,10

Descriptor code: 2

IOS427A *dev, chp, xxxxxx* FAILURE, REPLY: WITH UR BOX OR NOOP.

Explanation: During I/O processing, a device failed.

In the message text:

dev The device number.

chp The identifier (CHPID) of the channel path through which the system was accessing the device. If the system could not determine the channel path, asterisks appear in this field.

xxxxxx One of the following:

CHANNEL PATH

The failure occurred in the channel path.

CONTROL UNIT

This value appears for any failure other than a failing channel path. An inoperative control unit, a missing interrupt, or no operational paths are possible failures.

System action: The system holds all requests to the device until the operator responds to this message.

If **CONTROL UNIT** is in the message text, the system does not proceed with unconditional reserve processing because ownership of the device is unknown. Depending on the operator reply, the system does the following:

Operator Reply

System Action

UR The system does the following:

IOS428I

- For dynamic pathing devices, if the device is reserved to another stopped system, the system issues message IOS430I. The system that is holding the reserve detects any remaining hardware problem and performs recovery.
- If the UR command is successful, the system issues message IOS428I
- If the UR command is unsuccessful, the system issues messages IOS429I and IOS104I.
- The system allows any previously held requests to start.

BOX The system does the following:

- Concludes any previously held I/O requests in permanent error
- Concludes any new I/O requests in permanent error
- Prevents any new allocations to the device
- Marks the device pending offline, if the device is online
- Issues messages IOS429I and IOS105I
- Takes the device offline if the device is no longer allocated to a job

NOOP If the failure recurs, the system issues message IOS427A again.

Operator response: Do one of the following:

- Verify that the device is not reserved to another system
- Stop all affected systems or vary the device offline on all sharing systems.
- Reply NOOP to allow previously held requests to start.
- Reply UR to recover access to device *dev*. But first, to prevent the loss of data set integrity, prevent normal activity to the device with one of the following methods:
 - Enter the IOACTION STOP command for the device on each system that shares device *dev*. Wait for a successful response from the command before proceeding.
 - Cancel all jobs allocated to the device on each of the sharing systems and vary device *dev* offline on all sharing systems.
 - If the device is a dynamic pathing device, then stop the sharing system to stop I/O activity to the device.

Note: Stopping sharing processors to ensure data integrity during recovery of non-dynamic pathing devices will not work.

Then enter UR to recover access to device *dev* through an alternate channel path. If no alternate path exists or the UR command fails on all alternate paths, the command is entered on the failing channel path.

- Reply BOX to box device *dev*.
- If the error persists, take the path or the device offline. Contact hardware support.

When this message is issued before the MVS Console becomes active, IT IS EXTREMELY IMPORTANT to respond promptly. This message is issued as a synchronous WTOR during early IPL processing, which will prevent the system from updating its status on the sysplex couple data set. This, in turn, could lead to Sysplex Failure Management (SFM) deciding that the system is not responding normally, and removing it from the sysplex.

Note: If you do not respond within the maximum response time of two minutes, the master console might not accept the reply. Go to the system or service console and respond from there.

Source: Input/output supervisor (IOS)

Module: IOSVURDT

Routing code: 1,4,10

Descriptor code: 2

IOS428I IOS1428I *dev,chn1*, HAS BEEN RECOVERED THROUGH CHANNEL PATH *chn2*

Explanation: The unconditional reserve processing procedure successfully recovered the device through a specified channel path after a failure on another channel path.

One of the following initiated unconditional reserve processing:

- The operator replied UR to message IOS427A.
- The system detected a malfunction on device *dev*, and the device was reserved for this system.
- For devices that support the reset allegiance CCW, the system issues this message when another system causes contention for the specified device.

In the message text:

dev The device number.

chp1 The failing channel path identifier (CHPID). If the system could not determine which channel path failed, asterisks appear in this field.

chp2 The channel path that the system used for recovery.

System action: The system allows all previously held requests to start.

Operator response: Do the following:

1. Isolate the failing channel path for repair.
2. If there is only one remaining channel path, transfer critical applications to backup.
3. Contact hardware support.
4. Enter the IOACTION RESUME command for the device on all other sharing systems if the device was stopped, or restart any stopped systems, or vary the device back online.

Source: Input/output supervisor (IOS)

Module: IOSVURDT

Routing code: 2,4,10

Descriptor code: 4

IOS429I IOS1429I *dev,chp*, **COULD NOT BE RECOVERED THROUGH AN ALTERNATE CHANNEL PATH**

Explanation: After a failure on a channel path, the unconditional reserve processing procedure could not recover the specified device through an alternate channel path.

The system could not recover the device for one of the following reasons:

- No alternate channel paths were available for the device.
- All alternate channel paths were unsuccessful in recovery.
- The direct access storage device (DASD) hardware associated with *dev* does not support the unconditional reserve command.
- The operator entered a reply of BOX to message IOS427A.

In the message text:

dev The device number.

chp The failing channel path identifier (CHPID). If the system could not determine which channel path failed, asterisks appear in this field.

System action: The system allows all requests that were previously held to start. If the device was boxed, the system ends all previously held requests in error.

Operator response: Do the following:

1. Isolate the failing channel path for repair.
2. If there is only one remaining channel path, transfer critical applications to backup.
3. Contact hardware support.
4. Enter the IOACTION RESUME command for the device on all other sharing systems if the device was stopped, or restart any stopped systems, or vary the device back online.

Source: Input/output supervisor (IOS)

Module: IOSVURDT

Routing code: 2,4,10

IOS430I • IOS431I

Descriptor code: 4

IOS430I *dev*, RESERVED TO ANOTHER SYSTEM, UNCONDITIONAL RESERVE RECOVERY NOT INVOKED.

Explanation: The system found an error on a channel path associated with the specified device. The device was reserved to another system.

In the message text:

dev The device number.

System action: The system continues to process requests for the device. The system does not invoke unconditional reserve recovery. The system that is holding the reserve detects any remaining hardware problems and performs the necessary recovery.

Operator response: Do one of the following:

- Enter the IOACTION RESUME command for the device on all other sharing systems if the device was stopped.
- Restart any stopped systems or vary the device back online. Contact hardware support if any of the following occurs:
 - The failure occurs again.
 - The system holding the reserve cannot recover the device.
 - The system is holding a long-time reserve.

Source: Input/output supervisor (IOS)

Module: IOSVURDT

Routing code: 2,4,10

Descriptor code: 4

IOS431I DEVICE *dev* RESERVED TO CPU={*serialmodn* | UNKNOWN}, LPAR ID={*lparid* | NONE | UNKNOWN} SYSTEM=*sysname*[*sysname1*,*sysname2*, *sysname3*,... *sysname6*] | UNKNOWN

Explanation: A start pending missing interrupt handler (MIH) condition was detected for device *dev* and the system issued message IOS071I. Device *dev* was found to be reserved by the system with central processor serial and model number *serialmodn*.

Note: The central processor serial number in conjunction with the central processor model number provides a unique central processor identification that can be used in identifying an individual machine. Both sides of a machine running physically partitioned will have the same central processor serial number and model number.

In the message text:

dev
The device number.

CPU
One of the following:

serialmodn

serial refers to the central processor serial number of the system that holds the reserve. *modn* refers to the central processor model number of the system that holds the reserve.

The *serialmodn* field has the following hexadecimal format:

- In basic mode, *Annnnncccc*
- In logical partitioned (LPAR) mode, *LPnnnncccc* or *PPnnnncccc*

Where:

- *A* is the CPU address of the CPU.
- *L* is a logical CPU address.
- *P* or *PP* is a logical-partition identifier (LPAR ID).
- *nnnn* is a digit derived from the serial number of the CPU.

- *cccc* is the CPU model type

UNKNOWN

The *serialmodn* could not be determined. The local system might be an MVS guest running under VM.

LPAR ID=

One of the following:

lparid

The partition identifier of the system that holds the reserve, if the system is a logical partition (LPAR) under PR/SM™. The system may or may not be in the same sysplex as the system where the message appears, depending on whether the system name appears in the message.

- If the system name does appear, the system holding the reserve is in the same sysplex.
- If the system name does not appear, the system holding the reserve is not in the same sysplex.

NONE

The system holding the reserve is in the sysplex and is not an LPAR.

UNKNOWN

One of the following is true:

- The system holding the reserve is not in the sysplex, and the LPAR ID could not be determined.
- A system error occurred.
- The couple data set is formatted for an MVS/ESA 4.3.0 system or earlier.
- There was an I/O error accessing the couple data set.
- The system holding the reserve is running at the level of MVS/ESA 4.3.0 or earlier.
- The system is an MVS guest running under VM. The system might be an LPAR.

sysname

One of the following:

sysname

The MVS system name of the system that holds the reserve, if the system is running at a level later than MVS/ESA 4.3.0.

UNKNOWN

See the reasons given for an unknown *lparid*.

sysname1,sysname2,sysname3,...

The MVS system names of MVS guest systems running under VM. At most, six system names will be listed.

The following message text combinations can be expected:

DEVICE dev RESERVED TO CPU=*serialmodn*, LPAR ID=*lparid*, SYSTEM=*sysname*

The system holding the reserve has been identified.

DEVICE dev RESERVED TO CPU=*serialmodn*, LPAR ID=NONE**, SYSTEM=*sysname***

The system holding the reserve has been identified.

DEVICE dev RESERVED TO CPU=*serialmodn*, LPAR ID=*lparid* SYSTEM=UNKNOWN****

The system holding the reserve is identified by the *serialmodn* and the *lparid*. This system is not part of the sysplex.

DEVICE dev RESERVED TO CPU=*serialmodn*, LPAR ID=UNKNOWN**, SYSTEM=**UNKNOWN****

The system holding the reserve is identified by *serialmodn*. If you know that the system identified is running as an LPAR and that it is not running MVS as a VM guest, the second digit of *serialmodn* identifies the LPAR owning the reserve.

DEVICE dev RESERVED TO CPU=UNKNOWN**, LPAR ID=**UNKNOWN**, SYSTEM=**UNKNOWN****

The system holding the reserve could not be identified. The local MVS system might be running as a VM guest.

DEVICE dev RESERVED TO CPU=*serialmodn*, LPAR ID=UNKNOWN**, SYSTEM=*sysname1, sysname2, sysname3, ... sysname6***

The system holding the reserve is an MVS guest running under VM. The name of the system holding the reserve might not be listed in the message, however, because only a maximum of six system names can be listed. When this is the case, the system holding the reserve is a guest running on the same VM system as those listed. It might not be in the sysplex.

IOS431I

System action: I/O to the device remains queued. The system might issue repeated IOS071I messages. For JES2 systems without JES3 installed, or for JES2 systems with JES3 at a release prior to JES3 5.2.1 installed and JES2 started with the NOJES3 parameter (CON=(xx,NOJES3)), if the system holding the reserve is in the same sysplex, the system attempts to identify the jobs that have the device reserved. For JES2 systems or JES3 systems at JES3 5.2.1 or higher, if the system holding the reserve is in the same sysplex, the system attempts to identify the jobs that have the device reserved.

Operator response: To free the I/O device identified, take one of the following actions:

- **If the system holding the reserve has failed** (for example, if the CPU has entered a CHECK-STOP state), free the reserve by doing one of the following:
 - Perform a system reset on the failed system.
 - Deconfigure the channel paths from the failed system. See *ES/9000: Operating Your System* for information on how to do this.
 - Vary off the affected device paths from all attached systems and reset the interface switches at the control unit. (Note: With EMIF, other systems sharing the interface may need to have their paths varied offline first.)
 - Use System Automation for I/O operations to block ports to the control unit.
 - If all of the above four actions fail to free the reserve, vary off the affected devices from all attached systems and re-IML the control unit.
- **If the system holding the reserve is in the sysplex and has not failed**, take one of the following actions:
 - If the jobs holding the device reserve were identified, cancel the failing job.
 - If the jobs holding the device reserve were not identified, determine whether a job has failed as follows:
 - If you are running at a level later than MVS/ESA SP 4.3.0, issue the D U,VOL=volser command to obtain the device number for the system identified in the message. If you are not running at an MVS/ESA SP 5.2 level, you can use another product, such as System Automation, to obtain the correct device number.
 - Route the D U,VOL=volser command to the system identified in the message with the VOLSER for the device in order to obtain the device number on the system holding the reserve. Then route the D GRS,DEV=dev command to the system identified in the message. If the system responds within 30 seconds, and if no other system is attempting to do this query, the system will issue message ISG020I, which displays local resource information and identifies the jobs that have the device reserved. You can then cancel the failed job.
- **If the system holding the reserve is not in a sysplex, and has not failed, take one of the following actions as appropriate:**
 - Use System Automation for I/O operations to block ports to the control unit.
 - Determine the job holding the reserve by issuing the DISPLAY GRS command on the system identified in message IOS431I. Cancel the job.
 - Cancel the job identified in message IOS071I.

If more than one system name is identified, that is, MVS is a guest running under VM, determine the system holding the reserve by issuing one of the following VM commands (see *VM/ESA CP Command and Utility Reference*).

- If the device is a full-pack mini device, issue the VM operator command Q DASD RESERVE to identify the guest system that holds the reserve.
- If the device is not a full-pack mini device, it is a dedicated device and can be used by only one VM guest at a time. Issue the VM operator command Q *dev* from the operator console to identify the system that holds the reserve.

If the system name is not identified in the message, take one of the following actions as appropriate:

- If a system error occurred, contact the system programmer.
- Ensure that the couple data set is formatted for the level of MVS on which you are running.
- If there was an I/O error on the couple data set, initiate a switch.

If you get frequent occurrences of this message, the system MIH detection timeout value might need to be tuned. Inform the system programmer.

System programmer response: Determine whether the MIH detection timeout value needs to be tuned to resolve contention and workload conditions. Use the SETIOS command or the SET IOS=xx command to specify a different IECIOSxx parmlib member that contains new system MIH values.

If the system holding the reserve has failed, you might need to perform application-dependent recovery once the reserve has been freed to ensure the integrity of data.

Source: Input/output supervisor (IOS)

Module: IOSVURDT

Routing code: 2,4,10

Descriptor code: 4

IOS443I IOS MSI FAILED -- ESTAE RETURN CODE *rc*

Explanation: The input/output supervisor (IOS) master scheduler initialization (MSI) program could not establish a recovery environment during IPL.

In the message text:

rc The hexadecimal return code, which is one of the following:

- 10** The system encountered an unexpected error while attempting to establish the recovery routine.
- 14** The system could not obtain storage for a control block while attempting to establish the recovery routine.

System action: The system cannot establish dynamic pathing for all devices that support dynamic pathing. The system cannot read configuration data from all devices that provide configuration data. IPL continues.

Operator response: Do the following:

1. Notify the system programmer.
2. Vary the devices that support dynamic pathing offline.
3. To establish dynamic pathing, vary the same devices back online.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Input/output supervisor (IOS)

Module: IECVIOI

Routing code: 2

Descriptor code: 4

IOS444I IOS1444I DYNAMIC PATHING NOT {OPERATIONAL ON | REMOVED FROM} {DEVICE *devn* | PATH (*devn,chn*)}

Explanation: When the operator entered a VARY command, or the system invoked channel path recovery processing, dynamic pathing could not establish or remove a path or path group.

In the message text:

devn The device number. The device number is prefixed by the subchannel set identifier when appropriate.

chn The channel path identifier (CHPID).

The following are variations of the message text:

DYNAMIC PATHING NOT OPERATIONAL ON DEVICE *devn*

One of the following occurred:

- The system could not establish dynamic pathing for the specified device.
- The system could not remove a path from a path group.

DYNAMIC PATHING NOT OPERATIONAL ON PATH (*dev,chn*)

The system could not add the specified path to a path group.

DYNAMIC PATHING NOT REMOVED FROM DEVICE *dev*

The system could not remove a path group from the specified device.

IOS445I • IOS446I

DYNAMIC PATHING NOT REMOVED FROM PATH (*dev, chp*)

The system could not remove a path from its path group.

System action: The system continues processing.

Operator response: Do the following:

1. Isolate the failing channel path and control unit for repair.
2. If there is only one remaining channel path, transfer critical applications to backup.
3. Check the status of alternate paths, and vary online any paths that should be online.
4. Defer a CONFIG command, if possible. Otherwise, identify and recover failing tasks.
5. Notify the system programmer.
6. If the system recorded the logrec data set hardware error records for the device, contact hardware support. Otherwise, notify the system programmer.

System programmer response: If the path group identifier information in the logrec data set OBR-DPA record is erroneous, contact software support.

Source: Input/output supervisor (IOS)

Module: IECVDPTH

Routing code: 2,10

Descriptor code: 4

IOS445I PHYSICAL DEVICE IS INCONSISTENT WITH LOGICAL DEFINITION

Explanation: While attempting to bring a device online, the system found that the physical device is not consistent with the logical device definition.

System action: The system varies the device online.

Operator response: If the condition indicates an error, check the cabling and switch connections to the device. If no errors are found, enter an ACTIVATE request or reIPL the system, specifying an I/O configuration definition that has a consistent logical definition to the physical device.

Source: Input/output supervisor (IOS)

Module: IECVIOPM

Routing code: 1

Descriptor code: 4

IOS446I I/O ERROR VALIDATING PHYSICAL DEVICE

Explanation: While attempting to bring a device online during system initialization, the system was unable to verify that the physical device is consistent with the logical device definition.

System action: The system varies the device online.

Operator response: Obtain a generalized trace facility (GTF) trace for the device in question for the I/O issued during the VARY process to determine the cause of the I/O error. Notify the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the GTF trace.

Source: Input/output supervisor (IOS)

Routing code: 1

Descriptor code: 4

IOS450E IOS1450E *devn, chp, text* **PATH TAKEN OFFLINE**

Explanation: *text* is one of the following:

- NOT OPERATIONAL
- PERMANENT I/O,

The system validated a dynamic pathing device because one of the following occurred:

- The system detected a malfunction associated with the device.
- Either the operator or the system changed the state of one or more channel paths to the device.

In the message text:

devn

The device number. The device number is prefixed by the subchannel set identifier when appropriate.

chp

The channel path identifier (CHPID).

NOT OPERATIONAL

Because the channel path is not operational, the system could not obtain data about the state of the channel path.

PERMANENT I/O

Because of a channel path error or a missing interrupt, the system could not obtain data about the state of the channel path.

System action: The system varies the channel path offline and removes it from the dynamic path group.

Operator response: Do the following:

1. Isolate the failing control unit for repair.
2. If there is only one remaining channel path, transfer critical applications to backup.
3. Contact hardware support.
4. After the hardware problem is corrected, vary the channel path online.

Source: Input/output supervisor (IOS)

Module: IOSRSNDV

Routing code: 2,10

Descriptor code: 11

IOS451I IOS1451I *dev, BOXED, text*

Explanation: *text* is one of the following:

- NO ONLINE OPERATIONAL PATHS
- RESERVE LOST
- ASSIGN LOST
- DISBAND AND REGROUP PATH GROUP FAILED

The system validated a dynamic pathing device, because one of the following conditions occurred:

- The system detected a malfunction associated with the device.
- Either the operator or the system changed the state of one or more channel paths to the device.

In the message text:

dev

The device number.

NO ONLINE OPERATIONAL PATHS

Validation found that there are no online channel paths that can be used to access the device. This occurred for one of the following reasons:

- Validation removed the last available online channel path.

IOS451I

- Because of a channel path error, missing interrupt, or non-operational channel path condition, validation could not obtain data about the state of the channel path.

RESERVE LOST

Validation found that the device is not reserved to any channel path from this system.

ASSIGN LOST

Validation found that the device is not assigned to any channel path from this system.

DISBAND AND REGROUP PATH GROUP FAILED

Because of a channel path error, missing interrupt, or non-operational channel path condition, validation could not obtain data about the state of the channel path. The system could not remove the paths by rebuilding the dynamic path group.

System action: The system boxes the device, as follows:

- The system ends I/O on the device.
- New I/O requests result in permanent I/O errors.
- The system performs no new allocations for the device.
- If the device was online, the system marks it pending offline. A pending offline device goes offline when the following conditions occur in this order:
 1. The device is no longer allocated to any job.
 2. Allocation can get the necessary resources to process the request.
- If the device was offline, it remains offline.

If the device is no longer allocated to a job, and if allocation processing allocates any device in the system, the system takes the device offline.

Operator response: To recover the boxed device, do the following:

1. Vary the boxed device offline to all sharing systems.
2. Isolate the failing control unit for repair.
3. Determine the range of affected devices.
4. Resynchronize dynamic path selection (DPS) array information for all affected devices.
5. Contact hardware support.
6. Bring the device online to allow hardware support personnel to verify the data on the boxed device. Do one of the following:
 - Enter a DISPLAY UNITS command to see if the device is one of the following:
 - Offline and boxed (F-BOX)
 - Allocated and boxed (A-BOX)
 - If the device is offline and boxed, vary the device online by entering the following command:
VARY *dev*,ONLINE
 - If the device is allocated and boxed, display the using job steps that are allocated to the device by entering the following command:
DISPLAY U,,ALLOC,*dev*,1
Follow your installation's procedures for unallocating using job steps.
Vary the device offline, using the following command:
VARY *dev*,OFFLINE
Vary the device online, using the following command:
VARY *dev*,ONLINE
 - If the device is allocated and boxed, but not offline, enter the following command:
VARY *dev*,ONLINE,UNCOND
 - Verify the data on the volume.
7. Identify and recover failing tasks.

Source: Input/output supervisor (IOS)

Module: IOSRSNDV

Routing code: 2,10

Descriptor code: 4

IOS452I **IOS1452I** *devn chp, text*

Explanation: *text* is one of the following:

- OPERATIONAL PATH ADDED TO PATH GROUP
- OFFLINE PATH REMOVED FROM PATH GROUP
- RESERVE PROPAGATED TO PATH GROUP
- ASSIGN PROPAGATED TO PATH GROUP

The system validated a dynamic pathing device because one of the following occurred:

- The system found an error on the device.
- The operator or the system changed the state of one or more channel paths to the device.

In the message text:

devn

The device number. The device number is prefixed by the subchannel set identifier when appropriate.

chp

The channel path identifier (CHPID).

OPERATIONAL PATH ADDED TO PATH GROUP

The system found that an online channel path was not part of the dynamic path group.

OFFLINE PATH REMOVED FROM PATH GROUP

The system found an offline channel path that was part of the dynamic pathing group, and should not have been part of the group.

RESERVE PROPAGATED TO PATH GROUP

The system found that an offline channel path held the reserve that should be held only by online paths.

ASSIGN PROPAGATED TO PATH GROUP

The system found that an offline channel path held an assign that should only be held by online paths.

System action: Depending on the message text, the system does one of the following:

OPERATIONAL PATH ADDED TO PATH GROUP

The system adds the channel path to the dynamic pathing group.

OPERATIONAL PATH REMOVED FROM PATH GROUP

The system removes the channel path from the dynamic pathing group.

RESERVE PROPAGATED TO PATH GROUP

ASSIGN PROPAGATED TO PATH GROUP

The system propagates the assign condition to the online paths.

Operator response: Do the following:

1. Check for the following to see if the error occurred because of an external action:
 - Switching or disabling interfaces
 - Disabling switches
 - Disconnecting or reconnecting channel path interface cables
2. Determine the range of affected devices.
3. Resynchronize dynamic pathing support (DPS) array information for all affected devices.

Source: Input/output supervisor (IOS)

Module: IOSRSNDV

Routing code: 2,10

Descriptor code: 4

IOS500I IOS1500I
 ACTIVATE RESULTS
 [ACTIVATE COMPLETED SUCCESSFULLY
 | ACTIVATE COMPLETED - WARNING MESSAGE(S) ISSUED
 | ACTIVATE FAILED - ERROR MESSAGE(S) ISSUED
 | TEST DETECTED CONDITIONS WHICH WOULD RESULT IN ACTIVATE FAILURE
 | TEST DETECTED NO CONDITIONS WHICH WOULD RESULT
 IN ACTIVATE FAILURE]
rc, rsntext [COMPID = *compid*]
 [MESSAGES TRUNCATED AT 20.
 EXCESS IN SYSLOG.
 TOTALMESSAGES = *n*.]

Explanation: The system issues this message in response to an ACTIVATE request.

In the message text:

ACTIVATE COMPLETED SUCCESSFULLY

The system successfully processed the ACTIVATE request.

ACTIVATE COMPLETED - WARNING MESSAGE(S) ISSUED

The system processed the ACTIVATE request. The system issued attention messages. I/O devices that were added by the request may not be available for use.

ACTIVATE FAILED - ERROR MESSAGE(S) ISSUED

The system did not process the ACTIVATE request. The system issued error messages.

COMPID = *compid*

The 5-character identifier of the system component where the error occurred. For example, SC1C3 for IOS and SC1XL for HCD. COMPID is optionally specified for each *rc, rsntext* message.

rc, rsntext

A reason code and its associated message text. One of the following qualifiers precedes the reason code:

NOTE The message is an informational message.

WARN The message is a warning message.

REASON

The message is an error message.

If **NOTE** precedes the reason code, the system continues processing with the new I/O configuration definition. If **WARN** precedes the reason code, the system continues processing, but possibly in degraded mode (all paths, devices, etc. from the previous or new configuration may not be available). If **REASON** precedes the reason code, the system continues processing with the old I/O configuration definition.

The reason codes and associated texts may be issued by hardware configuration definition (HCD) or IOS. If the COMPID is SC1XL, then CBD should be prefixed to the reason to determine the associated HCD message. See *z/OS and z/VM HCD Messages*. The IOS reason codes and texts are the following:

NOTE=0100, SOFTWARE-ONLY CHANGE

The system changed the software input/output (I/O) configuration definition. The hardware I/O configuration definition is unchanged.

System action: The system changes the software representation for the configuration. If the hardware and software configuration are inconsistent, the system does not perform dynamic hardware changes until the hardware and software definitions are synchronized.

NOTE=0101, NO UCB CREATED FOR DEVICE *dev* DESCTEXT=DEVICE SUPPORT CODE NOT INSTALLED

As a result of an ACTIVATE request, the system tried to add a unit control block (UCB). The system could not find the support code for the device at system initialization.

In the message text:

dev The device number.

System action: The device is not available for use. The dynamic configuration change continues. If the system adds a subchannel, and the proper device support code is installed on the system, the device will be accessible at the next system initialization.

Operator response: If desired, install device support code (DSC) that supports dynamic changes. ReIPL the system.

NOTE=0101, NO UCB WOULD BE CREATED FOR DEVICE *dev* DESCTEXT=DEVICE SUPPORT CODE NOT INSTALLED

As a result of an ACTIVATE TEST request to test a configuration change, the system found that the configuration change included adding a UCB for the specified device. If the configuration change was activated, the system will not create the UCB because it cannot find the support code for the device at system initialization.

In the message text:

dev The device number.

System action: The system continues processing.

Operator response: If desired, install device support code (DSC) that supports dynamic changes. ReIPL the system.

System programmer response: Check LOADxx column 34 for device support code; 'Y' indicates all DSC was loaded at last IPL, and 'N' indicates that DSC was loaded only for devices in the current IODF. The default is Y.

NOTE=0102, NO UCB CREATED FOR DEVICE *dev* DESCTEXT=CURRENT OPERATING SYSTEM DOES NOT SUPPORT 4-DIGIT DEVICES

As a result of an ACTIVATE request, the system tried to build a UCB for a 4-digit device. The system could not build the UCB because the current operating system does not support 4-digit devices.

In the message text:

dev The 4-digit device number that was encountered.

System action: The ACTIVATE request completed successfully. No UCBs were built for the 4-digit device. Hardware updates will be done for the 4-digit device.

NOTE=0102, NO UCB CREATED FOR DEVICE *dev* DESCTEXT=DEVICE SUPPORT CODE DOES NOT SUPPORT DYNAMIC

As a result of an ACTIVATE request, the system tried to add a UCB. The system could not add the UCB. The support code for the device does not support dynamic changes.

In the message text:

dev The device number.

System action: The device is not available for use. The dynamic configuration change continues. If the system adds a subchannel, and the proper device support code is installed on the system, the device will be accessible at the next system initialization.

Operator response: If desired, install device support code (DSC) that supports dynamic changes. ReIPL the system.

NOTE=0102, NO UCB WOULD BE CREATED FOR DEVICE *dev* DESCTEXT=DEVICE SUPPORT CODE DOES NOT SUPPORT DYNAMIC

As a result of an ACTIVATE TEST request to test a configuration change, the system found that the configuration change included adding a UCB for the specified device. If the configuration change was activated, the system will not create the UCB because the device does not support dynamic changes.

In the message text:

dev The device number.

System action: The system continues processing.

Operator response: If desired, install device support code (DSC) that supports dynamic changes. ReIPL the system.

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NOTE=0103, DYNAMIC UNALLOCATION FAILED FOR *dsname* DESCTEXT=RETURN CODE: *rc*, REASON CODE: *rsnc*

As a result of an ACTIVATE request, the system tried to dynamically unallocate a data set. The system could not dynamically unallocate the data set.

In the message text:

dsname The data set name.

rc The return code from the dynamic allocation service.

rsnc The reason code from the dynamic allocation service.

System action: The system continues processing.

Operator response: Notify the system programmer. Provide the return and reason codes from dynamic allocation.

System programmer response: See *z/OS MVS Programming: Authorized Assembler Services Guide* for a description of the return and reason codes from the DYNALLOC macro.

NOTE=0104, DIV UNIDENTIFY FOR IODF FAILED DESCTEXT=RETURN CODE: *rc*, REASON CODE: *rsnc*

The data-in-virtual service could not unidentify the IODF.

In the message text:

rc The return code from the data-in-virtual unidentify service.

rsnc The reason code from the data-in-virtual unidentify service.

System action: The system continues processing.

Operator response: Notify the system programmer. Provide the return and reason codes from the DIV UNIDENTIFY service.

System programmer response: See *z/OS MVS Programming: Authorized Assembler Services Reference ALE-DYN* for a description of the return and reason codes from the DIV UNIDENTIFY service.

NOTE=0105, DEVICE *dev* CHANGED FROM STATIC TO DYNAMIC

The specified device is now defined to the system as a dynamic device. The device is now eligible for dynamic deletion.

In the message text:

dev The device number.

System action: The system continues processing.

NOTE=0106, MBI COULD NOT BE ASSIGNED FOR DEVICE *dev*

As a result of an ACTIVATE request, the system dynamically added a device. The system could not assign a measurement block index (MBI) to the device.

In the message text:

dev The device number.

System action: The system adds the device. The system does not gather any measurement data for the device.

Operator response: ReIPL the system if you want the system to automatically measure tape and direct access storage devices (DASD).

System programmer response: Update the CMB parameter in the IEASYSxx parmlib member to include the number of devices to be measured.

NOTE=0107, CCM COULD NOT EXIT CONFIGURATION MODE DESCTEXT=SYSTEM ERROR

When the system was completing a configuration change, an unexpected error occurred.

In the message text:

SYSTEM ERROR

A system error occurred when the system was completing the configuration change.

System action: The system continues processing. In a processor resource/systems manager (PR/SM) environment, new resources added to the system are not surfaced to other partitions. The system rejects subsequent dynamic hardware configuration changes in all partitions.

Operator response: To enable subsequent dynamic hardware configuration changes, do one of the following:

- In a PR/SM environment, reIPL the partition in configuration mode.
- ReIPL the system.

NOTE=0108, H/W AND S/W CONFIGURATION DEFINITIONS ARE NOW BACK IN SYNC

As a result of an ACTIVATE request, a software-only configuration change successfully resynchronized the hardware and software configuration definitions.

System action: The system makes the dynamic change. The system synchronizes the hardware and software configurations.

NOTE = 0108, H/W AND S/W CONFIGURATION DEFINITIONS WILL BE BACK IN SYNC

As a result of an ACTIVATE TEST request to test a software-only configuration change, the system found that the target IODF contains a configuration definition that matches the current hardware definition. If the software-only configuration change is activated, the system will synchronize the hardware and software configurations.

System action: The system continues processing.

NOTE=0109, DEFINITIONAL ERROR FOR CHPID *chpid*

As a result of an ACTIVATE request, the system tried to add a channel path, but the hardware is inconsistent with the channel path type. For example, a parallel channel path cannot be defined as a serial channel path.

In the message text:

chpid The channel path identifier.

System action: The system accepts the channel path definition, but does not configure the CHPID online. None of the devices defined to the channel path can be accessed through that channel path.

Operator response: Enter the ACTIVATE request again, specifying a channel path type that is consistent with the hardware.

NOTE=0110, DEFINITIONAL ERROR FOR CU *con*

As a result of an ACTIVATE request, the system tried to add a control unit, but the hardware is inconsistent with the control unit definition. For example, all the channel paths defined to an Internal System Device (ISD) do not physically attach to the same ISD control unit.

In the message text:

con The control unit number.

System action: The system accepts the control unit definition but the control unit cannot be used.

Operator response: Enter the ACTIVATE request again, specifying a control unit type that is consistent with the hardware.

| NOTE=0111, COUPLING PORT OR ADAPTER NOT INSTALLED FOR CHPID *xx*

A hardware adapter or port could not be found for the specified CHPID.

In the message text:

xx The channel path identifier (CHPID).

System action: The system accepts the channel path definition but the CHPID cannot be configured online and used. No connection can be made using this CHPID.

Operator response: Verify that the port or adapter is installed properly. If it is installed properly, notify the System Programmer.

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System programmer response: Verify that the CHPID is defined properly in the IODF. If it is not defined properly, correct the definition and reissue the ACTIVATE request. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

NOTE=010A,DEV *dev* DELETED, DEDICATED ALLEGIANCE NOT CLEARED [PARTITION = *partition*]

As a result of an ACTIVATE request, a device that had a dedicated allegiance to the channel subsystem was deleted. The system could not remove the dedicated allegiance at the device.

In the message text:

dev The device number.

partition

The partition name. This field appears when the system is in a logically partitioned mode (LPAR) environment.

System action: Other systems sharing the device cannot access the device unless the dedicated allegiance is reset.

Operator response: Do one of the following to reset the dedicated allegiance:

- Enter the CONFIG CHPID command to take the channel paths to the physical device offline from the partition.
- ReIPL the partition or the entire system.
- Quiesce all the devices on the control unit from all the sharing systems. ReIML the control unit.

NOTE=010B,H/W AND S/W CONFIGURATION DEFINITIONS ARE NOW OUT OF SYNC

As a result of an ACTIVATE or ACTIVATE RECOVER request, the system completed or ran a software-only dynamic configuration change. The target IODF data set does not contain a configuration definition that matches the current hardware definition.

System action: The system does not allow dynamic hardware changes until the hardware and software configuration definitions are synchronized.

Operator response: If desired, perform a software only change so the current software definition matches the current hardware definition.

NOTE=010B,H/W AND S/W CONFIGURATION DEFINITIONS WILL BE OUT OF SYNC

An ACTIVATE TEST request was entered to test for a software-only configuration change. The target IODF data set does not contain a configuration definition that matches the current hardware definition. If the software-only configuration change was activated, the hardware and software configurations would no longer be synchronized.

System action: The system continues processing.

NOTE=010C, THE ACTIVE IOCDS HAS BEEN SWITCHED TO *xx*

As a result of an ACTIVATE request, the system switched the active input/output configuration data set (IOCDS).

In the message text:

xx The identifier for the IOCDS that is currently active.

System action: The system switches the IOCDS.

[NOTE | REASON] =010D,THE ACTIVE IOCDS HAS NOT BEEN SWITCHED TO *xx* DESCTEXT=*text*

The operator entered an ACTIVATE request to switch the active IOCDS. The system could not make the switch.

In the message text:

xx The IOCDS identifier.

text is one of the following:

FUNCTION NOT SUPPORTED

The processor does not support the function used to switch the active IOCDS.

THE TARGET IOCDS ID IS NOT VALID FOR THIS MACHINE

The specified a target IOCDS identifier is not valid for the current machine.

THE TARGET IOCDS DOES NOT SUPPORT DYNAMIC

The target IOCDS does not support dynamic configuration changes.

THE TARGET IOCDS DOES NOT EXIST

The target IOCDS does not have an IOCDS data set created for it.

THE TARGET IOCDS IS NOT ACCESSIBLE

The system tried to switch the IOCDS on the wrong side of a physically partitionable machine.

THE TARGET IOCDS IS CURRENTLY BEING ALTERED

The I/O configuration program (IOCP) is currently updating the target IOCDS from another partition.

THE CURRENT I/O CONFIGURATION IS NOT VALID

The I/O configuration is in an unknown state.

THE TARGET IOCDS IS NOT IN A VALID STATE

The target IOCDS does not contain a valid I/O configuration. This can occur if an earlier attempt to write the IOCDS failed while the system was writing the IOCDS, or if the IOCDS is currently being written. This can also occur if an IOCDS was written in preparation for a machine upgrade and is not valid for the current machine.

THE CURRENT CONFIGURATION DOES NOT SUPPORT DYNAMIC

The target IOCDS does not support the dynamic configuration function.

THE CURRENT I/O CONFIGURATION DOES NOT MATCH THE IOCDS

The configuration definition in the channel subsystem does not match the configuration definition in the IOCDS.

THE CURRENT MACHINE MODE DOES NOT MATCH THE IOCDS

The current machine mode does not match the IOCDS mode.

INCONSISTENCY DETECTED IN LOGICAL PART CHARACTERISTICS

The logical partition characteristics of the current configuration do not match the definition in the target IOCDS. Use the HCD to create the IOCDS and retry the function.

A SYSTEM ERROR HAS OCCURRED

You attempted to switch the active IOCDS but the function failed. The system writes a SYMREC record to the logrec data set.

THE IOCDS DOES NOT MATCH THE CURRENT CONFIGURATION

The current configuration definition in the channel subsystem does not match the configuration definition in the IOCDS. Use the correct IOCDS or use the HCD to create one.

THIS LPAR IS NOT AUTHORIZED FOR DYNAMIC CHANGES

The system is in LPAR mode and this partition was not authorized to make dynamic I/O configuration changes.

System action: The system does not switch the IOCDS. If AN UNKNOWN SYSTEM HAS OCCURRED appears in the message text, the system writes a logrec data set error record.

Operator response: If **THE CURRENT I/O CONFIGURATION IS NOT VALID** appears in the message text, enter the ACTIVATE RECOVER command to restore the I/O configuration to a known state. If **THE IOCDS DOES NOT MATCH THE CURRENT CONFIGURATION** appears in the message text, enter an ACTIVATE request to activate the correct IOCDS. Otherwise, do one of the following:

- Use the HCD to download a new IOCDS for the current configuration.
- Enter the ACTIVATE request again, using a valid IOCDS identifier.

NOTE=010E, CONFIGURATION RECOVERED TO {SOURCE | TARGET} IODF *dsname*

As a result of an ACTIVATE RECOVER request, the system recovered the I/O configuration.

In the message text:

SOURCE

The system recovered the configuration to the source IODF.

TARGET

The system recovered the configuration to the target IODF.

dsname The name of the IODF data set that represents the configuration to which the system was recovered.

System action: The system does one of the following:

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- If the system issues NOTE=010B,H/W AND S/W CONFIGURATION DEFINITIONS ARE NOW OUT OF SYNC, the system does not synchronize the hardware and software configurations.
- If the system does not issue NOTE=010B, the system synchronizes the hardware and software configurations.

Operator response: If the system does not synchronize the hardware and software configurations, perform a software-only change to synchronize the hardware and software definitions.

NOTE=010F, NEW CONFIGURATION ACTIVE, CLEANUP IN PROGRESS DESCTEXT=WAITING FOR OLD EDT TO BE DELETED

As a result of an ACTIVATE request, the dynamic I/O change was successful except that outstanding allocation requests are preventing deletion of the old eligible device table (EDT). The system cannot perform ACTIVATE requests and DDR swaps until the system issues message IOS501I.

System action: The system is waiting for outstanding allocation requests to complete. Message IOS513E is issued every fifteen minutes until all outstanding allocation requests have been satisfied. Once those requests are complete, the system deletes the old EDT and issues message IOS501I.

Operator response: If the configuration change is still in progress (determined using the D IOS,CONFIG command), then issue the D IOS,CONFIG(EDT) command to determine what jobs have outstanding binds on the secondary (old) EDT. Satisfy the outstanding allocation requests by either mounting the requested volumes, canceling the job, or canceling the address space.

System action: The system accepts the control unit definition but the control unit cannot be used.

Operator response: Enter the ACTIVATE request again, specifying control unit type that is consistent with the hardware.

NOTE=0112,REQUEST CONTAINS DELETE(S), SPECIFY FORCE ON H/W ACTIVATE

While processing an ACTIVATE TEST request, configuration change processing detected that activating to the target IODF will cause one or more hardware components to be deleted from the configuration.

System action: The system continues processing.

Operator response: If the delete changes are desired, specify FORCE when performing the hardware ACTIVATE to prevent ACTIVATE failures.

NOTE=0113,DEFINITIONAL ERROR FOR *type aid*

As a result of an ACTIVATE request, the system tried to add an I/O adapter, but the hardware is inconsistent with the adapter definition. For example, the specified I/O adapter type does not match the physical adapter installed in the specified location (PCHID).

In the message text:

type

The adapter type. One of the following:

- PCIE FUNCTION

aid

The adapter ID. The PCIe function ID when adapter type is PCIE FUNCTION.

System action: The system accepts the I/O adapter definition.

Operator response: Enter the ACTIVATE request again, specifying an adapter type that is consistent with the hardware.

System programmer response: Verify that the I/O adapter is defined properly in the IODF. If it is not defined properly, correct the definition and reissue the ACTIVATE request.

NOTE=0114,PHYSICAL I/O ADAPTER for *type aid* IS NOT INSTALLED IN THE SPECIFIED LOCATION *cccc*

As a result of an ACTIVATE request, the system performed a change request for an I/O adapter. However, the I/O adapter is not installed at the specified location.

In the message text:

type

The adapter type. One of the following:

- PCIE FUNCTION

| *aid*
| The adapter ID. The PCIe function ID when adapter type is PCIE FUNCTION.

| *cccc*
| The physical channel ID.

| System action: The system accepts the I/O adapter definition, but the I/O adapter cannot be configured online and used.

| Operator response: Verify that the I/O adapter is installed properly. If it is installed properly, notify the System Programmer.

| System programmer response: Verify that the I/O adapter is defined properly in the IODF. If it is not defined properly, correct the definition and reissue the ACTIVATE request. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

| **REASON=0148,CANNOT DELETE PPRC DEVICE *sdev***
| **DESCTEXT=REMOVING ANCHOR DEVICE *sdev* IS NOT PERMITTED**

| As a result of an ACTIVATE request, the system tried to delete a device. The device is an anchor device configured in subchannel set 0 and contains device attributes that are inherited by PPRC devices with the same 4-digit device number in alternate subchannel sets.

| In the message text:

| *s* The subchannel set ID

| *dev*
| The device number

| System action: The system rejects the ACTIVATE request.

| Operator response: None.

| System programmer response: If you want to delete the anchor device from the configuration, you must also delete the PPRC devices from the alternate subchannel sets that would inherit the anchor properties from the anchor device.

| **REASON=0149,CANNOT ADD PPRC DEVICE *sdev***
| **DESCTEXT=ACTIVE DEVICE *sdev* EXISTS AND MAY CONTAIN DATA**

| As a result of an ACTIVATE request, the system tried to add a device to an alternate subchannel set. The device identified in the message as the active device is configured in subchannel set 0 and may contain data. Adding the new device may cause the data to become inaccessible.

| In the message text:

| *s* The subchannel set ID

| *dev*
| The device number

| System action: The system rejects the ACTIVATE request.

| Operator response: None.

| System programmer response: In order to add the device to an alternate subchannel set, the device identified in the message as the active device must be varied offline before the ACTIVATE request is issued.

| **Attention:** Varying the active device offline will cause loss of access to any data on that device. If the system is IPLed with the alternate subchannel set as the active subchannel set, then the newly added device will be brought online causing permanent loss of access to the data contained on the previously active device.

| **REASON=0150,REQUEST CONTAINS DELETE(S), BUT FORCE OPTION NOT SPECIFIED**

| As a result of an ACTIVATE request, the system tried to activate an IODF that modified an I/O component. This modification will cause a delete of one or more hardware components. The system requires the FORCE keyword to delete the component(s). The FORCE keyword was not specified on the request.

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System action: The system rejects the ACTIVATE request.

Operator response: Enter an ACTIVATE, FORCE command to delete the hardware component(s).

REASON=0151,CAN NOT DELETE DEVICE *dev* **DESCTEXT=DEVICE PINNED, [ASID = *asid*] reason**

As a result of an ACTIVATE request, the system tried to delete a device. The device is pinned, and therefore cannot be deleted.

In the message text:

dev The device number.

asid The address space identifier (ASID) of the address space where the program that pinned the device is running. If this field does not appear in the message text, the pin request is not associated with an address space.

reason A message that explains why the device was pinned.

System action: The system rejects the ACTIVATE request.

Operator response: Enter the ACTIVATE request again. If the problem occurs again, notify the system programmer.

System programmer response: If the device was pinned because an error occurred, try to unpin the device. If you cannot unpin the device, modify the target IODF so the device is not deleted. Enter the ACTIVATE request again.

Although pinned devices are detected during activates with the TEST option, some products and functions like Geographically Dispersed Parallel Sysplex® (GDPS®) and z/OS Basic HyperSwap rely on signals issued during real (non-TEST) activates in order to prevent deletion of those paths. Therefore, activates with the TEST option might not alert you to the potential of a real activate failure that can occur as a result of pinned devices, and the system does not issue this message. Devices/paths can become pinned or unpinned if a real activate request is performed at a separate time from a test activate.

REASON=0152,CAN NOT DELETE DEVICE *sddd* **DESCTEXT=*text***

As a result of an ACTIVATE request, the system tried to delete or modify a device. The system could not delete or modify the device.

In the message text:

dddd The device number.

s The subchannel set. If omitted from the message the subchannel set is 0.

text One of the following:

DEVICE ONLINE

The device is online and therefore cannot be deleted or modified.

DEVICE ALLOCATED

If the device is a TP device or a CTC it can be allocated while offline.

DEVICE IS AN ACTIVE PARALLEL ACCESS VOLUME ALIAS

If the device is an active Parallel Access Volume Alias then there was I/O active that prevented it from being removed. This I/O did not end in a reasonable amount of time.

IOSBIND ALLOWBINDS=NO SERVICE FAILED

If the IOSBIND service failed.

System action: The system rejects the ACTIVATE request.

Operator response: Depending on the message text, do one of the following:

DEVICE ONLINE

Vary the device offline. Enter the ACTIVATE request again.

DEVICE ALLOCATED

The job that has allocated the device must be canceled to unallocate the device. Enter the ACTIVATE request again.

DEVICE IS AN ACTIVE PARALLEL ACCESS VOLUME ALIAS

The ACTIVATE command should be retried. If the problem persists IBM software support should be contacted.

IOSBIND ALLOWBINDS=NO SERVICE FAILED

There is an internal error that should be reported to IBM software support.

REASON=0153,CAN NOT DELETE PATH (*dev,chpid*) DESCTEXT=PATH ONLINE

As a result of an ACTIVATE request, the system tried to delete a channel path from a device. The channel path is online and therefore cannot be deleted.

In the message text:

dev The device number.

chpid The channel path identifier (CHPID).

System action: The system rejects the ACTIVATE request.

Operator response: Vary the path offline. Enter the ACTIVATE request again.

REASON=0154,CAN NOT DELETE CHPID *chpid* DESCTEXT=CHPID CONFIGURED ONLINE

As a result of an ACTIVATE request, the system tried to delete a channel path. The channel path is configured online and therefore cannot be deleted.

In the message text:

chpid The channel path identifier (CHPID).

System action: The system rejects the ACTIVATE request.

Operator response: Configure the CHPID offline. Enter the ACTIVATE request again.

REASON=0155,CAN NOT DELETE PATH (*dev,chpid*) DESCTEXT=PATHS PINNED, [ASID = *asid*] *reason*

As a result of an ACTIVATE request, the system tried to delete a channel path. The system could not delete the channel path because the paths to the device are pinned.

In the message text:

dev The device number.

chpid The channel path identifier (CHPID).

asid The address space identifier (ASID) for where the program that pinned the device runs. If this field does not appear in the message text, the pin request is not associated with an address space.

reason A message that explains why the paths were pinned.

System action: The system rejects the ACTIVATE request.

Operator response: Enter the ACTIVATE request again. If the problem occurs again, notify the system programmer.

System programmer response: If the paths to the device were pinned because an error occurred, try to unpin the paths. If you cannot unpin the paths, modify the target IODF so the device path is not deleted. Enter the ACTIVATE request again.

Although pinned devices are detected during activates with the TEST option, some products and functions like Geographically Dispersed Parallel Sysplex (GDPS) and z/OS Basic HyperSwap rely on signals issued during real (non-TEST) activates in order to prevent deletion of those paths. Therefore, activates with the TEST option might not alert you to the potential of a real activate failure that can occur as a result of pinned devices, and the system does not issue this message. Devices/paths can become pinned or unpinned if a real activate request is performed at a separate time from a test activate.

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REASON=0156,NOT ENOUGH SPACE TO ACCOMMODATE HARDWARE CHANGES DESCTEXT=NET # [SUB | SUBS | CU | LCU | LCUS]
TO BE ADDED = xxxxxxxx, # [SUB | SUBS | CU | LCU | LCUS] AVAIL = yyy

There is not enough storage in the hardware system area (HSA) to store the changes to the hardware I/O configuration. More subchannels for unshared channel paths (SUB), subchannels for shared channel paths (SUBS), control units (CU), logical control units (LCU), or logical control units for shared channel paths (LCUS) must be available in the HSA to store the changes to the hardware I/O configuration.

In the message text:

xxxxxxx

The number of subchannels, CUs, or LCUs that the system is adding because of the configuration change.

yyy

The number of subchannels, CUs, or LCUs that are currently available in the HSA.

System action: The system rejects the ACTIVATE request.

Operator response: Notify the system programmer. After the system programmer modifies the target IODF, enter the ACTIVATE request again. Repeat this procedure until the system stops issuing this error message. If the error persists, power-on-reset (POR) the machine with either a larger expansion factor for the HSA or larger shared subchannel expansion.

Note: Increasing the expansion factor could effect HSA. For further details, see the PR/SM Planning Guide for your machine type.

Modify the target IODF to reduce the number of I/O components added to the configuration. If this is not acceptable, a power-on-reset (POR) is required to specify a greater number of subchannels. In order to determine how many subchannels were changed, use HCD to generate a CSS Device Detail Report for both the SOURCE and TARGET IODF and check the TOTALs.

REASON=0157,CAN NOT [DELETE DEVICE dev| DELETE PARTITION FROM DEVICE CANDIDATE LIST dev | DELETE PATH (dev,chpid) | ADD PATH (dev, chpid)] DESCTEXT=CANNOT DETERMINE WHETHER DEVICE IS IN THIS PARTITION, RC=rc

As a result of an ACTIVATE request from a system running in a logical partition, that system tried to activate an IODF to delete or modify an I/O device, delete a logical partition from an I/O device candidate list, delete an I/O device path or add an I/O device path' The system cannot determine whether or not the I/O device is in the same logical partition.

For information about device candidate lists, see *z/OS HCD User's Guide*.

In the message text:

rc The return code from a system service used to determine if the device is in the partition where the activate request is running.

dev The device number.

chpid The channel path identifier (CHPID).

System action: The system rejects the dynamic configuration change.

Operator response: Notify the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=0159,PROCESSING TERMINATED DUE TO AN UNEXPECTED ERROR DESCTEXT = text

As a result of an ACTIVATE request, the system tried to process a dynamic configuration change. An error occurred.

text is one of the following:

IOS ADDRESS SPACE NOT ACTIVE

A system error occurred. The IOS address space (IOSAS) is not currently active.

THE CCM WAS NOT INVOKED DUE TO AN ATTACH ERROR

The ATTACH service failed to invoke the function required to perform the configuration change.

CCM RECOVERY ROUTINE ENTERED WITH ABEND CODE *code*

A system error occurred during the configuration change. The system entered recovery.

In the message text:

code The abend code.

CCM RECOVERY ROUTINE REENTERED WITH ABEND CODE *code*

A system error occurred during the configuration change. The system entered recovery. The recovery routine was entered previously.

In the message text:

code The abend code.

CCM RECOVERY ROUTINE ENTERED: ABEND *code*, REASON *rsn*

A system error occurred during the configuration change. The system entered recovery.

In the message text:

code The abend code.

rsn The reason code.

CCM RECOVERY ROUTINE REENTERED: ABEND *code*, REASON *rsn*

A system error occurred during the configuration change. The system entered recovery. The recovery routine was entered previously.

In the message text:

code The abend code.

rsn The reason code.

System action: If **THE CCM WAS NOT INVOKED DUE TO AN ATTACH ERROR** appears in the message text, the system writes a SYMREC record to the logrec data set. Otherwise, the system writes a dump to the SYS1.DUMPxx data set.

Operator response: If **IOS ADDRESS SPACE NOT ACTIVE** appears in the message text, retry the dynamic configuration change after IOS recovery restarts the IOS address space. Otherwise, notify the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=015A,USER NOT AUTHORIZED TO USE ACTIVATE

As a result of an ACTIVATE request, you tried to do one of the following:

- Make a dynamic configuration change.
- Test if a configuration change would work.

You are not authorized to perform the requested function.

System action: The system rejects the ACTIVATE request.

Operator response: To make a dynamic configuration change, obtain write access to the MVS.ACTIVATE RACF resource. To test a configuration change, obtain read access to the MVS.ACTIVATE RACF resource.

REASON=015B,USER AUTHORIZATION COULD NOT BE DETERMINED DESCTEXT=RACROUTE RETURN CODE *cc*, REASON CODE 000000rr

A user issued an ACTIVATE request through Hardware Configuration Definition (HCD). The system could not verify that the HCD user is authorized to issue the MVS ACTIVATE command.

In the message text:

cc, 000000rr

The return and reason codes from:

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```
RACROUTE REQUEST=AUTH,  
CLASS=OPERCMD5,ATTR=UPDATE.
```

For more information on the return and reason codes, see *z/OS Security Server RACROUTE Macro Reference* for the correct return codes.

System action: The ACTIVATE request was failed.

Operator response: Notify the system programmer.

System programmer response: This message is issued because an HCD ACTIVATE request always issues a RACF authorization check for the MVS ACTIVATE command, and the MVS ACTIVATE command is not currently RACF-protected. The cause could be any one of the following:

- RACF is not installed.
- The OPERCMD5 class is not activated and RACLISed.
- The MVS.ACTIVATE resource is not protected by an OPERCMD5 profile.

Do one of the following:

- RACF-protect the MVS ACTIVATE command and authorize the TSO/E userid of the HCD user to the MVS ACTIVATE command. For more information on RACF-protecting operator commands, see *z/OS MVS Planning: Operations*.
- You can also issue the ACTIVATE command directly from a system console. The system console must be authorized to issue the ACTIVATE command either through the AUTH(SYS) command authority or RACF authorization.

REASON=015C,CCM BACKOUT FAILED

As a result of an ACTIVATE request, the system encountered an unexpected error while performing the dynamic configuration change. A second error occurred while trying to restore the system to its original state.

System action: The system ends I/O configuration processing. The system leaves the I/O configuration in an unpredictable state.

Operator response: Enter an ACTIVATE RECOVER command to recover the system. Notify the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=015D,HCD DETECTED AN ERROR IN UIM PROCESSING *hcd_message*

The hardware configuration definition (HCD) found an error during unit information module (UIM) initialization or UIM device features table (DFT) build processing.

In the message text:

hcd_message
The HCD error message.

System action: The system rejects the ACTIVATE request.

Operator response: See the operator response for the accompanying HCD message.

System programmer response: See the system programmer response for the accompanying HCD message in *z/OS MVS System Messages, Vol 4 (CBD-DMO)*.

NOTE=015E,DEVICE TYPE *devtype* **NOT RECOGNIZED** (*nnnnn* **DEVICES**)

As a result of an ACTIVATE request, the system could not find a valid UIM for a device type, or the UIM contained a logic error, or the UIM does not support the device type on this level of the operating system.

In the message text:

devtype The device type.
nnnnn The number of devices defined with this device type.

System action: The system continues processing the dynamic configuration changes. The system will not build UCBs for any devices of this device type.

Operator response: If this condition is not expected, install the missing UIM, or correct the UIM in error. If the problem is in IBM code, notify the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

NOTE=015F,UIM *modname* DID NOT BUILD A DFT FOR DEVICE *dev*

The system found a logic error in a UIM. The system could not build a device features table (DFT) for a device.

In the message text:

modname

The UIM name.

dev

The device number.

System action: The system continues processing the dynamic configuration changes. The system will not build a UCB for this device.

Operator response: Verify that the correct UIMs are installed. If the problem is in IBM code, notify the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=0160,COULD NOT OPEN SYS1.NUCLEUS

The system could not open the SYS1.NUCLEUS data set.

System action: The system rejects the ACTIVATE request.

Operator response: Notify the system programmer.

System programmer response: See *z/OS DFSMSdfp Diagnosis* for diagnosis information on the OPEN macro.

REASON=0161,CAN NOT DELETE DEVICE *dev* DESCTEXT=DEVICE IS NOT DEFINED AS DYNAMIC

As a result of an ACTIVATE request, the system tried to activate an IODF that would cause a device to be deleted. The device is not defined as dynamic and therefore cannot be deleted.

In the message text:

dev

The device number.

System action: The system rejects the ACTIVATE request.

Operator response: Check if you tried to activate the correct IODF. If the IODF is correct, notify the system programmer. If the IODF is not correct, enter the correct IODF name on the ACTIVATE request.

System programmer response: Do one of the following:

- If you do not want to delete the device, modify the target IODF so the device will not be deleted. Tell the operator to enter the ACTIVATE request again.
- If you want to delete the device, create a new target IODF identical to the one currently active, but with the devices to be deleted defined as DYNAMIC=YES (this change must be the ONLY change in the IODF). Tell the operator to enter an ACTIVATE request to activate this change. Then tell the operator to enter the previous ACTIVATE again.

REASON=0162,CAN NOT DELETE DEVICE *dev* DESCTEXT=PIN STATUS UNKNOWN

As a result of an ACTIVATE request, the system tried to delete a device. The system could not determine if the device was pinned. Because of a previous system error, the pin status of the device is unknown. The device cannot be safely added or deleted for the remainder of the IPL.

In the message text:

dev

The device number.

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System action: The system rejects the ACTIVATE request.

Operator response: Modify the target IODF so the device will not be deleted. Enter the ACTIVATE request again.

REASON=0163, INPUT CCB WAS NOT VALID DESCTEXT=*text*

The system found a logic error in the input from HCD.

text is one of the following:

UNRECOGNIZED VERSION CODE

An internal error occurred.

UNRECOGNIZED FUNCTION CODE

An internal error occurred.

Operator response: Notify the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=0164, CONFIG CHANGE INCONSISTENT WITH CURRENT SOFTWARE CONFIG

As a result of an ACTIVATE request, the system tried to activate an IODF. The request is inconsistent with the current configuration definition. This could happen if two activate requests are issued at the same time by two different users. One user may alter the configuration, making the other user's request inconsistent with the current configuration.

System action: The system rejects the ACTIVATE request.

Operator response: Enter the ACTIVATE request again.

REASON=0165, CAN NOT DELETE DEVICE *dev* DESCTEXT=DEVICE SUPPORT CODE DOES NOT SUPPORT DYNAMIC

As a result of an ACTIVATE request, the system tried to delete a device. The system could not delete the device. The device support code does not support dynamic changes.

In the message text:

dev The device number.

System action: The system rejects the ACTIVATE request.

Operator response: Install device support code that supports dynamic changes. ReIPL the system. If this is not acceptable, notify the system programmer. After the system programmer corrects the problem, enter the ACTIVATE request again.

System programmer response: Modify the target IODF so the device will not be deleted.

REASON=0167, CCM COULD NOT ENTER CONFIGURATION MODE DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to activate an IODF that would cause I/O configuration changes to the channel subsystem. The system could not enter configuration mode.

text is one of the following:

SYSTEM ERROR

An internal error occurred.

ANOTHER PARTITION IS IN CONFIGURATION MODE

A configuration change is in progress in another partition.

PARTITION NOT AUTHORIZED TO ENTER CONFIGURATION MODE

The partition is not authorized to make dynamic I/O configuration changes.

H/W AND S/W I/O CONFIGURATION DEFINITIONS ARE OUT OF SYNCH

The I/O configuration was updated between the time the operator entered the activate request and the time that the system made the hardware change. Another partition initiated a dynamic I/O configuration change, or another HCD user in the same partition initiated the change.

DYNAMIC I/O CONFIGURATION CAPABILITY DISABLED

The system operator disabled the dynamic I/O configuration capability.

DYNAMIC I/O CONFIGURATION CAPABILITY DISABLED, POR REQD

The system operator disabled the dynamic I/O configuration capability.

SOFTWARE LEVEL IS INCOMPATIBLE WITH HARDWARE

The software is not at the level required to communicate with the hardware.

System action: The system rejects the ACTIVATE request.

Operator response: Depending on the message text, do one of the following:

SYSTEM ERROR

Notify the system programmer.

ANOTHER PARTITION IS IN CONFIGURATION MODE

Wait for the configuration change to complete before starting another configuration change.

PARTITION NOT AUTHORIZED TO ENTER CONFIGURATION MODE

Enter the ACTIVATE request from an authorized partition, or request authorization through the LPAR panels.

H/W AND S/W I/O CONFIGURATION DEFINITIONS ARE OUT OF SYNCH

If desired, perform a software only change so the current software definition matches the current hardware definition.

DYNAMIC I/O CONFIGURATION ABILITY DISABLED

Enable dynamic I/O changes through the service processor.

DYNAMIC I/O CONFIGURATION ABILITY DISABLED, POR REQD

Perform a POR on the machine to restore dynamic I/O configuration capability, if desired.

System programmer response: Depending on the message text, do one of the following:

SYSTEM ERROR

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

SOFTWARE LEVEL IS INCOMPATIBLE WITH HARDWARE

Apply the level of software that supports the current hardware.

REASON=0168,CAN NOT DELETE PATH (*dev, chpid*) DESCTEXT=DEVICE NOT DEFINED AS DYNAMIC

As a result of an ACTIVATE request, the system tried to activate an IODF that would delete a path to a device. The system could not delete the path. The device is not defined as dynamic.

In the message text:

dev The device number.

chpid The channel path identifier (CHPID).

System action: The system rejects the ACTIVATE request.

Operator response: Check if you tried to activate the correct IODF. If the IODF is correct, notify the system programmer. If the IODF is not correct, enter the correct IODF name on the ACTIVATE request.

System programmer response: Do one of the following:

REASON=0169,CAN NOT ADD PATH (*dev, chpid*) DESCTEXT=DEVICE IS NOT DEFINED AS DYNAMIC

As a result of an ACTIVATE request, the system tried to activate an IODF that would add a channel path to a device. The system could not add the path. The device is not defined as dynamic.

In the message text:

dev The device number.

chpid The channel path identifier (CHPID).

Operator response: Check if you tried to activate the correct IODF. If the IODF is correct, notify the system programmer. If the IODF is not correct, enter the correct IODF name on the ACTIVATE request.

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System programmer response: Do one of the following:

- If you do not want to delete the device, modify the target IODF so the device will not be deleted. Tell the operator to enter the ACTIVATE request again.
- If you want to delete the device, modify the target IODF to change the device from static to dynamic. Tell the operator to enter an ACTIVATE request to activate this change. Then tell the operator to enter the previous ACTIVATE request again.

REASON=016A, CAN NOT DELETE CU(S) FROM DEVICE(S) *dev1[-dev2]* DESCTEXT=CU(S): *xxxx[,yyy,...*] *text*

As a result of an ACTIVATE request, the system tried to delete the specified control units from one or more devices. The system could not delete the control units.

In the message text:

dev1[-dev2]

The range of device numbers

xxxx[,yyy,...]

The list of control unit identifiers.

text

One of the following:

SYSTEM ERROR DIAGNOSTIC INFO *diag info*

An internal error occurred.

LIMITS EXCEEDED

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system writes a logrec data set error record.

Operator response: Depending on the message text, do one of the following:

SYSTEM ERROR

Notify the system programmer.

LIMITS EXCEEDED

Notify the system programmer.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

Notify the system programmer.

REQUEST NOT SUPPORTED BY THIS MODEL

Notify the system programmer.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

Enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODF.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=016B, CAN NOT DELETE DEVICE(S) *dev1[-dev2]* DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to delete one or more devices. The system could not delete the device(s).

In the message text:

dev1[-*dev2*]

The range of device numbers.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

LIMITS EXCEEDED

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system writes a logrec data set error record.

Operator response: Depending on the message text, do one of the following:

SYSTEM ERROR

Notify the system programmer.

LIMITS EXCEEDED

Notify the system programmer.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

Notify the system programmer.

REQUEST NOT SUPPORTED BY THIS MODEL

Notify the system programmer.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

Enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODF.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=016C,CAN NOT ADD DEVICE(S) *dev1*[-*dev2*] **DESCTEXT=***text*

As a result of an ACTIVATE request, the system tried to add one or more devices. The system could not add the device(s).

In the message text:

dev1 - *dev2*

The list of device numbers.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

LIMITS EXCEEDED

One of the following occurred:

- The system tried to create a logical control unit (LCU) where all the devices did not attach to all the physical control units. Adding a device would cause two LCUs to be merged into one LCU, while devices are already attached to both LCUs.
- The system tried to add a device that is accessed by more CUs and/or paths than the processor supports.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system writes a logrec data set error record.

Operator response: Depending on the message text, do one of the following:

SYSTEM ERROR

Notify the system programmer.

LIMITS EXCEEDED

For case 1, ensure that all devices in the LCU are defined so they are accessible from all the physical control units in the LCU. For case 2, notify the system programmer.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

Notify the system programmer.

REQUEST NOT SUPPORTED BY THIS MODEL

Notify the system programmer.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

Enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODF.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=016D,CAN NOT ADD CU(S) TO DEVICE(S) dev1[-dev2] DESCTEXT=CU(S): [xxxx,yyy,...] text

As a result of an ACTIVATE request, the system tried to add the specified control units to one or more devices. The system could not add the control unit(s).

In the message text:

dev1[-dev2]

The range of device numbers.

xxxx,yyy,...

The control unit identifiers.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

LIMITS EXCEEDED

One of the following occurred:

- The system tried to create a logical control unit (LCU) where all the devices did not attach to all the physical control units. Adding a device would cause two LCUs to be merged into one LCU, while devices are already attached to both LCUs.
- The system tried to add a device that is accessed by more CUs and/or paths than the processor supports.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system writes a logrec data set error record.

Operator response: Depending on the message text, do one of the following:

SYSTEM ERROR

Notify the system programmer.

LIMITS EXCEEDED

For case 1, ensure that all devices in the LCU are defined so they are accessible from all the physical control units in the LCU. For case 2, notify the system programmer.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

Notify the system programmer.

REQUEST NOT SUPPORTED BY THIS MODEL

Notify the system programmer.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

Enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODF.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=016E,CAN NOT MODIFY CHARACTERISTICS FOR DEVICE(S) *dev1*[-*dev2*] DESCTEXT=CHARACTERISTICS: [TIMEOUT | STATDET | PREFPATH] *text*

As a result of an ACTIVATE request, the system tried to modify the characteristics of one or more devices. The system could not modify the characteristics.

In the message text:

dev1 - *dev2*

The list of device numbers.

TIMEOUT

One or more interface timeout facilities.

STATDET

One or more illegal status detection facilities.

PREFPATH

One or more preferred paths.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

LIMITS EXCEEDED

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system writes a logrec data set error record.

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Operator response: Depending on the message text, do one of the following:

SYSTEM ERROR

Notify the system programmer.

LIMITS EXCEEDED

Notify the system programmer.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

Notify the system programmer.

REQUEST NOT SUPPORTED BY THIS MODEL

Notify the system programmer.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

Enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODE.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=0170,CAN NOT DELETE CHPID *chpid* DESCTEXT=*text*

The system could not delete the specified channel path.

In the message text:

chpid

The channel path identifier (CHPID).

text

One of the following:

SYSTEM ERROR

An internal error occurred.

LAST CHPID FOR ONE OR MORE PARTITIONS

The operator tried to delete the only channel path defined to one or more partitions in the system.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

CHPID IS IN A STATE THAT PREVENTS IT FROM BEING DELETED

The CHPID is in a model-dependent state that prevents it from being deleted.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system writes a logrec data set error record.

Operator response: Depending on the message text, do one of the following:

SYSTEM ERROR

Notify the system programmer.

LAST CHPID FOR ONE OR MORE PARTITIONS

Notify the system programmer. After the system programmer modifies the target IODE, enter the ACTIVATE request again.

REQUEST NOT SUPPORTED BY THIS MODEL

Notify the system programmer.

CHPID IS IN A STATE THAT PREVENTS IT FROM BEING DELETED

Notify the system programmer.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

Enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not

required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODF.

System programmer response: If **LAST CHPID FOR ONE OR MORE PARTITIONS** appears in the message text, modify the target IODF such the channel path is not deleted. Otherwise, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=0171,CAN NOT ADD CHPID *chpid text*

As a result of an ACTIVATE request, the system tried to add a channel path. The system could not add the channel path.

In the message text:

chpid

The channel path identifier (CHPID).

text

One of the following:

SYSTEM ERROR

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

RESOURCE IS ALREADY DEFINED FOR PHYSICAL CHANNEL ID *cccc*

The physical channel ID specified has already been associated with another resource, such as a cryptographic device, a CHPID, or an I/O adapter.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system writes a logrec data set error record.

Operator response: Depending on the message text, do one of the following:

SYSTEM ERROR

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

REQUEST NOT SUPPORTED BY THIS MODEL

RESOURCE IS ALREADY DEFINED FOR PHYSICAL CHANNEL ID *cccc*

Notify the system programmer.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

Enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODF.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

If the message text is **RESOURCE IS ALREADY DEFINED FOR PHYSICAL CHANNEL ID** *cccc*, determine which resource is defined with the identified PCHID. For example, the cryptographic controls on the Support Element (SE) or Hardware Management Console (HMC) can be used to determine whether any cryptographic device is configured with this PCHID. If the physical channel ID is used for a device, modify the CHPID definition to use another ID. If no resources can be found that are defined at the location, contact the IBM Support Center to determine the cause of the problem.

REASON=0172,CAN NOT DELETE CU *cuid DESCTEXT=text*

As a result of an ACTIVATE request, the system tried to delete a control unit. The system could not delete the control unit.

In the message text:

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cuid

The control unit identifier.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system writes a logrec data set error record.

Operator response: Depending on the message text, do one of the following:

SYSTEM ERROR

Notify the system programmer.

REQUEST NOT SUPPORTED BY THIS MODEL

Notify the system programmer.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

Enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODF.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=0173,CAN NOT ADD CU *cuid* DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to add a control unit. The system could not add the control unit.

In the message text:

cuid

The control unit identifier.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

LIMITS EXCEEDED

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

CAN NOT ADD CU TO A DEDICATED CHPID CONNECTION

The system could not add a CU because a CHPID connection was dedicated to another CU.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system writes a logrec data set error record.

Operator response: Depending on the message text, do one of the following:

SYSTEM ERROR

Notify the system programmer.

LIMITS EXCEEDED

Notify the system programmer.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

Notify the system programmer.

REQUEST NOT SUPPORTED BY THIS MODEL

Notify the system programmer.

CAN NOT ADD CU TO A DEDICATED CHPID CONNECTION

Check if the correct configuration was entered on the ACTIVATE request. If the configuration was correct, notify the system programmer.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

Enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODF.

System programmer response: If **CAN NOT ADD CU TO A DEDICATED CHPID CONNECTION** appears in the message text, change the state of the connection using the enterprise systems connection (ESCON) manager. Otherwise, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=0174,CAN NOT DELETE CHPID(S) FROM CU *cuid* DESCTEXT=CHPID(S): *chp1,[chp2...] text*

As a result of an ACTIVATE request, the system tried to delete the specified channel paths from one or more control units. The system could not delete the channel paths.

In the message text:

cuid

The control unit identifier.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system writes a logrec data set error record.

Operator response: Depending on the message text, do one of the following:

SYSTEM ERROR

Notify the system programmer.

REQUEST NOT SUPPORTED BY THIS MODEL

Notify the system programmer.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

Enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODF.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

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REASON=0175,CAN NOT DELETE UNIT ADDRESS(ES) *xx[-yy]* FROM CU *cuid* DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to delete the specified unit addresses from one or more control units. The system could not delete the unit addresses.

In the message text:

xx[-yy]

The range of unit addresses.

cuid

The control unit identifier.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system writes a logrec data set error record.

Operator response: Depending on the message text, do one of the following:

SYSTEM ERROR

Notify the system programmer.

REQUEST NOT SUPPORTED BY THIS MODEL

Notify the system programmer.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

Enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODF.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=0176,CAN NOT ADD CHPID(S) TO CU *cuid* DESCTEXT=CHPID(S): *chp1[,chp2,...]* *text*

As a result of an ACTIVATE request, the system tried to add the specified channel paths to one or more control units. The system could not add the channel path(s).

In the message text:

cuid

The control unit identifier.

chp1[,chp2,...]

The CHPID(s).

text

One of the following:

SYSTEM ERROR

An internal error occurred.

LIMITS EXCEEDED

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

CAN NOT ADD CU TO A DEDICATED CHPID CONNECTION

The system could not add a CU because a CHPID connection was dedicated to another CU.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system writes a logrec data set error record.

Operator response: Depending on the message text, do one of the following:

SYSTEM ERROR

Notify the system programmer.

LIMITS EXCEEDED

Notify the system programmer.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

Notify the system programmer.

REQUEST NOT SUPPORTED BY THIS MODEL

Notify the system programmer.

CAN NOT ADD CU TO A DEDICATED CHPID CONNECTION

Check if the correct configuration was entered on the ACTIVATE request. If the configuration was correct, notify the system programmer.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

Enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODF.

System programmer response: If **CAN NOT ADD CU TO A DEDICATED CHPID CONNECTION** appears in the message text, change the state of the connection using the enterprise systems connection (ESCON) manager. Otherwise, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=0177,CAN NOT ADD UNIT ADDRESS(ES) *xx[-yy]* TO CU *cuid* DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to add the specified unit addresses to one or more control units. The system could not add the unit address(es).

In the message text:

xx[-yy]

The range of unit addresses.

cuid

The control unit identifier.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

LIMITS EXCEEDED

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

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System action: The system rejects the ACTIVATE request.

Operator response: Depending on the message text, do one of the following:

SYSTEM ERROR

Notify the system programmer.

LIMITS EXCEEDED

Notify the system programmer.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

Notify the system programmer.

REQUEST NOT SUPPORTED BY THIS MODEL

Notify the system programmer.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

Enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODF.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=0178, CAN NOT DELETE PATH (*dev, chpid*) DESCTEXT=PIN STATUS UNKNOWN

As a result of an ACTIVATE request, the system tried to delete a device path. The system could not delete the device path. The system could not determine the pin status of the device. Because of a previous system error, the pin status of the device is unknown. The device can not be safely deleted or modified for the remainder of the IPL.

In the message text:

dev The device number.

chpid The channel path identifier.

System action: The system rejects the ACTIVATE request.

Operator response: Check if you entered the correct IODF identifier. If the IODF identifier is correct, notify the system programmer. After the system programmer corrects the problem, enter the ACTIVATE request again.

System programmer response: Modify the target IODF so the device path will not be deleted.

REASON=0179, CAN NOT DELETE PATH (*dev, chpid*) DESCTEXT=DEVICE SUPPORT CODE DOES NOT SUPPORT DYNAMIC

As a result of an ACTIVATE request, the system tried to delete a channel path from a device. The system could not delete the channel path. The device support code does not support dynamic changes.

In the message text:

dev The device number.

chpid The channel path identifier (CHPID).

Operator response: Check if you entered the correct IODF identifier. If the IODF identifier is correct, notify the system programmer. After the system programmer corrects the problem, enter the ACTIVATE request again.

System programmer response: Modify the target IODF so the device path will not be deleted.

REASON=017A, CAN NOT ADD PATH (*dev, chpid*) DESCTEXT=DEVICE SUPPORT CODE DOES NOT SUPPORT DYNAMIC

As a result of an ACTIVATE request, the system tried to add a channel path to a device. The system could not add the channel path. The device support code does not support dynamic changes.

In the message text:

dev The device number.

chpid The channel path identifier (CHPID).

System action: The system rejects the ACTIVATE request.

Operator response: Check if you entered the correct IODF identifier. If the IODF identifier is correct, notify the system programmer. After the system programmer corrects the problem, enter the ACTIVATE request again.

System programmer response: Modify the target IODF modify the target IODF so the device path will not be added.

REASON=017B, IOCINFO SERVICE FAILED DESCTEXT=RETURN CODE: *rc*, REASON CODE: *rsnc*

When you requested a function that required data returned by the IOCINFO system service, an error occurred.

In the message text:

rc, rsnc

The return and reason codes from the IOCINFO service.

System action: The system rejects the ACTIVATE request.

Operator response: Notify the system programmer. Provide the return and reason codes from the IOCINFO service.

System programmer response: See *z/OS MVS Programming: Authorized Assembler Services Guide* for a description of the return and reason codes from the IOCINFO service.

REASON=017C, CCM COULD NOT ESTABLISH ESTAE DESCTEXT=RETURN CODE: *rc*, REASON CODE: *rsnc*

When the system tried to establish an ESTAE recovery routine, an error occurred.

In the message text:

rc, rsnc

The return and reason codes from the recovery routine.

System action: The system rejects the ACTIVATE request.

Operator response: Enter the ACTIVATE request again.

**REASON=017D, IOCINFO SERVICE FAILED IN CCM RECOVERY ROUTINE DESCTEXT=RETURN CODE: *rc*, REASON CODE: *rsnc*
LAST SUCCESSFUL H/W CHANGE COULD NOT BE DETERMINED**

An error occurred during the configuration change causing the recovery routine to be entered. The IOCINFO system service was issued to gather the required data. However, the service encountered an unexpected error and the last successful hardware change, needed to perform complete backout, could not be determined. As a result, the requested configuration changes might be partially backed out in hardware.

In the message text:

rc, rsnc The return and reason codes from the IOCINFO service.

System action: The system continues with backout changes. However, the last hardware change will not be restored.

Operator response: Enter the ACTIVATE request again with the RECOVER keyword to recover the hardware I/O configuration definition to either source or target IODF.

REASON=017E, DYNAMIC ALLOCATION FAILED FOR *dsname* DESCTEXT=RETURN CODE: *rc*, REASON CODE: *rsnc*

As a result of an ACTIVATE request, the system tried to allocate a data set. The system could not allocate the data set.

In the message text:

dsname The data set name.

rc, rsnc The return and reason codes from dynamic allocation.

System action: The system rejects the ACTIVATE request.

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Operator response: If the target data set is accessible, enter the ACTIVATE request again. Otherwise, notify the system programmer, providing the return and reason codes from dynamic allocation.

System programmer response: See *z/OS MVS Programming: Authorized Assembler Services Guide* for a description of the return and reason codes from the DYNALLOC macro.

REASON=017F, BLDL SERVICE FAILED DESCTEXT=RETURN CODE: rc, REASON CODE: rsn

As a result of an ACTIVATE request, the system tried to load the device UIMs. A system error occurred.

In the message text:

dsname The data set name.

rc, rsn The return and reason codes from the build link-list (BLDL) service routine.

System action: The system rejects the ACTIVATE request.

Operator response: Notify the system programmer.

System programmer response: Determine error from the BLDL return and reason codes.

REASON=0180, DIV IDENTIFY FOR IODF FAILED DESCTEXT=RETURN CODE: rc, REASON CODE: rsn

While the system was using the DIV IDENTIFY service to select the target IODF data set, an error occurred.

In the message text:

rc, rsn The return and reason codes from DIV IDENTIFY.

System action: The system rejects the ACTIVATE request.

Operator response: Notify the system programmer. Provide the return and reason codes from DIV IDENTIFY.

System programmer response: See *z/OS MVS Programming: Authorized Assembler Services Guide* for a description of the return and reason codes from the DIV IDENTIFY service.

REASON=0181, DIV ACCESS FOR IODF FAILED DESCTEXT=RETURN CODE: rc, REASON CODE: rsn

While the system was using the DIV ACCESS service to request permission to read the target IODF data set, an error occurred.

In the message text:

rc, rsn The return and reason codes from DIV ACCESS.

System action: The system rejects the ACTIVATE request.

Operator response: Notify the system programmer. Provide the return and reason codes from DIV ACCESS.

System programmer response: See *z/OS MVS Programming: Authorized Assembler Services Guide* for a description of the return and reason codes from the DIV ACCESS service.

REASON=0182, DIV MAP FOR IODF FAILED DESCTEXT=RETURN CODE: rc, REASON CODE: rsn

While the system was using the DIV MAP service to access the target IODF data set, an error occurred.

In the message text:

rc, rsn The return and reason codes from DIV MAP.

System action: The system rejects the ACTIVATE request.

Operator response: Notify the system programmer. Provide the return and reason codes from DIV MAP.

System programmer response: See *z/OS MVS Programming: Authorized Assembler Services Guide* for a description of the return and reason codes from the DIV MAP service.

REASON=0183, DYNAMIC I/O ENQUEUE COULD NOT BE OBTAINED

One of the following occurred:

- The system is still processing a previous ACTIVATE request that requested a dynamic change.
- As a result of a previous ACTIVATE request, the system is rebuilding the EDT. The system did not yet complete this process. A possible cause is that a mount request for a device in the old EDT is outstanding.
- Another function or process is holding the resource.

System action: The system rejects the ACTIVATE request.

Operator response: Issue a D GRS,RES=(SYSZIOS,*) to determine the function or subsystem holding the resource. Wait for the function or subsystem to finish. Enter the ACTIVATE request again.

REASON=0184, RECONFIGURATION ENQUEUES COULD NOT BE OBTAINED

An ACTIVATE request was entered to activate a new IODF. The system could not process the request. There is a reconfiguration in progress on the system (the system is processing a VARY command) or the system enqueue is held by another system service, such as VARY device online.

One of the following may be true:

- A VARY command is active
- A DDR (Dynamic Device Reconfiguration) is active
- A SETIOS MIH, SET IOS=xx, or D IOS,MIH command is active

System action: The system rejects the ACTIVATE request.

Operator response: Wait for either the VARY, DDR, SETIOS, SET IOS=xx, or D IOS,MIH activities to complete. Enter the ACTIVATE request again.

REASON=0186, COULD NOT DETERMINE IF ENOUGH SPACE FOR H/W CHANGES

An ACTIVATE request was entered to activate a new IODF. The system could not process the request. An error prevented the system from determining if the dynamic changes will fit into the hardware system area (HSA).

System action: The system rejects the ACTIVATE request.

Operator response: Enter the ACTIVATE request again.

REASON=0187, NO DEVICES DEFINED IN IODF *dsname*

The user either attempted to activate a new IODF that contains no device definitions or a new IODF whose devices are not connected to any control units.

System action: The system rejects the ACTIVATE request.

Operator response: Enter the ACTIVATE command again with an IODF that contains valid device definitions.

REASON=018A, CAN NOT DELETE CU(S) FROM DEVICE(S) *dev1[-dev2]* DESCTEXT=CU(S): *xxxx[,yyy,...]* *text*

As a result of an ACTIVATE request, the system tried to activate an IODF that required the specified control units to be added to one or more devices. An error occurred after the control units were added. In attempting to restore the original configuration, the system tried to delete the control units from the devices. The system could not delete the control unit(s).

In the message text:

dev1 - dev2

The range of device numbers.

xxxx, [yyy,...]

The list of control unit identifiers.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

LIMITS EXCEEDED

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system does not return to the original configuration definition. The system writes a logrec data set error record.

Operator response: Enter an ACTIVATE RECOVER request to restore the original configuration definition. If the problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only dynamic I/O configuration changes until you perform a power-on reset (POR).

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=018B,CAN NOT DELETE DEVICE(S) dev1[-dev2] DESCTEXT=text

As a result of an ACTIVATE request, the system tried to activate an IODF that required one or more devices to be added to the system. An error occurred after the devices were added. In attempting to restore the original configuration, the system tried to delete the device(s). The system could not delete the device(s).

In the message text:

dev1 - dev2

The range of device numbers.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

LIMITS EXCEEDED

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system does not return to the original configuration definition. The system writes a logrec data set error record.

Operator response: Enter an ACTIVATE RECOVER request to restore the original configuration definition. If the problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only dynamic I/O configuration changes until you perform a power-on reset (POR).

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=018C,CAN NOT ADD DEVICE(S) dev1[-dev2] DESCTEXT=text

As a result of an ACTIVATE request, the system tried to activate an IODF that required one or more devices to be deleted from the system. An error occurred after the devices were deleted. In attempting to restore the original configuration, the system tried to add the device(s). The system could not add the device(s).

In the message text:

dev1 - dev2

The range of device numbers.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

LIMITS EXCEEDED

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system does not return to the original configuration definition. The system writes a logrec data set error record.

Operator response: Enter an ACTIVATE RECOVER request to restore the original configuration definition. If the problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only dynamic I/O configuration changes until you perform a power-on reset (POR).

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=018D,CAN NOT ADD CU(S) TO DEVICE(S) dev1[-dev2] DESCTEXT=CU(S): xxxx[,yyy,...] text

As a result of an ACTIVATE request, the system tried to activate an IODF that required the specified control unit(s) to be deleted from one or more devices. An error occurred after the control unit(s) were deleted. In attempting to restore the original configuration, the system tried to add the control unit(s), but could not add them.

In the message text:

dev1 - dev2

The range of device numbers.

xxxx[,yyy,...]

The list of control unit identifiers.

text

One of the following:

SYSTEM ERROR

LIMITS EXCEEDED

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system does not return to the original configuration definition. The system writes a logrec data set error record.

Operator response: Enter an ACTIVATE RECOVER request to restore the original configuration definition. If the problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only dynamic I/O configuration changes until you perform a power-on reset (POR).

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System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=018E,CAN NOT MODIFY CHARACTERISTICS FOR DEVICE(S) *dev1*[-*dev2*] DESCTEXT=CHARACTERISTICS: *text*
desc text

As a result of an ACTIVATE request, the system tried to modify the characteristics of a subchannel. An error occurred after the characteristics were modified. In attempting to restore the original configuration, the system tried to modify the characteristics back to their original state. The system could not modify the characteristics.

In the message text:

dev1 - *dev2*

The range of device numbers.

text

One of the following:

TIMEOUT

Interface timeout facility.

STATDET

Illegal status detection facility.

PREFPATH

The preferred path.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

LIMITS EXCEEDED

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system does not return to the original configuration definition. The system writes a logrec data set error record.

Operator response: Enter an ACTIVATE RECOVER request to restore the original configuration definition. If the problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only dynamic I/O configuration changes until you perform a power-on reset (POR).

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=0190,CAN NOT DELETE CHPID *chpid* DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to activate an IODF that required the specified CHPID(s) to be added to the configuration. An error occurred after the CHPID(s) were added. In attempting to restore the original configuration, the system tried to delete the CHPID(s). The system could not delete the CHPID(s).

In the message text:

chpid

The channel path identifier.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

LIMITS EXCEEDED

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system does not return to the original configuration definition. The system writes a logrec data set error record.

Operator response: Enter an ACTIVATE RECOVER request to restore the original configuration definition. If the problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only dynamic I/O configuration changes until you perform a power-on reset (POR).

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=0191,CAN NOT ADD CHPID *chpid* DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to activate an IODF that required the specified CHPID(s) to be deleted from the configuration. An error occurred after the CHPID(s) were deleted. In attempting to restore the original configuration, the system tried to add the CHPID(s). The system could not add the CHPID(s).

In the message text:

chpid

The channel path identifier.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system does not return to the original configuration definition. The system writes a logrec data set error record.

Operator response: Enter an ACTIVATE RECOVER request to restore the original configuration definition. If the problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only dynamic I/O configuration changes until you perform a power-on reset (POR).

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=0192,CAN NOT DELETE CU *cuid* DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to activate an IODF that required a control unit to be added to the configuration. An error occurred after the control unit was added. In attempting to restore the original configuration, the system tried to delete the control unit. The system could not delete the control unit.

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In the message text:

cuid

The control unit identifier.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system does not return to the original configuration definition. The system writes a logrec data set error record.

Operator response: Enter an ACTIVATE RECOVER request to restore the original configuration definition. If the problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only dynamic I/O configuration changes until you perform a power-on reset (POR).

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=0193,CAN NOT ADD CU *cuid* DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to activate an IODF that required a control unit to be deleted from the configuration. As error occurred after the control unit was deleted. In attempting to restore the original configuration, the system tried to add the control unit. The system could not add the control unit.

In the message text:

cuid

The control unit identifier.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

LIMITS EXCEEDED

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

CAN NOT ADD CU TO A DEDICATED CHPID CONNECTION

The system could not add a CU because a CHPID connection was dedicated to another CU.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system does not return to the original configuration definition. The system writes a logrec data set error record.

Operator response: Do one of the following:

- If **CAN NOT ADD CU TO A DEDICATED CHPID CONNECTION** appears in the message text, check if the correct configuration was entered on the ACTIVATE request. If the configuration was correct, notify the system programmer.

- Enter an **ACTIVATE RECOVER** request to restore the original configuration definition. If the problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only dynamic I/O configuration changes until you perform a power-on reset (POR).

System programmer response: If **CAN NOT ADD CU TO A DEDICATED CHPID CONNECTION** appears in the message text, change the state of the connection using the enterprise systems connection (ESCON) manager. Otherwise, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=0194,CAN NOT DELETE CHPID(S) FROM CU *cuid* DESCTEXT=CHPID(S): *xx[,yy,...]* *text*

As a result of an **ACTIVATE** request, the system tried to activate an IODF that required the specified CHPID(s) to be added to a control unit. An error occurred after the CHPID(s) were added. In attempting to restore the original configuration, the system tried to delete the CHPID(s). The system could not delete the CHPID(s).

In the message text:

cuid

The control unit identifier.

xx[,yy,...]

The CHPID(s).

text

One of the following:

SYSTEM ERROR

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the **ACTIVATE** request. The system does not return to the original configuration definition. The system writes a logrec data set error record.

Operator response: Enter an **ACTIVATE RECOVER** request to restore the original configuration definition. If the problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only dynamic I/O configuration changes until you perform a power-on reset (POR).

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

DESCTEXT=0195,CAN NOT DELETE UNIT ADDRESS(ES) *xx*, [*yy...*] FROM CU *cuid* DESCTEXT=*text*

As a result of an **ACTIVATE** request, the system tried to activate an IODF that required the specified unit address(es) to be changed. An error occurred after the address range was modified. In attempting to restore the original configuration, the system tried to restore the original address range. The system could not restore the address range.

In the message text:

cuid

The control unit identifier.

xx, [*yy...*]

The list of unit addresses.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system does not return to the original configuration definition. The system writes a logrec data set error record.

Operator response: Enter an ACTIVATE RECOVER request to restore the original configuration definition. If the problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only dynamic I/O configuration changes until you perform a power-on reset (POR).

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=0196,CAN NOT ADD CHPID(S) TO CU *cuid* DESCTEXT=CHPID(S): *chp1[,chp2,...]* *text*

As a result of an ACTIVATE request, the system tried to activate an IODF that required the specified CHPID(s) to be deleted from a control unit. An error occurred after the CHPID(s) were deleted. In attempting to restore the original configuration, the system tried to add the CHPID(s). The system could not add the CHPID(s).

In the message text:

cuid

The control unit identifier.

chp1,[chp2...]

The list of channel path identifiers.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

LIMITS EXCEEDED

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

CAN NOT ADD CU TO A DEDICATED CHPID CONNECTION

The system could not add a CU because a CHPID connection was dedicated to another CU.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system does not return to the original configuration definition. The system writes a logrec data set error record.

Operator response: Do one of the following:

- If **CAN NOT ADD CU TO A DEDICATED CHPID CONNECTION** appears in the message text, check if the correct configuration was entered on the ACTIVATE request. If the configuration was correct, notify the system programmer.
- Enter an ACTIVATE RECOVER request to restore the original configuration definition. If the problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only dynamic I/O configuration changes until you perform a power-on reset (POR).

System programmer response: If **CAN NOT ADD CU TO A DEDICATED CHPID CONNECTION** appears in the message text, change the state of the connection using the enterprise systems connection (ESCON) manager. Otherwise, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=0197,CAN NOT ADD UNIT ADDRESS(ES) *xx*, [*yy>...*] TO CU *cuid* DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to activate an IODF that required the specified unit address(es) to be changed. An error occurred after the address range was modified. In attempting to restore the original configuration, the system tried to restore the original address range. The system could not restore the address range.

In the message text:

cuid

The control unit identifier.

xx[,yy...]

The list of unit addresses.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

LIMITS EXCEEDED

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system does not return to the original configuration definition. The system writes a logrec data set error record.

Operator response: Enter an ACTIVATE RECOVER request to restore the original configuration definition. If the problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only dynamic I/O configuration changes until you perform a power-on reset (POR).

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=0198,CANNOT DELETE PARTITION FROM DEVICE CANDIDATE LIST *dev* DESCTEXT=DEVICE (ONLINE | ALLOCATED)

As a result of an ACTIVATE request from a system running in a logical partition, the system tried to delete that logical partition from the device candidate list. The I/O device is online or allocated. Therefore, the logical partition cannot be deleted from the device candidate list.

For information about device candidate lists, see *z/OS HCD User's Guide*.

In the message text:

dev

The device number of the I/O device.

System action: The system rejects the ACTIVATE request.

Operator response: Vary the I/O device offline. If the I/O device is allocated; wait for the job to terminate, or cancel the job; then vary the I/O device offline. Enter the ACTIVATE request again.

REASON=0199,CANNOT DELETE PARTITION FROM DEVICE CANDIDATE LIST *dev* DESCTEXT=DEVICE PINNED, [ASID = *asid*]

reason

As a result of an ACTIVATE request from a system running in a logical partition, the system tried to delete that logical partition from the device candidate list. The I/O device is pinned, and therefore the logical partition cannot be deleted from the device candidate list.

For information about device candidate lists, see *z/OS HCD User's Guide*.

In the message text:

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dev The device number of the I/O device.

asid The address space identifier (ASID) of the address space where the program that pinned the I/O device is running. If this field does not appear in the message text, the pin request is not associated with an address space.

System action: The system rejects the ACTIVATE request.

Operator response: Enter the ACTIVATE request again. If the problem recurs, notify the system programmer.

System programmer response: Wait for the program that pinned the I/O device to complete. If necessary retry ACTIVATE; if the problem recurs, modify the target IODF so the logical partition is not deleted from the device candidate list.

Although pinned devices are detected during activates with the TEST option, some products and functions like Geographically Dispersed Parallel Sysplex (GDPS) and z/OS Basic HyperSwap rely on signals issued during real (non-TEST) activates in order to prevent deletion of those paths. Therefore, activates with the TEST option might not alert you to the potential of a real activate failure that can occur as a result of pinned devices, and the system does not issue this message. Devices/paths can become pinned or unpinned if a real activate request is performed at a separate time from a test activate.

REASON=019A,CANNOT DELETE PARTITION FROM DEVICE CANDIDATE LIST *dev* DESCTEXT=PIN STATUS UNKNOWN

As a result of an ACTIVATE request from a system running in a logical partition, the system tried to delete that logical partition from the device candidate list. Because of a previous system error, the system could not determine if the I/O device was pinned. The logical partition cannot be safely deleted from the device candidate list for the remainder of the IPL.

For information about device candidate lists, see *z/OS HCD User's Guide*.

In the message text:

dev The device number of the I/O device.

System action: The system rejects the ACTIVATE request.

Operator response: Modify the target IODF so the logical partition is not deleted from the device candidate list. Enter the ACTIVATE request again.

REASON=019B,CANNOT DELETE PARTITION FROM CHPID CANDIDATE LIST *chpid* DESCTEXT=CHPID CONFIGURED ONLINE

As a result of an ACTIVATE request from a system running in a logical partition, the system tried to delete that logical partition from the channel path candidate list. The channel path is configured online to the logical partition and therefore cannot be deleted from the channel path candidate list.

For information about channel path candidate lists, see *z/OS HCD User's Guide*.

In the message text:

chpid The channel path identifier (CHPID).

System action: The system rejects the ACTIVATE request.

Operator response: Configure the CHPID offline. Enter the ACTIVATE request again.

REASON=019C,CANNOT PERFORM ACTIVATE RECOVER DESCTEXT=*text*

The system could not perform the activate recover.

In the message text:

text

One of the following:

INCOMPATIBLE OPERATING SYSTEM IDENTIFIER *xx* ENCOUNTERED

The retrieved operating system identifier is not compatible with the system performing the ACTIVATE RECOVER request. The partition that caused the recover-required situation is incompatible with the partition that is trying to perform the ACTIVATE RECOVER.

xx The operating system identifier.

INCOMPATIBLE VERSION yy ENCOUNTERED

The retrieved version is not compatible with the system performing the ACTIVATE RECOVER request. The partition that caused the recover-required situation is incompatible with the partition that is trying to perform the ACTIVATE RECOVER.

yy The version.

System action: The system rejects the ACTIVATE request.

Operator response: Depending on the message text, do one of the following:

INCOMPATIBLE OPERATING SYSTEM IDENTIFIER xx ENCOUNTERED

Perform the ACTIVATE request with the RECOVER option on the partition that originally encountered the ACTIVATE failure or a partition that has an operating system identifier that is compatible with the partition that originally encountered the ACTIVATE failure.

INCOMPATIBLE VERSION yy ENCOUNTERED

Perform the ACTIVATE request with the RECOVER option on the partition that originally encountered the ACTIVATE failure or a partition that can perform a recover request for the version that was stored by the last system that modified the hardware configuration

REASON=01A0,CANNOT DELETE PARTITION ACCESS FROM DEVICE(S) dev1[-dev2] DESCTEXT=text

As a result of an ACTIVATE request, the system tried to delete one or more logical partitions from the device candidate lists of one or more I/O devices. The system could not delete the logical partition(s) from the device candidate list(s) of the I/O device(s).

For information about device candidate lists, see *z/OS HCD User's Guide*.

In the message text:

dev1[-dev2]

The range of device numbers for I/O devices.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

LIMITS EXCEEDED

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS PROCESSOR

The processor does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary error occurred when the system tried to update the hardware I/O configuration.

System action: The system rejects the ACTIVATE request and writes a logrec data set error record.

Operator response: Depending on the message text, do one of the following:

SYSTEM ERROR

Notify the system programmer.

LIMITS EXCEEDED

Notify the system programmer.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

Notify the system programmer.

REQUEST NOT SUPPORTED BY THIS PROCESSOR

Notify the system programmer.

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TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

Enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODF.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=01A1,CANNOT ADD PARTITION ACCESS TO DEVICE(S) *dev1*[-*dev2*] DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to add one or more logical partitions to the device candidate lists of one or more I/O devices. The system could not add the logical partition(s) to the device candidate list(s) of the I/O device(s).

For information about device candidate lists, see *z/OS HCD User's Guide*.

In the message text:

dev1 - *dev2*

The list of device numbers.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

LIMITS EXCEEDED

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS PROCESSOR

The processor does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary error occurred when the system tried to update the hardware I/O configuration.

System action: The system rejects the ACTIVATE request and writes a logrec data set error record.

Operator response: Depending on the message text, do one of the following:

SYSTEM ERROR

Notify the system programmer.

LIMITS EXCEEDED

Notify the system programmer.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

Notify the system programmer.

REQUEST NOT SUPPORTED BY THIS PROCESSOR

Notify the system programmer.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

Enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODF.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=01A2,CANNOT DELETE PARTITION(S) FROM CHPID CANDIDATE LIST *chpid* DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to delete one or more logical partition(s) from the channel path candidate list.

For information about channel path candidate lists, see *z/OS HCD User's Guide*.

In the message text:

chpid

The channel path identifier (CHPID).

text

One of the following:

SYSTEM ERROR

An internal error occurred.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary error occurred when the system tried to update the hardware I/O configuration.

CHPID IS CONFIGURED TO ONE OR MORE AFFECTED PARTITIONS

The delete request was conditional (FORCE=DEVICE) and the specified channel path is currently configured online to one or more of the logical partitions that are being deleted from the candidate list.

System action: The system rejects the ACTIVATE request and writes a logrec data set error record.

Operator response: Depending on the message text, do one of the following:

SYSTEM ERROR

Notify the system programmer.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

Enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODF.

CHPID IS CONFIGURED TO ONE OR MORE AFFECTED PARTITIONS

Configure the channel path offline to the logical partition(s) that are being removed from the candidate list, and, if successful, issue the ACTIVATE again. The system detects only the first occurrence of a channel path being online for this reason. Review other changes to ensure that the next ACTIVATE does not fail when the next occurrence is encountered. Or, consider using ACTIVATE FORCE=CANDIDATE to unconditionally delete the logical partition(s) from the channel path's candidate list. For information about the ACTIVATE command, see *z/OS MVS System Commands*. For information about channel path candidate lists, see *z/OS HCD User's Guide*.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=01A3,CANNOT ADD PARTITION(S) TO CHPID CANDIDATE LIST *chpid* DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to add one or more logical partitions to the channel path candidate list. The system could not add the logical partition(s) to the channel path candidate list.

For information about channel path candidate lists, see *z/OS HCD User's Guide*.

In the message text:

chpid

The channel path identifier (CHPID).

text

One of the following:

SYSTEM ERROR

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary error occurred when the system tried to update the hardware I/O configuration.

System action: The system rejects the ACTIVATE request and writes a logrec data set error record.

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Operator response: Depending on the message text, do one of the following:

SYSTEM ERROR

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

Notify the system programmer.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

Enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODF.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=01A4,CANNOT DELETE LOGICAL PARTITION *xxxxxxx* FROM CSS *cc* DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to delete a logical partition from the specified logical channel subsystem. The system could not delete the logical partition from the logical channel subsystem.

In the message text:

xxxxxxx

The logical partition name.

cc The logical channel subsystem ID.

text

One of the following:

SYSTEM ERROR DIAGNOSTIC INFO *diag info*

An internal error occurred.

LOGICAL PARTITION IS ACTIVE

The logical partition to be deleted is active.

RESOURCES ARE CONFIGURED TO THIS PARTITION

Resources, such as cryptographic devices or CHPIDs, are still configured to the specified partition.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary error occurred when the system tried to update the hardware I/O configuration.

System action: The system rejects the ACTIVATE request and writes a logrec data set error record.

Operator response: Depending on the message text, do one of the following:

SYSTEM ERROR

LOGICAL PARTITION IS ACTIVE

RESOURCES ARE CONFIGURED TO THIS PARTITION

Notify the system programmer.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

Enter the DISPLAY IOS,CONFIG MVS command to determine whether recovery is required.

- If recovery is not required, the temporary condition occurred on the first attempt to update the hardware. In this case, the system is returned to the original I/O configuration definition. Retry the ACTIVATE request. It is likely to work a second or subsequent time, as the condition is only temporary.
- If recovery is required, the temporary condition did not occur on the first attempt to update the hardware. In this case, the hardware has been partially updated and the software I/O configuration definition updated to match the target IODF. Use the RECOVER option to recover the hardware I/O configuration definition to the target IODF.

System programmer response: Search problem reporting databases for a fix to the problem. If no fix exists, contact the IBM Support Center.

If the message text is RESOURCES ARE CONFIGURED TO THIS PARTITION, determine which resources are still configured to the partition. For example, the cryptographic controls on the Support Element (SE) or Hardware Management Console (HMC) can be used to determine whether cryptographic devices are configured

to this partition and to remove those devices from the partition. If no resources are found to be configured to the partition, contact the IBM Support Center to determine the cause of the problem.

REASON=01A8, CANNOT DELETE *type aid DESCTEXT=text*

As a result of an ACTIVATE request, the system tried to delete an I/O adapter from the configuration. The system could not delete the I/O adapter.

In the message text:

type

The adapter type. One of the following:

- PCIE FUNCTION

aid

The adapter ID. The PCIe function ID when adapter type is PCIE FUNCTION.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

PCIE FUNCTION IS IN A STATE THAT PREVENTS IT FROM BEING DELETED

The PCIe function is in a model-dependent state that prevents it from being deleted.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary error occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request and writes a logrec data set error record.

Operator response: Depending on the message text, do one of the following:

SYSTEM ERROR

Notify the system programmer.

REQUEST NOT SUPPORTED BY THIS MODEL

Notify the system programmer.

PCIE FUNCTION IS IN A STATE THAT PREVENTS IT FROM BEING DELETED

Notify the system programmer.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

Enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODF.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=01A9, CANNOT ADD *type aid DESCTEXT=text*

As a result of an ACTIVATE request, the system tried to add an I/O adapter to the configuration. The system could not add the I/O adapter.

In the message text:

type

The adapter type. One of the following:

- PCIE FUNCTION

aid

The adapter ID. The PCIe function ID when adapter type is PCIE FUNCTION.

text

One of the following:

IOS500I

SYSTEM ERROR

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary error occurred when the system tried to update the hardware.

RESOURCE IS ALREADY DEFINED FOR PHYSICAL CHANNEL *cccc*

The system could not make the configuration change. The physical channel id specified has already been associated with another resource, such as a cryptographic device, a chpid, or another I/O adapter.

System action: The system rejects the ACTIVATE request and writes a logrec data set error record.

Operator response: Depending on the message text, do one of the following:

SYSTEM ERROR

Notify the system programmer.

REQUEST NOT SUPPORTED BY THIS MODEL

Notify the system programmer.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

Enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODE.

RESOURCE IS ALREADY DEFINED FOR PHYSICAL CHANNEL *cccc*

Notify the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

If message text is RESOURCE IS ALREADY DEFINED FOR PHYSICAL CHANNEL *cccc*, determine whether any cryptographic device is configured by checking the cryptographic controls on the Hardware Management Console. If the physical channel id is used for a cryptographic device, modify the PCIe function definition to use another id. If a cryptographic device is not defined at the above location, process as a system error.

REASON=01AA,CANNOT DELETE PARTITION ACCESS FROM *type aid* DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to delete one or more logical partitions from the I/O adapter candidate list. The system could not delete the logical partition(s) from the candidate list of the specified I/O adapter.

In the message text:

type

The adapter type. One of the following:

- PCIE FUNCTION

aid

The adapter ID. The PCIe function ID when adapter type is PCIE FUNCTION.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

PCIE FUNCTION IS CONFIGURED TO ONE OR MORE AFFECTED PARTITIONS

The delete request was conditional (FORCE=CANDIDATE was not specified) and the specified I/O adapter is currently configured to one or more of the logical partitions that are being deleted from the candidate list.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary error occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request and writes a logrec data set error record.

Operator response: Depending on the message text, do one of the following:

SYSTEM ERROR

Notify the system programmer.

REQUEST NOT SUPPORTED BY THIS MODEL

Notify the system programmer.

PCIE FUNCTION IS CONFIGURED TO ONE OR MORE AFFECTED PARTITIONS

Configure the PCIe function offline to the logical partition(s) that are being removed from the candidate list, and, if successful, issue the ACTIVATE again. The system detects only the first occurrence of a PCIe function being online for this reason. Review other changes to ensure that the next ACTIVATE does not fail when the next occurrence is encountered. Or, consider using ACTIVATE FORCE=CANDIDATE to unconditionally delete the logical partition(s) from the PCIe function's candidate list. For information about the ACTIVATE command, see *z/OS MVS System Commands*. For information about PCIe function candidate lists, see *z/OS HCD User's Guide*.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

Enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODF.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=01AB,CANNOT ADD PARTITION ACCESS TO *type aid* DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to add one or more logical partitions to the I/O adapter candidate list. The system could not add the logical partition(s) to the candidate list of the specified I/O adapter.

In the message text:

type

The adapter type. One of the following:

- PCIE FUNCTION

aid

The adapter ID. The PCIe function ID when adapter type is PCIE FUNCTION.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary error occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request and writes a logrec data set error record.

Operator response: Depending on the message text, do one of the following:

SYSTEM ERROR

Notify the system programmer.

REQUEST NOT SUPPORTED BY THIS MODEL

Notify the system programmer.

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TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

Enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODF.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=01B0,CANNOT DELETE PARTITION ACCESS FROM DEVICE(S) *dev1*[-*dev2*] DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to activate an IODF to add one or more logical partitions to the device candidate lists of one or more I/O devices. An error occurred after the logical partition(s) were added to the device candidate list(s) of the I/O device(s). In attempting to restore the original configuration, the system could not delete the logical partition(s) from the device candidate list(s) of the I/O device(s).

For information about device candidate lists, see *z/OS HCD User's Guide*.

In the message text:

dev1 - *dev2*

The range of device numbers for I/O devices.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

LIMITS EXCEEDED

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS PROCESSOR

The processor does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary error occurred when the system tried to update the hardware I/O configuration.

System action: The system rejects the ACTIVATE request and writes a logrec data set error record without returning to the original configuration definition.

Operator response: Enter an ACTIVATE RECOVER request to restore the original configuration definition. If the problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only dynamic I/O configuration changes until you perform a power-on reset (POR) (POR).

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=01B1,CANNOT ADD PARTITION ACCESS TO DEVICE(S) *dev1*[-*dev2*] DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to activate an IODF to delete one or more logical partitions from the device candidate lists of one or more I/O devices. An error occurred after the logical partition(s) were deleted from the device candidate list(s) of the I/O device(s). In attempting to restore the original configuration, the system could not add the logical partition(s) to the device candidate list(s) of the I/O device(s).

For information about device candidate lists, see *z/OS HCD User's Guide*.

In the message text:

dev1 - *dev2*

The range of device numbers for I/O devices.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

LIMITS EXCEEDED

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS PROCESSOR

The processor does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary error occurred when the system tried to update the hardware I/O configuration.

System action: The system rejects the ACTIVATE request and writes a logrec data set error record without returning to the original configuration definition.

Operator response: Enter an ACTIVATE RECOVER request to restore the original configuration definition. If the problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only dynamic I/O configuration changes until you perform a power-on reset (POR) (POR).

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=01B2,CANNOT DELETE PARTITION(S) FROM CHPID CANDIDATE LIST *chpid* DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to activate an IODF to add one or more logical partitions to the channel path candidate list for the specified CHPID. An error occurred after the logical partition(s) were added. In attempting to restore the original configuration, the system could not delete the logical partition(s) from the channel path candidate list.

For information about channel path candidate lists, see *z/OS HCD User's Guide* .

In the message text:

chpid

The channel path identifier.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary error occurred when the system tried to update the hardware I/O configuration.

CHPID IS CONFIGURED TO ONE OR MORE AFFECTED PARTITIONS

The delete request was conditional and the specified channel path is currently configured online to one or more of the logical partitions that are being deleted from the candidate list.

System action: The system rejects the ACTIVATE request and writes a logrec data set error record without returning to the original configuration definition.

Operator response: Enter an ACTIVATE RECOVER request to restore the original configuration definition. If the problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only dynamic I/O configuration changes until you perform a power-on reset (POR) (POR).

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=01B3,CANNOT ADD PARTITION(S) TO CHPID CANDIDATE LIST *chpid* DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to activate an IODF to delete one or more logical partitions from the channel path candidate list for the specified channel path. An error occurred after the logical partition(s) were deleted. In attempting to restore the original configuration, the system could not add the logical partition(s) to the channel path candidate list.

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For information about channel path candidate lists, see *z/OS HCD User's Guide* .

In the message text:

chpid

The channel path identifier.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary error occurred when the system tried to update the hardware I/O configuration.

System action: The system rejects the ACTIVATE request and writes a logrec data set error record without returning to the original configuration definition.

Operator response: Enter an ACTIVATE RECOVER request to restore the original configuration definition. If the problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only dynamic I/O configuration changes until you perform a power-on reset (POR).

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

| **REASON=01B8,CANNOT DELETE** *type aid* **DESCTEXT=***text*

| As a result of an ACTIVATE request, the system tried to activate an IODF to add the specified I/O adapter. An error occurred after the I/O adapter was added. In attempting to restore the original configuration, the system could not delete the I/O adapter.

| In the message text:

| *type*

The adapter type. One of the following:

- PCIE FUNCTION

| *aid*

The adapter ID. The PCIe function ID when adapter type is PCIE FUNCTION.

| *text*

One of the following:

| **SYSTEM ERROR**

| An internal error occurred.

| **TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER**

| The system could not make the configuration change. A temporary error occurred when the system tried to update the hardware.

| System action: The system rejects the ACTIVATE request and writes a logrec data set error record without returning to the original configuration definition.

| Operator response: Enter an ACTIVATE RECOVER request to restore the original configuration definition. If the problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only dynamic I/O configuration changes until you perform a power-on reset (POR).

| System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=01B9,CANNOT ADD *type aid* DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to activate an IODF to delete the specified I/O adapter. An error occurred after the I/O adapter was deleted. In attempting to restore the original configuration, the system could not add the I/O adapter.

In the message text:

type

The adapter type. One of the following:

- PCIE FUNCTION

aid

The adapter ID. The PCIe function ID when adapter type is PCIE FUNCTION.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary error occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request and writes a logrec data set error record without returning to the original configuration definition.

Operator response: Enter an ACTIVATE RECOVER request to restore the original configuration definition. If the problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only dynamic I/O configuration changes until you perform a power-on reset (POR).

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=01BA,CANNOT DELETE PARTITION ACCESS FROM *type aid* DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to activate an IODF to add one or more logical partitions to the candidate list for the specified I/O adapter. An error occurred after the logical partition(s) were added to the candidate list. In attempting to restore the original configuration, the system could not delete the logical partition(s) from the I/O adapter.

In the message text:

type

The adapter type. One of the following:

- PCIE FUNCTION

aid

The adapter ID. The PCIe function ID when adapter type is PCIE FUNCTION.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

PCIE FUNCTION IS CONFIGURED TO ONE OR MORE AFFECTED PARTITIONS

The delete request was conditional (FORCE=CANDIDATE was not specified) and the specified I/O adapter is currently configured to one or more of the logical partitions that are being deleted from the candidate list.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary error occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request and writes a logrec data set error record without returning to the original configuration definition.

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| Operator response: Enter an ACTIVATE RECOVER request to restore the original configuration definition. If the
| problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only
| dynamic I/O configuration changes until you perform a power-on reset (POR).

| System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists,
| contact the IBM Support Center.

| **REASON=01BB,CANNOT ADD PARTITION ACCESS TO** *type aid* **DESCTEXT=***text*

| As a result of an ACTIVATE request, the system tried to activate an IODF to delete one or more logical partitions
| from the candidate list for the specified I/O adapter. An error occurred after the logical partition(s) were deleted
| from the candidate list. In attempting to restore the original configuration, the system could not add the logical
| partition(s) to the I/O adapter.

| In the message text:

| *type*

| The adapter type. One of the following:

- | • PCIE FUNCTION

| *aid*

| The adapter ID. The PCIe function ID when adapter type is PCIE FUNCTION.

| *text*

| One of the following:

| **SYSTEM ERROR**

| An internal error occurred.

| **TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER**

| The system could not make the configuration change. A temporary error occurred when the system
| tried to update the hardware.

| System action: The system rejects the ACTIVATE request and writes a logrec data set error record without
| returning to the original configuration definition.

| Operator response: Enter an ACTIVATE RECOVER request to restore the original configuration definition. If the
| problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only
| dynamic I/O configuration changes until you perform a power-on reset (POR).

| System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists,
| contact the IBM Support Center.

| **REASON=01C0,CANNOT DELETE MANAGED CHPID(S) FROM CU** *cuid* **DESCTEXT=CHPID(S):** *chpid1,[chpid2...]* *text*

| As a result of an ACTIVATE request, the system tried to delete the specified managed channel paths from one or
| more control units. The system could not delete the managed channel paths.

| In the message text:

| *cuid*

| The control unit identifier.

| *text*

| One of the following:

| **SYSTEM ERROR**

| An internal error occurred.

| **REQUEST NOT SUPPORTED BY THIS MODEL**

| The machine does not support dynamic changes.

| **TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER**

| The system could not make the configuration change. A temporary error occurred when the system
| tried to update the hardware I/O configuration.

| System action: The system rejects the ACTIVATE request. The system writes a logrec data set error record.

| Operator response: Depending on the message text, do one of the following:

SYSTEM ERROR

Notify the system programmer.

REQUEST NOT SUPPORTED BY THIS MODEL

Notify the system programmer.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

Enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODF.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=01C1,CANNOT MODIFY THE NUMBER OF MANAGED CHPID(S) ON CU *cuid* DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to modify the number of managed channel paths on the control unit. The system could not modify the number of managed channel paths.

In the message text:

cuid

The control unit identifier.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

LIMITS EXCEEDED

An internal error occurred.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary error occurred when the system tried to update the hardware I/O configuration.

System action: The system rejects the ACTIVATE request. The system writes a logrec data set error record.

Operator response: Depending on the message text, do one of the following:

SYSTEM ERROR

Notify the system programmer.

REQUEST NOT SUPPORTED BY THIS MODEL

Notify the system programmer.

LIMITS EXCEEDED

Notify the system programmer.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

Enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODF.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=01C2,CANNOT ACCESS DATA FOR CONTROL UNIT *cuid* DESCTEXT= *text*

As a result of an ACTIVATE request, the system tried to access data for the control unit. The attempt to access the control unit data failed.

In the message text:

cuid

The control unit identifier.

IOS500I

text

One of the following:

SYSTEM ERROR

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

INVALID CONTROL UNIT NUMBER

An internal error occurred.

NOT AUTHORIZED TO EXECUTE COMMAND

An internal error occurred.

System action: The system rejects the ACTIVATE request. The system writes a logrec data set error record.

Operator response: Depending on the message text, do one of the following:

SYSTEM ERROR

Notify the system programmer.

REQUEST NOT SUPPORTED BY THIS MODEL

Notify the system programmer.

INVALID CONTROL UNIT NUMBER

Notify the system programmer.

NOT AUTHORIZED TO EXECUTE COMMAND

Notify the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=01C3, CANNOT VARY PATH *cc* OFFLINE TO SYSTEM *xxxxxxx* DESCTEXT=PATH CANNOT BE VARIED OFFLINE TO A MEMBER OF THE SYSPLEX

As a result of an ACTIVATE request, the system tried to remove a managed CHPID from a control unit. The ACTIVATE could not vary the managed path offline to all systems in the LPAR cluster on this CPC.

In the message text:

cc The channel path identifier.

xxxxxxx

System name.

System action: The system rejects the ACTIVATE request.

Operator response: Check to see if the channel path is the last path to a device. Otherwise, notify the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=01C4, CANNOT DETERMINE CU(s) ATTACHED TO CHPID *cc* DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to remove a managed CHPID from a control unit. The ACTIVATE could not determine the control units attached to the CHPID.

In the message text:

cc The channel path identifier.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

NOT AUTHORIZED TO EXECUTE COMMAND

An internal error occurred.

System action: The system rejects the ACTIVATE request and writes a logrec data set error record.

Operator response: Notify the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=01C5,DYNAMIC I/O ENQUEUE COULD NOT BE OBTAINED

One of the following occurred:

- The system is still processing a previous ACTIVATE request that requested a dynamic change.
- As a result of a previous ACTIVATE request, the system is rebuilding the EDT. The system did not yet complete this process. A possible cause is that a mount request for a device in the old EDT is outstanding.
- Another function or subsystem is holding the dynamic channel path management resource.

System action: The system rejects the ACTIVATE request and writes a logrec data set error record.

Operator response: Issue the D GRS,RES=(SYSZIOS,*) command to determine the function or subsystem holding the resource and if there is contention on the resource. (Note: The minor name for the resource is "DYNAMIC" or "DYNAMIC" concatenated with the IOS XCF group name). If there is contention on the resource, issue D GRS,ANALYZE,BLOCKER to show more information related to the contention. Wait for the function or subsystem to finish or take steps to clear the contention. Enter the ACTIVATE request again.

REASON=01C6,MAXIMUM MANAGED CHPID COUNT FOR CU *cuid* MAY NOT BE VALID DESCTEXT= *text*

As a result of an ACTIVATE request, the system tried to access data for the control unit. The attempt to access the control unit data failed.

In the message text:

cuid

The control unit identifier.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

INVALID CONTROL UNIT NUMBER

An internal error occurred.

NOT AUTHORIZED TO EXECUTE COMMAND

An internal error occurred.

System action: The system continues the ACTIVATE request and writes a logrec data set error record.

Operator response: Notify the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=01C7,DISCOVERY ENQUEUE COULD NOT BE OBTAINED

System action: Activate processing terminates.

System programmer response: Try the ACTIVATE processing during a time when a discovery and auto-configuration request is not being processed.

REASON=01D0,CANNOT MODIFY THE NUMBER OF MANAGED CHPID(S) ON CU *cuid* DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to modify the number of managed channel paths on the

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control unit. An error occurred after modifying the number of managed channel paths on the control unit. In attempting to restore the original configuration, the system could not modify the number of managed channel paths on the control unit to its original value.

In the message text:

cuid

The control unit identifier.

text

One of the following:

SYSTEM ERROR

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

LIMITS EXCEEDED

An internal error occurred.

System action: The system rejects the ACTIVATE request and writes a logrec data set error record without returning to the original configuration definition.

Operator response: Enter an ACTIVATE RECOVER request to restore the original configuration definition. If the problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only dynamic I/O configuration changes until you perform a power-on reset (POR).

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

[REASON | WARN]=0200, NEW EDT COULD NOT BE BUILT IODF ACCESS FAILED. DATA-IN-VIRTUAL REASON CODE IS *rsnc*

As a result of an ACTIVATE request, the system tried to access the IODF data-in-virtual services. The system could not access the data-in-virtual services.

In the message text:

rsnc The reason code from DIV.

System action: The system does not build the new EDT. If REASON appears in the message text, the system tries to back out to the previous configuration. If WARN appears in the message text, the system continues processing in degraded mode.

Operator response: See the operator response for the data-in-virtual reason code and any messages that the system issued. If the error is in IBM code, notify the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

[REASON | WARN]=0202, NEW EDT COULD NOT BE BUILT ACTIVATE FUNCTION CANCELLED BY OPERATOR.

The operator entered an ACTIVATE request to build a new eligible devices table (EDT). The system could not build the EDT. One or more jobs are currently waiting for MOUNT or a shared device or data set in the EDT. The operator entered a CANCEL command in reply to the activate request.

System action: The system does not process the ACTIVATE request. The system previously issued the following messages:

- IEF690I, followed by IEF235D for MOUNT requests.
- IEF488I or IEF489I, for exclusive allocation requests on a device.
- IEF458D, followed by IEF863I, for data set requests.
- IEF289E, if messages were suppressed by the specific wait user exit or the allocation/offline user exit.

Operator response: Satisfy all pending MOUNT requests, and either cancel or wait for all jobs currently waiting for datasets or devices. When all such jobs have completed or been cancelled, retry the ACTIVATE request.

[REASON | WARN]=0203, NEW EDT COULD NOT BE BUILT EDT BUILD FAILED, UNDETERMINED SYSTEM ERROR.

The system found a an error while trying to build the EDT.

System action: The system does not build the new EDT. If REASON appears in the message text, the system tries to back out to the previous configuration. If WARN appears in the message text, the system continues processing in degraded mode.

Operator response: Notify the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

[REASON | WARN]=0204, NEW EDT COULD NOT BE BUILT EDT BUILD ABENDED, RECOVERY PROCESSING WAS ENTERED

The system found a an error while trying to build the EDT.

System action: The system does not build the new EDT. If REASON appears in the message text, the system tries to back out to the previous configuration. If WARN appears in the message text, the system continues processing in degraded mode.

Operator response: Notify the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

[REASON | WARN]=0205, NEW EDT COULD NOT BE BUILT BACKOUT OF EDT BUILD FAILED, UNDETERMINED SYSTEM ERROR.

While the system was trying to back out of an EDT build to the previous EDT, an error occurred.

System action: The system does not build the new EDT. The EDT that contains the previous configuration remains in effect. The system continues processing, but possibly in degraded mode.

Operator response: Notify the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

[REASON | WARN]=0206, NEW EDT COULD NOT BE BUILT DESCTEXT=BACKOUT OF EDT BUILD ABENDED, RECOVERY WAS ENTERED.

While the system was trying to back out of an EDT build to the previous EDT, an error occurred.

System action: The system does not build the new EDT. The EDT that contains the previous configuration remains in effect. The system continues processing, but possibly in degraded mode.

Operator response: Notify the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

[REASON | WARN]=0207, NEW EDT COULD NOT BE BUILT DESCTEXT=INCORRECT EDT ID SPECIFIED WITH ACTIVATE COMMAND.

The operator entered an ACTIVATE request to activate an EDT in the IODF. The EDT identifier is not valid.

System action: The system does not process the ACTIVATE request.

Operator response: Enter the ACTIVATE request again, specifying a valid EDT Identifier.

[REASON | WARN]=0208, NEW EDT COULD NOT BE BUILT DESCTEXT=INCORRECT CONFIGURATION ID SPECIFIED WITH ACTIVATE COMMAND.

The operator entered an ACTIVATE request to activate a configuration in the IODF. The configuration identifier is not valid.

System action: The system does not process the ACTIVATE request.

Operator response: Enter the ACTIVATE request again, specifying a valid EDT Identifier.

[REASON | WARN]=0209, NEW EDT COULD NOT BE BUILT EDT BUILD FAILED, ESQA STORAGE NOT AVAILABLE.

As a result of an ACTIVATE request, the system tried to build a new eligible devices table (EDT). The system could not obtain enough ESQA storage to build the table.

System action: The system does not build the new EDT. If REASON appears in the message text, the system tries to back out to the previous configuration. If WARN appears in the message text, the system continues processing in degraded mode.

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Operator response: Free-up storage in the SQA. Retry the ACTIVATE.

[REASON | WARN]=0210, NEW EDT COULD NOT BE BUILT EDT BUILD FAILED, PRIVATE STORAGE NOT AVAILABLE.

As a result of an ACTIVATE request, the system tried to build a new eligible devices table (EDT). The system could not obtain enough private storage to build the table.

System action: The system does not build the new EDT. If REASON appears in the message text, the system tries to back out to the previous configuration. If WARN appears in the message text, the system continues processing in degraded mode.

Operator response: Analyze the new IODF and eliminate any redundant esoterics and unused devices. Retry the ACTIVATE.

REASON=0321,CANNOT DELETE COUPLING FACILITY DEVICE(S) dev1 [-dev2] DESCTEXT=text

As a result of an ACTIVATE request, the system tried to delete one or more coupling facility device(s). The system could not delete the device(s).

In the message text:

dev1 [-dev2]

The range of device numbers.

text One of the following:

SYSTEM ERROR

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system writes a logrec error record.

Operator response: If the message contains the text TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER, enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODF.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=0322,CANNOT ADD COUPLING FACILITY DEVICE(S) dev1 [-dev2] DESCTEXT=text

As a result of an ACTIVATE request, the system tried to add one or more coupling facility device(s). The system could not add the device(s).

In the message text:

dev1 [-dev2]

The list of device numbers.

text One of the following:

SYSTEM ERROR

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system writes a logrec error record.

Operator response: If the message contains the text TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER, enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODF.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

| **REASON=0323,THE CONNECTED SYSTEM NAME WILL BE CHANGED FOR COUPLING CHPID *xx* IN CSS *cc***
| **DESCTEXT=COUPLING CSYSTEM NAME CHANGES MIGHT AFFECT FUTURE CONNECTIVITY**

| A request was made to activate an IODF that required the Connected System (CSYSTEM) name of a CHPID, which supports coupling over InfiniBand (CIB) or coupling over PCIE (CS5) to be changed. The attempt to change the CSYSTEM name was successful.

Note: Modifying the CSYSTEM name of a channel path does not affect a connection if it already exists. However, if the existing connection is lost and needs to be reestablished, the new CSYSTEM name might or might not match the name of the system that was previously connected, but might match the name of a different system.

In the message text:

xx The channel path identifier (CHPID).
cc The logical channel subsystem for the devices.

System action: The system continues normal operation.

Operator response: No action in this system is necessary. When an ACTIVATE is complete for the connected system, and the CHPID is varied online in both systems, the connection is properly established.

System programmer response: None.

REASON=0324,CANNOT DELETE CF CHPID *chpid* DESCTEXT=*text*
The system could not delete the specified CF sender channel path.

In the message text:

chpid The channel path identifier (CHPID).
text One of the following:

SYSTEM ERROR

An internal error occurred.

LAST CHPID FOR ONE OR MORE PARTITIONS

The operator tried to delete the only channel path defined to one or more partitions in the system.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

CHPID IS IN A STATE THAT PREVENTS IT FROM BEING DELETED

The CHPID is in a model-dependent state that prevents it from being deleted.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system writes a logrec error record.

Operator response: Perform the indicated actions for the following message texts:

LAST CHPID FOR ONE OR MORE PARTITIONS

Notify the system programmer. After the system programmer modifies the target IODF, enter the ACTIVATE request again.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

Enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not

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required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODF.

System programmer response: If LAST CHPID FOR ONE OR MORE PARTITIONS appears in the message text, modify the target IODF such the channel path is not deleted. Otherwise, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=0325, CANNOT ADD CF CHPID *chpid* DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to add a CF sender channel path. The system could not add the channel path.

In the message text:

chpid The channel path identifier (CHPID).

text One of the following:

SYSTEM ERROR

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

THE CONNECTED SYSTEM (CSYSTEM) NAME SPECIFIED IS INCORRECT

The Connected System name specified on the CHPID definition was not recognized.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system writes a logrec error record.

Operator response: If the message contains the text TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER, enter a DISPLAY IOS, CONFIG MVS command to determine if recovery is required. If recovery is not required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODF.

If this message contains the text THE CONNECTED SYSTEM (CSYSTEM) NAME SPECIFIED IS INCORRECT, notify the System Programmer.

System programmer response: If the message contains the text THE CONNECTED SYSTEM (CSYSTEM) NAME SPECIFIED IS INCORRECT, check the IODF to determine the correct name of the connected system, correct the definition and retry the ACTIVATE request. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=0326, CANNOT DELETE COUPLING FACILITY CU *mfn* DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to delete a coupling facility control unit. The system could not delete the coupling facility control unit.

In the message text:

mfn The coupling facility control unit number.

text One of the following:

SYSTEM ERROR

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system writes a logrec error record.

Operator response: If the message contains the text TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER, enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODF.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=0327, CANNOT ADD COUPLING FACILITY CU *mfn* DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to add a coupling facility control unit. The system could not add the coupling facility control unit.

In the message text:

mfn The coupling facility control unit number.

text One of the following:

SYSTEM ERROR

An internal error occurred.

LIMITS EXCEEDED

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system writes a logrec error record.

Operator response: If the message contains the text TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER, enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODF.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

**REASON=0328, CANNOT DELETE CF CHPID(S) FROM COUPLING FACILITY CU *mfn* DESCTEXT=CHPID(S): *chp1* [,*chp2*...]
text chp1 [,*chp2*...]**

As a result of an ACTIVATE request, the system tried to delete the specified CF sender channel path(s) from a coupling facility control unit. The system could not delete the channel paths.

In the message text:

mfn The coupling facility control unit number.

chp1 [,*chp2*...]

The list of channel path identifiers (CHPIDs).

text One of the following:

SYSTEM ERROR

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system writes a logrec error record.

Operator response: If the message contains the text TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER, enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODF.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=032A, CANNOT ADD CF CHPID(S) TO COUPLING FACILITY CU *mfn* DESCTEXT=CHPID(S): *chp1[,chp2...]* *text*

As a result of an ACTIVATE request, the system tried to add the specified CF sender channel paths to a coupling facility control unit. The system could not add the channel path(s).

In the message text:

mfn The coupling facility control unit number.

chp1[,chp2...]
The list of channel path identifiers (CHPIDs).

text One of the following:

SYSTEM ERROR

An internal error occurred.

LIMITS EXCEEDED

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system writes a logrec error record.

Operator response: If the message contains the text TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER, enter a DISPLAY IOS,CONFIG MVS command to determine if recovery is required. If recovery is not required, enter the ACTIVATE request again. If recovery is required, enter an ACTIVATE RECOVER request to recover the hardware I/O configuration definition to the target IODF.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=032B, CANNOT CHANGE THE CONNECTED SYSTEM NAME FOR COUPLING CHPID *xx* IN CSS *cc* DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to modify the connected system name of a CHPID that supports coupling over InfiniBand or coupling over PCIE. The system could not modify the name.

In the message text:

xx The channel path identifier (CHPID).

cc The logical channel subsystem for the devices.

text One of the following:

SYSTEM ERROR - DIAGNOSTIC INFO *xxxx xxxx xx*

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

THE CONNECTED SYSTEM (CSYSTEM) NAME SPECIFIED IS INCORRECT

The Connected System name specified on the CHPID definition was not recognized.

System action: The system rejects the ACTIVATE request. The system writes a logrec error record.

Operator response: Notify the system programmer.

System programmer response: If the message contains the text THE CONNECTED SYSTEM (CSYSTEM) NAME SPECIFIED IS INCORRECT, verify that the Local System Name of the connected system in the processor section of the IODF and the Connected System Name of the CHPID are the same. If they are not the same, resolve any difference.

In any of the above cases, retry the ACTIVATE request. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=0330, CANNOT DELETE CF CHPID *chpid* DESCTEXT=CF CHPID CONFIGURED ONLINE

As a result of the ACTIVATE request, the system tried to delete the CF sender channel path. The channel path is configured online.

In the message text:

chpid The channel path identifier (CHPID).

System action: The system rejects the ACTIVATE request.

Operator response: Configure the channel path offline. Enter the ACTIVATE request again.

REASON=0331, CANNOT DELETE PARTITION FROM CF CHPID CANDIDATE LIST *chpid* DESCTEXT=CF CHPID CONFIGURED ONLINE

As a result of the ACTIVATE request, the system tried to delete a partition from the CHPID candidate list of a CF sender channel path. The channel path is configured online.

In the message text:

chpid The channel path identifier (CHPID).

System action: The system rejects the ACTIVATE request.

Operator response: Configure the channel path offline. Enter the ACTIVATE request again.

REASON=0332, CANNOT PROCESS REQUEST FOR RECEIVER, PEER OR COUPLING CHP *xx* DESCTEXT=*text*

In the message text:

xx The channel path identifier (CHPID).

text One of the following:

REQUEST NOT SUPPORTED BY THE SOFTWARE

The system rejects the ACTIVATE request because the correct level of software is not installed.

REQUEST NOT SUPPORTED BY THIS PROCESSOR

The system rejects the ACTIVATE request because the correct level of hardware is not installed.

System action: The system rejects the ACTIVATE request because the correct level of hardware or software is not installed.

Operator response: Notify the system programmer.

REASON=0341, CANNOT DELETE COUPLING FACILITY DEVICE(S) *dev1* [-*dev2*] DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to activate an IODF that required one or more coupling facility devices be added to the system. An error occurred after the coupling facility devices were added. In attempting to restore the original configuration, the system tried to delete the coupling facility device(s). The system could not delete the coupling facility device(s).

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In the message text:

dev1 [-*dev2*]

The range of device numbers for coupling facilities.

text One of the following:

SYSTEM ERROR

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system does not return to the original configuration definition. The system writes a logrec error record.

Operator response: Enter an ACTIVATE RECOVER request to restore the original configuration definition. If the problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only dynamic I/O configuration changes until you perform a power-on reset (POR).

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=0342, CANNOT ADD COUPLING FACILITY DEVICE(S) *dev1* [-*dev2*] **DESCTEXT=***text*

As a result of an ACTIVATE request, the system tried to activate an IODF that required one or more coupling facility devices to be deleted from the system. An error occurred after the coupling facility devices were deleted. In attempting to restore the original configuration, the system tried to add the coupling facility device(s). The system could not add the coupling facility device(s).

In the message text:

dev1 [-*dev2*]

The range of device numbers for coupling facilities.

text One of the following:

SYSTEM ERROR

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system does not return to the original configuration definition. The system writes a logrec error record.

Operator response: Enter an ACTIVATE RECOVER request to restore the original configuration definition. If the problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only dynamic I/O configuration changes until you perform a power-on reset (POR).

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=0344, CANNOT DELETE CF CHPID *chpid* **DESCTEXT=***text*

As a result of an ACTIVATE request, the system tried to activate an IODF that required the specified CF sender CHPID to be added to the configuration. An error occurred after the CHPID was added. In attempting to restore the original configuration, the system tried to delete the CHPID. The system could not delete the CHPID.

In the message text:

chpid The channel path identifier.

text One of the following:

SYSTEM ERROR

An internal error occurred.

LAST CHPID FOR ONE OR MORE PARTITIONS

The operator tried to delete the only channel path defined to one or more partitions in the system.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

CHPID IS IN A STATE THAT PREVENTS IT FROM BEING DELETED

The CHPID is in a model-dependent state that prevents it from being deleted.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system does not return to the original configuration definition. The system writes a logrec error record.

Operator response: Enter an ACTIVATE RECOVER request to restore the original configuration definition. If the problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only dynamic I/O configuration changes until you perform a power-on reset (POR).

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=0345, CANNOT ADD CF CHPID *chpid* DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to activate an IODF that required the specified CF sender CHPID to be deleted from the configuration. An error occurred after the CHPID was deleted. In attempting to restore the original configuration, the system tried to add the CHPID. The system could not add the CHPID.

In the message text:

chpid The channel path identifier.

text One of the following:

SYSTEM ERROR

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

THE CONNECTED SYSTEM (CSYSTEM) NAME SPECIFIED IS INCORRECT

The Connected System name specified on the CHPID definition was not recognized.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system does not return to the original configuration definition. The system writes a logrec error record.

Operator response: Enter an ACTIVATE RECOVER request to restore the original configuration definition. If the problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only dynamic I/O configuration changes until you perform a power-on reset (POR).

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

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REASON=0346, CANNOT DELETE COUPLING FACILITY CU *mfn* DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to activate an IODF that required a coupling facility control unit to be added to the configuration. An error occurred after the coupling facility control unit was added. In attempting to restore the original configuration, the system tried to delete the coupling facility control unit. The system could not delete the coupling facility control unit.

In the message text:

mfn The coupling facility control unit number.

text One of the following:

SYSTEM ERROR

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system does not return to the original configuration definition. The system writes a logrec error record.

Operator response: Enter an ACTIVATE RECOVER request to restore the original configuration definition. If the problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only dynamic I/O configuration changes until you perform a power-on reset (POR).

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=0347, CANNOT ADD COUPLING FACILITY CU *mfn* DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to activate an IODF that required a coupling facility control unit to be deleted from the configuration. As error occurred after the coupling facility control unit was deleted. In attempting to restore the original configuration, the system tried to add the coupling facility control unit. The system could not add the coupling facility control unit.

In the message text:

mfn The coupling facility control unit number.

text One of the following:

SYSTEM ERROR

An internal error occurred.

LIMITS EXCEEDED

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system does not return to the original configuration definition. The system writes a logrec error record.

Operator response: Enter an ACTIVATE RECOVER request to restore the original configuration definition. If the problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only dynamic I/O configuration changes until you perform a power-on reset (POR).

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=0348, CANNOT DELETE CF CHPID(S) FROM COUPLING FACILITY CU *mfn* DESCTEXT=CHPID(S): *chp1[,chp2...]*
text

As a result of an ACTIVATE request, the system tried to activate an IODF that required the specified CF sender CHPID(s) to be added to a coupling facility control unit. An error occurred after the CHPID(s) were added. In attempting to restore the original configuration, the system tried to delete the CHPID(s). The system could not delete the CHPID(s).

In the message text:

mfn The coupling facility control unit number.

chp1[,chp2...]

The list of channel path identifiers (CHPIDs).

text One of the following:

SYSTEM ERROR

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system does not return to the original configuration definition. The system writes a logrec error record.

Operator response: Enter an ACTIVATE RECOVER request to restore the original configuration definition. If the problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only dynamic I/O configuration changes until you perform a power-on reset (POR).

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

REASON=034A, CANNOT ADD CF CHPID(S) TO COUPLING FACILITY CU *mfn* DESCTEXT=CHPID(S): *chp1[,chp2...]* *text*

As a result of an ACTIVATE request, the system tried to activate an IODF that required the specified CF sender CHPID(s) to be deleted from a coupling facility control unit. An error occurred after the CHPID(s) were deleted. In attempting to restore the original configuration, the system tried to add the CHPID(s). The system could not add the CHPID(s).

In the message text:

mfn The coupling facility control unit number.

chp1[,chp2...]

The list of channel path identifiers (CHPIDs).

text One of the following:

SYSTEM ERROR

An internal error occurred.

LIMITS EXCEEDED

An internal error occurred.

INADEQUATE RESOURCES TO ACCOMMODATE CONFIGURATION CHANGE

An internal error occurred.

REQUEST NOT SUPPORTED BY THIS MODEL

The machine does not support dynamic changes.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system does not return to the original configuration definition. The system writes a logrec error record.

Operator response: Enter an ACTIVATE RECOVER request to restore the original configuration definition. If the problem occurs again, notify the system programmer. If recovery is unsuccessful, you can perform software-only dynamic I/O configuration changes until you perform a power-on reset (POR).

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

| REASON=034B, CANNOT CHANGE THE CONNECTED SYSTEM NAME FOR COUPLING CHPID *xx* IN CSS *cc* DESCTEXT=*text*

As a result of an ACTIVATE request, the system tried to activate an IODF that required the Connected System (CSYSTEM) name of a CHPID, which supports coupling over InfiniBand (CIB) or coupling over PCIE to be changed. An error occurred after the change was made. The system attempted to restore the original configuration, but the attempt to restore the original CSYSTEM name failed.

In the message text:

xx The channel path identifier (CHPID).

cc The logical channel subsystem for the devices.

text One of the followings:

SYSTEM ERROR - DIAGNOSTIC INFO *xxxx xxxx xx*

An internal error occurred.

THE CONNECTED SYSTEM (CSYSTEM) NAME SPECIFIED IS INCORRECT

The Connected System name specified on the CHPID definition was not recognized.

TEMPORARY CONDITION, TRY ACTIVATE REQUEST AGAIN LATER

The system could not make the configuration change. A temporary condition occurred when the system tried to update the hardware.

System action: The system rejects the ACTIVATE request. The system does not return to the original configuration definition. A symptom record of the event is recorded on SYS1.LOGREC for diagnostic purposes.

Operator response: Enter an ACTIVATE RECOVER request to restore the original configuration definition. If the problem occurs again, notify the system programmer. If the recovery is unsuccessful, you can perform software-only dynamic I/O configuration changes until you perform a power-on reset (POR).

System programmer response: The message reporting that THE CONNECTED SYSTEM NAME (CSYSTEM) IS INCORRECT must not occur, because the CSYSTEM name that the system tried to restore was in effect before the ACTIVATE request was attempted.

In any of the above cases, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

| REASON=0400, CANNOT DELETE PCIE FUNCTION *pfid* DESCTEXT=PCIE FUNCTION CONFIGURED ONLINE

As a result of an ACTIVATE request, the system tried to either delete a PCIe function from the configuration or delete access to the PCIe function by the current logical partition. The PCIe function is still configured or in use.

In the message text:

pfid

The PCIe function ID.

System action: The system rejects the ACTIVATE request and writes a logrec data set error record.

Operator response: Vary the PCIe function offline. Enter the ACTIVATE request again.

REASON=0401, PROCESSING MAY NOT HAVE COMPLETED SUCCESSFULLY

As a result of an ACTIVATE request, the system tried to perform a change request for one or more PCIe functions. The attempt to process these changes were not successful.

System action: The system rejects the ACTIVATE request and writes a logrec data set error record.

Operator response: Issue the DISPLAY PCIe command and verify the status of the PCIe service.

System programmer response: If the PCIe service is available, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

MESSAGES TRUNCATED AT 20. EXCESS IN SYSLOG. TOTAL MESSAGES = *n*.

As a result of an ACTIVATE request, an excessive number of messages may be generated. Only the header line, the first twenty results, and this end line are sent to the console. The remainder are written to the hardcopy log only to prevent a loss of error messages and to ensure the console is not flooded with messages. The excess messages are associated with message IOS516I.

In the message text:

n The total number of messages.

System action: The system has written the excess results to the hardcopy log only.

Operator Response: See the hardcopy log for the excess results under message IOS516I.

System Programmer Response: See the hardcopy log for the excess results under message IOS516I.

Source: Input/output supervisor (IOS)

IOS501I ACTIVATE CLEANUP COMPLETE

Explanation: An ACTIVATE command that required a new eligible device table (EDT) to be built has completed. The configuration change is no longer in progress and the system has deleted the old EDT.

System action: The system continues processing with the new I/O configuration, and can successfully complete new ACTIVATE requests and DDR swaps.

Source: Input/output supervisor (IOS)

Module: IOSVCOMMN, IOSVCMES

Routing code: N/A

Descriptor code: N/A

IOS502I IOS1502I**I/O CONFIGURATION CHANGED**

INVOKER = *jobname*

NEW IODF = *iodfname*

EDT REBUILT, NEW EDT ID = *edtid*

[NOTE | WARN] = *rc, rsntext*

DEVICE(S) DELETED FROM SUBCHANNEL SET 0 *dev3*, [*dev4...*].

DEVICE(S) DELETED FROM SUBCHANNEL SET 1 *dev3*, [*dev4...*].

DEVICE(S) DELETED FROM SUBCHANNEL SET 2 *dev3*, [*dev4...*].

DEVICE(S) DELETED FROM SUBCHANNEL SET 3 *dev3*, [*dev4...*].

DEVICE(S) ADDED FOR SUBCHANNEL SET 0 *dev1*, [*dev2...*].

DEVICE(S) ADDED FOR SUBCHANNEL SET 1 *dev1*, [*dev2...*].

DEVICE(S) ADDED FOR SUBCHANNEL SET 2 *dev1*, [*dev2...*].

DEVICE(S) ADDED FOR SUBCHANNEL SET 3 *dev1*, [*dev2...*].

DEVICE(S) DELETED FROM SOFTWARE CONFIGURATION

[FOR SUBCHANNEL SET *x*] *dev1*, [*dev2...*].

DEVICE(S) ADDED TO SOFTWARE CONFIGURATION

[FOR SUBCHANNEL SET *x*] *dev3*, [*dev4...*].

CU(S) DELETED [FROM CSS *cc*] *con3*, [*con4...*].

CU(S) ADDED [TO CSS *cc*] *con1*, [*con2>/mv>...*].

IOS502I

CHPID(S) DELETED [FROM CSS *cc*] *chpd3*, [*chpd4...*].
CHPID(S) ADDED [TO CSS *cc*] *chpd1*, [*chpd2...*].
CHPID *chpid* DELETED FROM DEVICE(S) [IN CSS *cc*] *dev3*, [*dev4...*].
CHPID *chpid* ADDED TO DEVICE(S) [IN CSS *cc*] *dev1*, [*dev2...*].
LOGICAL PARTITIONS DELETED FROM CSS *cc*
lpname1, [*lpname2...lpnamex*]
LOGICAL PARTITIONS ADDED TO CSS *cc* *lpname1*, [*lpname2...lpnamex*]
PCIE FUNCTION(S) DELETED *pfid1*, [*pfid2*]
PCIE FUNCTION(S) ADDED *pfid1*, [*pfid2*]

Explanation: The system sends this message to the hard-copy log when the system completes processing of an ACTIVATE request initiated via an ACTIVATE request or an HCD ACTIVATE panel. An installation can use this message to do the following:

- Audit configuration changes
- Allow message-based automation programs to make the added input/output (I/O) components available for use

In the message text:

INVOKER=*jobname*

The name of the program that issued the ACTIVATE request. If the ACTIVATE request was issued through the hardware configuration definition (HCD) application programmer interface (API), this field contains the name of the program that invoked the API. If the ACTIVATE request was issued through the HCD panels, this field contains the userid on which HCD is running. If the operator entered the ACTIVATE request, this field contains OPERATOR.

NEW IODF = *iodfname*

The name of the IODF that contains the I/O configuration definition that was activated.

EDT REBUILT, NEW EDT ID = *edtid*

Two-character identifier for the new EDT that was built.

[NOTE | WARN] = *rc*, *rsntext*

A four-digit hexadecimal reason code and an associated informational or attention message. See the explanation of message IOS500I for descriptions of these messages.

DEVICE(S) ADDED TO SOFTWARE CONFIGURATION *dev1*, [*dev2...*]

A list of devices that were added to the software configuration by the activate request.

DEVICE(S) DELETED FROM SOFTWARE CONFIGURATION *dev3*, [*dev4...*]

A list of devices that were deleted from the software configuration by the activate request.

DEVICE(S) ADDED *dev1*, [*dev2...*]

A list of devices that were added to the hardware configuration by the activate request.

DEVICE(S) DELETED *dev3*, [*dev4...*]

A list of devices that were deleted from the hardware configuration by the activate request.

If **FOR SUBCHANNEL SET** *x* is displayed, shows the subchannel set for the devices.

CU(S) ADDED *con1*, [*con2...*]

A list of control units that were added by the activate request.

CU(S) DELETED *con3*, [*con4...*]

A list of control units that were deleted by the activate request. If you have not explicitly deleted the devices which are attached to the deleted control unit, subsequent display of the UCBs for these devices will show them as offline.

CHPID(S) ADDED *chpd1*, [*chpd2...*]

A list of channel path identifiers that were added by the activate request.

CHPID(S) DELETED *chpd3*, [*chpd4...*]

A list of channel path identifiers that were deleted by the activate request.

FROM CSS *cc*

Indicates the logical channel subsystem for the deleted devices.

TO CSS *cc*

Indicates the logical channel subsystem for the devices being added.

CHPID *chpid* ADDED TO DEVICE(S) [IN CSS *cc*] *dev1*, [*dev2*...]

The activate request added the specified channel path to the specified list of devices. If **IN CSS *cc*** is displayed, shows the logical channel subsystem for the devices.

CHPID *chpid* DELETED FROM DEVICE(S) [TO CSS *cc*] *dev3*, [*dev4*...]

The activate request deleted the specified channel path from the specified list of devices.

If **IN CSS *cc*** is displayed, shows the logical channel subsystem for the devices.

LOGICAL PARTITIONS DELETED FROM CSS *cc* *lpname1*, [*lpname2*...*lpmamex*]

The activate request deleted the logical partition from the I/O configuration.

LOGICAL PARTITIONS ADDED TO FROM CSS *cc* *lpname1*, [*lpname2*...*lpmamex*]

The activate request added the logical partition to the I/O configuration.

| PCIE FUNCTION(S) DELETED *pfid1*, [*pfid2*]

| A list of PCIe functions deleted from the I/O configuration by the activate request.

| PCIE FUNCTION(S) ADDED *pfid1*, [*pfid2*]

| A list of PCIe functions added to the I/O configuration by the activate request.

System action: The system sends this message to the hardcopy log when processing of the ACTIVATE request completes. The system continues processing with the new I/O configuration definition.

Source: Input/output supervisor (IOS)

Routing code: Note 13

Descriptor code: -

IOS503I I/O CONFIGURATION CHANGED
PARTITION *partition_name* DELETED
FROM CANDIDATE LIST(S) FOR DEVICE(S) [IN CSS *cc*] *dev1*, [*dev2*...].
PARTITION *partition_name* ADDED TO CANDIDATE LIST(S) FOR
DEVICE(S) [IN CSS *cc*] *dev3*, [*dev4*...].
PARTITION *partition_name* DELETED FROM ACCESS/CANDIDATE LIST(S) FOR CHPID(S)
[IN CSS *cc*] *chpd1*, [*chpd2*...].
PARTITION *partition_name* ADDED TO ACCESS/CANDIDATE LIST(S) FOR CHPID(S)
[IN CSS *cc*] *chpd3*, [*chpd4*...].
| PARTITION *partition_name* DELETED FROM ACCESS/CANDIDATE LIST(S) FOR PCIE
| FUNCTION(S) *pfid1*, [*pfid2*]
| PARTITION *partition_name* ADDED TO ACCESS/CANDIDATE LIST(S) FOR PCIE FUNCTION(S)
| *pfid1*, [*pfid2*]

Explanation: The system sends this message to the hardcopy log after the system successfully completes a dynamic reconfiguration hardware change when the system is in LPAR mode on an EMIF-capable machine and the configuration changes affect the way logical partitions access

- channel paths.
- devices attached to shared channel paths.
- PCIe functions.

System action: This message is sent to the hardcopy log when the ACTIVATE request completes and the hardware change is made. This message is not written for software-only changes.

A component may appear in this message for the following reasons:

- The partition was deleted from the candidate list of a device.
- The partition was added to the candidate list of a device.
- The partition was in the candidate list of a deleted device.
- The partition was in the candidate list of an added device.
- The partition was deleted from the access or candidate list of a channel path (CHPID).
- The partition was added to the access or candidate list of a channel path (CHPID).
- The partition was in the access or candidate list of a deleted channel path (CHPID).
- The partition was in the access or candidate list of an added channel path (CHPID).

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- | • The partition was deleted from the access or candidate list of a PCIe function.
- | • The partition was added to the access or candidate list of a PCIe function.
- | • The partition was in the access or candidate list of a deleted PCIe function.
- | • The partition was in the access or candidate list of an added PCIe function.

In certain situations, you might see a partition deleted from and added to the access or candidate list of the same component.

Note: See *IOCP User's Guide and Reference* for channel path and device candidate list rules for your specific channel type.

Source: Input/output supervisor (IOS)

Routing code: Note 13

Descriptor code: -

IOS504I **COUPLING FACILITY CONFIGURATION CHANGED**
{NOTE | WARN} = *rc, rsntext*
COUPLING FACILITY DEVICE(S) DELETED [FROM CSS *cc*] *dev1*, [*dev2*...].
COUPLING FACILITY DEVICE(S) ADDED [TO CSS *cc*] *dev3*, [*dev4*...].
COUPLING FACILITY CU(S) DELETED [FROM CSS *cc*] *con1*, [*con2*...].
COUPLING FACILITY CU(S) ADDED [TO CSS *cc*] *con3*, [*con4*...].
CF CHPID(S) DELETED [FROM CSS *cc*] *chp1*, [*chp2*...].
CF CHPID(S) ADDED [TO CSS *cc*] *chp3*, [*chp4*...].

Explanation: This message indicates that a configuration change included changes to the coupling facility hardware, such as channel paths, devices, or control units. The system issues this message after completion of an ACTIVATE request initiated via an ACTIVATE request or the HCD ACTIVATE panel. An installation can use this message to audit configuration changes.

In the message text:

{NOTE | WARN} = *rc, rsntext*

A four-digit hexadecimal reason code and an associated informational or attention message. See the explanation of message IOS500I for descriptions of these reason codes.

COUPLING FACILITY DEVICE(S) DELETED [FROM CSS *cc*] *dev1*, [*dev2*...].

A list of coupling facility devices that were deleted by the activate request. If **FROM CSS *cc*** is displayed, shows the logical channel subsystem for the devices.

COUPLING FACILITY DEVICE(S) ADDED [TO CSS *cc*] *dev3*, [*dev4*...].

A list of coupling facility devices that were added by the activate request. If **TO CSS *cc*** is displayed, shows the logical channel subsystem for the devices.

COUPLING FACILITY CU(S) DELETED [FROM CSS *cc*] *con1*, [*con2*...].

A list of coupling facility control units that were deleted by the activate request. If **FROM CSS *cc*** is displayed, shows the logical channel subsystem for the devices.

COUPLING FACILITY CU(S) ADDED [TO CSS *cc*] *con3*, [*con4*...].

A list of coupling facility control units that were added by the activate request. If **TO CSS *cc*** is displayed, shows the logical channel subsystem for the devices.

CF CHPID(S) DELETED [FROM CSS *cc*] *chp1*, [*chp2*...].

A list of channel path identifiers that were deleted by the activate request. If **FROM CSS *cc*** is displayed, shows the logical channel subsystem for the devices.

CF CHPID(S) ADDED [TO CSS *cc*] *chp2*, [*chp4*...].

A list of channel path identifiers that were added by the activate request. If **TO CSS *cc*** is displayed, shows the logical channel subsystem for the devices.

System action: The system sends this message to the hard-copy log when processing of the ACTIVATE request completes. The system continues processing with the new coupling facility configuration definition.

Source: Input/output supervisor (IOS)

Module: IOSVCMAR

Routing code: Note 13

Descriptor code: -

IOS505A DYNAMIC I/O CONFIGURATION CHANGES ARE NOT ALLOWED, THE HARDWARE AND SOFTWARE CONFIGURATION DEFINITIONS DO NOT MATCH

Explanation: The configuration token in the input/output definition file (IODF) does not match the configuration token in the hardware system area (HSA).

System action: The system does not allow the operator to enter an ACTIVATE request that involves changes to the hardware. System initialization continues.

Operator response: Ensure that the correct LOADxx parmlib member was selected. Ensure that the correct parmlib device number was specified on the initial program load (IPL) load parameter.

Use the D IOS,CONFIG command to find out what the TOKEN information reveals. This is the PROCESSOR TOKEN from HSA. Find the IODF that has the same processor token for that machine.

Then enter an ACTIVATE request with the SOFT keyword to change the software configuration definition to match the hardware configuration definition. This may mean activating an old IODF in order to get the tokens back in sync. Once definitions are back in sync, hardware ACTIVATE can be done to the appropriate IODF.

Source: Input/output supervisor (IOS)

Module: IECVIOSI

Routing code: 2,10

Descriptor code: 2

IOS506I *hh.mm.ss* I/O CONFIG DATA *text*

Explanation: The system issues this message in response to a DISPLAY IOS,CONFIG command. Depending on the option specified on the D IOS,CONFIG command, *text* might be some part of the following information:

ACTIVATE RECOVER REQUIRED

SOURCE IODF = sorcname PROCESSOR = sorcproc
TARGET IODF = targname PROCESSOR = targproc

```
| CONFIGURATION CHANGE IN PROGRESS[,{THIS | ANOTHER} PARTITION | PARTITION partname]  
| TOKEN: PROCESSOR DATE        TIME        DESCRIPTION  
| SOURCE: sorcproc yy-mm-dd hh.mm.ss dsc1... dsc2  
| TARGET: targproc yy-mm-dd hh.mm.ss dsc1... dsc2
```

```
ACTIVE IODF DATA SET = actvname  
CONFIGURATION ID = cfid            EDT ID = yy  
TOKEN: PROCESSOR    DATE        TIME        DESCRIPTION  
SOURCE: procname    yy-mm-dd    hh.mm.ss    dsc1... dsc2  
ACTIVE CSS: css SUBCHANNEL SETS CONFIGURED: ss1, [ss2 ...]  
CHANNEL PATH MEASUREMENT FACILITY status1  
CHANNEL MEASUREMENT BLOCK FACILITY status2  
| [SUBCHANNEL SET FOR PPRC PRIMARY: INITIAL = s ACTIVE = s]  
| [HYPERSWAP FAILOVER HAS OCCURRED: YES | NO]  
| [LOCAL SYSTEM NAME (LSYSTEM): lsys]
```

```
HARDWARE SYSTEM AREA  
AVAILABLE FOR CONFIGURATION CHANGES text1 |  
  COULD NOT BE OBTAINED
```

```
ELIGIBLE DEVICE TABLE LATCH COUNTS text2 |  
  EDT LATCH TABLES COULD NOT BE OBTAINED
```

The following rules apply:

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- In response to a DISPLAY IOS,CONFIG command without any parameters, ACTIVE IODF DATA SET information appears, including the subchannel sets in use, the status of the channel path measurement facility, and the status of the channel measurement block facility.

If a configuration change is incomplete or in progress, one of the following messages appears:

- ACTIVATE RECOVER REQUIRED appears when an I/O configuration change is incomplete. Enter the ACTIVATE RECOVER command to recover the hardware I/O configuration to match the source or target IODF.
- CONFIGURATION CHANGE IN PROGRESS appears when an I/O configuration change is ongoing.
- In response to a DISPLAY IOS,CONFIG(ALL) command, ACTIVE IODF DATA SET, HARDWARE SYSTEM AREA, and ELIGIBLE DEVICE TABLE information appear.
- In response to a DISPLAY IOS,CONFIG(HSA) command, HARDWARE SYSTEM AREA appear.
- In response to a DISPLAY IOS,CONFIG(EDT) command, ELIGIBLE DEVICE TABLE information appears.

In the message text:

ACTIVATE RECOVER REQUIRED

Enter an ACTIVATE RECOVER request to recover the hardware I/O configuration to match the source or target IODF.

sorcname

The name of the source input/output (I/O) definition file (IODF) data set.

sorcproc

The name of the source processor.

targname

The name of the target IODF.

targproc

The name of the target processor.

| **CONFIGURATION CHANGE IN PROGRESS, [{THIS | ANOTHER} PARTITION | PARTITION *partname*]**

A configuration change is in progress.

| {THIS | ANOTHER} PARTITION | PARTITION *partname* shows if the system is in a logically partitioned mode (LPAR) environment.

THIS

A configuration change is in progress on this partition.

ANOTHER

A configuration change is in progress on another partition.

| **PARTITION *partname***

| A configuration change is in progress on another partition identified by partname.

sorcproc

The name of the source processor.

targproc

The name of the target processor.

DATE

yy-mm-dd

The date when the processor definition was created, showing the 2-digit year (yy), the month of the year (mm), and the day of the month (dd).

TIME

hh:mm:ss

The time when the processor definition was created, in hours (00-23), minutes (00-59), and seconds (00-59).

DESCRIPTION *dsc1... dsc2*

The configuration description, as specified by the installation.

ACTIVE IODF DATA SET

The I/O configuration information.

actvname

The name of the IODF data set that contains the active I/O configuration definition.

procname

The name of the processor that was used to create the I/O configuration definition.

cfid

The operating system configuration identifier that was used to create the I/O configuration definition.

yy The identifier for the current eligible devices table (EDT).

DATE*yy-mm-dd*

The date when the processor definition was created, showing the 2-digit year (yy), the month of the year (mm), and the day of the month (dd).

TIME*hh:mm:ss*

The time when the processor definition was created, in hours (00-23), minutes (00-59), and seconds (00-59).

DESCRIPTION *dsc1... dsc2*

The configuration description, as specified by the installation.

ACTIVE CSS *css*

The identifier for the active channel subsystem.

SUBCHANNEL SETS CONFIGURED *ss1, [ss2...]*

This field identifies which subchannel sets are configured for possible use in the system. This does not imply that there are any active subchannels defined in these Subchannel Sets. For more detailed information on the configuration of each subchannel set, refer to the output from the D IOS,CONFIG(HSA) command.

CHANNEL PATH MEASUREMENT FACILITY *status1*

The status of the channel path measurement facility. When the channel path measurement facility status is available, one of the following statements appears in the *status1* field:

- IS CURRENTLY ACTIVE
- IS TURNED OFF
- TURNED OFF, SOFTWARE ERROR
- TURNED OFF, HARDWARE ERROR

Note: No message is displayed when the channel path measurement facility status is not available.

CHANNEL MEASUREMENT BLOCK FACILITY *status2*

The status of the channel measurement block facility. One of the following statements appears in the *status2* field, where (yy) indicates the error code.

- IS ACTIVE
- IS INACTIVE SOFTWARE ERROR, (yy)
- IS INACTIVE HARDWARE ERROR, (yy)
- IS INACTIVE UNKNOWN ERROR, (yy)

SUBCHANNEL SET FOR PPRC PRIMARY: INITIAL = s ACTIVE = s

Shows the initial subchannel set that was active at IPL time and also shows the currently active subchannel set.

HYPERSWAP FAILOVER HAS OCCURRED: YES | NO

Indicates whether a HyperSwap has occurred (YES) or not (NO) while this system was IPLed.

LOCAL SYSTEM NAME (LSYSTEM): *lsys*

Specifies the system name (CPC designator) of the local system.

HARDWARE SYSTEM AREA

The information about the hardware system area (HSA).

AVAILABLE FOR CONFIGURATION CHANGES *text1*

The amount of HSA that is available to perform configuration changes and the amount of space for each subchannel set within each channel subsystem.

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All of the following information appear for *text1*, where *xxxxxxxxxx* indicates the available number:

- *xxxxxxxxxx* PHYSICAL CONTROL UNITS
- *xxxxxxxxxx* SUBCHANNELS FOR SHARED CHANNEL PATHS
- *xxxxxxxxxx* SUBCHANNELS FOR UNSHARED CHANNEL PATHS
- *xxxxxxxxxx* LOGICAL CONTROL UNITS FOR SHARED CHANNEL PATHS
- *xxxxxxxxxx* LOGICAL CONTROL UNITS FOR UNSHARED CHANNEL PATHS

COULD NOT BE OBTAINED

An erroneous response code is returned from the hardware.

ELIGIBLE DEVICE TABLE LATCH COUNTS *text2* | EDT LATCH TABLES COULD NOT BE OBTAINED

The information about the eligible device table (EDT).

ELIGIBLE DEVICE TABLE LATCH COUNTS *text2*

The jobs with outstanding binds on the primary EDT, and, if applicable, on the secondary EDT.

The following information might appear for each instance of *text2*:

- *mmmmmmmmmm* OUTSTANDING BINDS ON PRIMARY EDT ASID = *asid* JOBNAME = *jobname*
- *mmmmmmmmmm* OUTSTANDING BINDS ON PRIMARY EDT (*state*) ASID = *asid* JOBNAME = *jobname*
- *nnnnnnnnnn* OUTSTANDING BINDS ON SECONDARY EDT (*state*) ASID = *asid* JOBNAME = *jobname*

In the message text:

mmmmmmmmmm

Indicates the number of outstanding binds on the primary (current) EDT.

nnnnnnnnnn

Indicates the number of outstanding binds on the secondary (old) EDT.

Note: If the secondary EDT does not exist, this message line and its subsequent *asid/jobname* messages are not displayed.

state

Indicates that this is either the ORIGINAL, INTERMEDIATE, or FINAL EDT. When no EDT transition is in progress (there is no secondary EDT), the state is not shown. For more information about original, intermediate, and final EDTs, see the Eligible Device Table information in *z/OS MVS Diagnosis: Reference*.

asid

Specifies the address space identifier for the address space which has an outstanding bind on an EDT. If more than fifteen binds exist on the primary EDT, only the first fifteen *asids* located for the primary EDT are listed. If more than fifteen binds exist on the secondary EDT, only the first fifteen *asids* located for the secondary EDT are listed.

jobname

Specifies the name of the job which has an outstanding bind on an EDT. If more than fifteen binds exist on the primary EDT, then only the first fifteen *jobnames* located for the primary EDT are listed. If more than fifteen binds exist on the secondary EDT, then only the first fifteen *jobnames* located for the secondary EDT are listed.

EDT LATCH TABLES COULD NOT BE OBTAINED

An error is returned from the EDTINFO service.

System action: The system continues processing.

Source: Input/output supervisor (IOS)

Module: IOSCCONF

Routing code: -

Descriptor code: -

IOS507D ACTIVATE COMMAND DID NOT COMPLETE. REPLY "WAIT" -OR- "TERM"

Explanation: The system is taking an excessive amount of time to process an ACTIVATE request,

System action: The system continues processing. Depending on the operator reply, the system does one of the following:

WAIT The system sets another wait interval.

TERM If configuration change processing is not currently executing in the IOS address space, then the system terminates the ACTIVATE command processor task. Otherwise, the system allows the configuration change to complete and ignores the request to terminate processing (see note below).

Note: Once configuration change processing is executing in the IOS address space, the configuration change must be allowed to complete. This is because it is impossible to properly restore the original configuration that was in affect before the ACTIVATE command was issued. Thus, if the operator attempts to reply TERM at a point where the original configuration cannot be restored, the system ignores the TERM request and issues message IOS508I REPLY TERM IGNORED, CONFIGURATION CHANGES ALREADY IN PROGRESS.

If the operator reply is not valid, the system issues message IOS508I.

If the ACTIVATE request completes before the operator replies, the system deletes message IOS507D.

Operator response: Reply **WAIT** if the reason for the slow processing time is valid (system stop, needed outstanding reply, etc.) Otherwise, reply **TERM**. If message IOS508I is issued indicating that TERM has been ignored, then wait for the configuration change to complete. Use the 'D IOS,CONFIG(EDT)' command to determine if EDT contention could be the reason for the wait.

Source: Input/output supervisor (IOS)

Module: IOSCCONF

Routing code: -

Descriptor code: 5,8,9

IOS508I *text*

Explanation: The system may issue this message after the operator replies to message IOS507D. *text* is one of the following:

INCORRECT REPLY FOR ACTIVATE COMMAND

The operator entered an incorrect reply to message IOS507D.

REPLY TERM IGNORED, CONFIGURATION CHANGES ALREADY IN PROGRESS

The operator replied TERM to message IOS507D, however, IOS configuration change processing is currently executing in the IOS address space and cannot be terminated.

System action: Depending on the message text, one of the following:

INCORRECT REPLY FOR ACTIVATE COMMAND

The system continues processing. The system reissues message IOS507D.

REPLY TERM IGNORED, CONFIGURATION CHANGES ALREADY IN PROGRESS

The system continues processing the ACTIVATE request.

Operator response: Depending on the message text, one of the following:

INCORRECT REPLY FOR ACTIVATE COMMAND

Enter WAIT or TERM in response to message IOS507D.

REPLY TERM IGNORED, CONFIGURATION CHANGES ALREADY IN PROGRESS

Allow the ACTIVATE request to complete. Use the 'D IOS,CONFIG(EDT)' command to determine if EDT contention could be the cause of the wait.

Source: Input/output supervisor (IOS)

Module: IOSCCONF

IOS509I • IOS510I

Routing code: 2

Descriptor code: 12

IOS509I DYNAMIC I/O CONFIGURATION CHANGES ARE NOT ALLOWED, {*iodfname* IS NOT CATALOGED | *iodfname* VOLUME *volume* IS NOT ONLINE}

Explanation: While processing the LOADxx parmlib member during system initialization, the system found one of the following:

- The input/output definition file (IODF) data set is not cataloged.
- The volume where the IODF data set resides is not online.

In the message text:

iodfname

The name of the IODF data set.

System action: System initialization continues. The dynamic capability is disabled.

Operator response: Ensure that the correct LOADxx member was selected and that the correct parmlib device number was specified on the IPL load parameter. If the correct LOADxx member was specified, notify the system programmer.

System programmer response: If *iodfname* IS NOT CATALOGED appears in the message text, catalog the IODF data set. If *iodfname* VOLUME *volume* IS NOT ONLINE appears in the message text, vary the volume online.

Source: Input/output supervisor (IOS)

Module: IECVIOSI

Routing code: 2,10

Descriptor code: 4

IOS510I CONFLICTING *iodfname* DEVICE - *dev1* USED FOR IPL, CATALOG POINTS TO *dev2*

Explanation: While processing the LOADxx parmlib member, the system found that the system catalog points to the IODF on a different device than the device that was used while processing the LOADxx parmlib member during system initialization.

In the message text:

dev1 The device number of the device used during IPL.

dev2 The device number in the catalog.

System action: System initialization continues. Dynamic changes may not be possible if the IODF dataset does not match the current configuration.

Operator response: Ensure that the correct LOADxx member was selected and that the correct parmlib device number was specified on the IPL load parameter. If the correct LOADxx member was specified, notify the system programmer.

System programmer response: Uncatalog the IODF data set. Recatalog the IODF data set to device *dev1*. Then enter an ACTIVATE request if a different I/O configuration is desired.

Source: Input/output supervisor (IOS)

Module: IECVIOSI

Routing code: 2,10

Descriptor code: 4

IOS511A THE PREVIOUS DYNAMIC CONFIGURATION CHANGE WAS NOT COMPLETED - ISSUE THE ACTIVATE COMMAND WITH RECOVER KEYWORD TO RECOVER

Explanation: During system initialization, the system found that a dynamic I/O configuration change from a previous system initialization or partition (LPAR environment) did not complete successfully.

System action: System initialization continues. The system does not allow any dynamic hardware changes until the operator enters an ACTIVATE RECOVER command.

Operator response: Enter an ACTIVATE RECOVER request to synchronize the hardware and software definitions.

Source: Input/output supervisor (IOS)

Routing code: 2,10

Descriptor code: 2

IOS512I DYNAMIC I/O CONFIGURATION CHANGES ARE NOT ALLOWED, THE ACTIVE HARDWARE DEFINITION DOES NOT SUPPORT DYNAMIC

Explanation: The input/output configuration data set (IOCDS) that was used to load the machine was not created by the hardware configuration definition (HCD). The IOCDS does not contain the hardware token that identifies the configuration.

System action: System initialization continues. The dynamic capability is disabled.

Operator response: A power-on-reset with an IOCDS created by HCD is required in order to be able to make dynamic changes to the hardware configuration definition.

Source: Input/output supervisor (IOS)

Module: IECVIOI

Routing code: 2,10

Descriptor code: 4

IOS513E ACTIVATE STILL WAITING FOR OLD EDT TO BE DELETED - ISSUE 'D IOS,CONFIG(EDT)' TO DETERMINE OUTSTANDING BINDS

Explanation: The dynamic change to the I/O configuration is still waiting for the old Eligible Device Table (EDT) to be deleted.

System action: The system cannot perform any ACTIVATE requests or DDR swaps until outstanding allocation requests against the old EDT have been satisfied. Message IOS513E is re-issued every fifteen minutes until all outstanding allocation requests are satisfied, at which time message IOS501I is issued.

Operator response: Issue the 'D IOS,CONFIG(EDT)' command to determine what jobs have outstanding binds on the secondary (old) EDT. Satisfy the outstanding allocation requests by either mounting the requested volumes, canceling the job, or canceling the address space.

Source: Input/output supervisor (IOS)

Module: IOSVCMMN

**IOS515A IOS1515A
DEVICE *devn* DYNAMICALLY DELETED OR MODIFIED, DEDICATED ALLEGIANCE COULD NOT BE CLEARED, [PARTITION = *prtition*]**

Explanation: As a result of an ACTIVATE request, a device was either deleted or modified to remove channel paths from the device. A unit check occurred. The system did not have a chance to read the sense data before the device was deleted or modified. The channel subsystem was unable to clear the dedicated allegiance condition.

In the message text:

devn The device number. The device number is prefixed by the subchannel set identifier when appropriate.

prtition The partition name. This field appears when the system is in a logically partitioned mode (LPAR) environment.

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System action: The system continues processing.

Operator response: ReIML the control unit to which the device is attached.

Source: Input/output supervisor (IOS)

Module: IOSVCMHU

Routing code: 2,10

Descriptor code: 2

IOS516I EXCESS ACTIVATE RESULTS

Explanation: During ACTIVATE command processing, if the IOS500I messages are truncated at the console, the excess lines are sent to hardcopy log only and associated with the IOS516I message. See IOS500I for more information.

System action: See IOS500I.

Source: Input/output supervisor (IOS)

Module: IOSCCONF

Routing code: Note 13

Descriptor code: 4

IOS530I IOS530I DISCOVERY AND AUTOCONFIG [PROCESSING WAS SUCCESSFUL | PROCESSING WAS UNSUCCESSFUL] *rc, rsntext* [COMPID = *compid*]

Explanation: The system issues this message in response to a DISCOVERY AND AUTOCONFIGURATION request.

Operator response: For meanings and actions for each *rc* and *rsntext*, request the explanation for each message in HCD or HCM.

Source: Input/output supervisor (IOS)

In the message text:

PROCESSING WAS SUCCESSFUL

The system successfully processed the request.

PROCESSING WAS UNSUCCESSFUL

The system did not process the request. The system issued error messages.

COMPID = *compid*

The 5-character identifier of the system component where the error occurred. For example, SC1C3 for IOS and SC1XL for HCD. COMPID is optionally specified for each *rc, rsntext* message.

rc, rsntext

A reason code and its associated message text. One of the following qualifiers precedes the reason code:

NOTE The message is an informational message.

WARN The message is a warning message.

REASON

The message is an error message.

If **NOTE** precedes the reason code, the system continues processing with the new I/O configuration definition. If **WARN** precedes the reason code, the system continues processing but possibly in degraded mode (all paths, devices, etc. from the previous or new configuration may not be available). If **REASON** precedes the reason code, the system continues processing with the old I/O configuration definition.

The reason codes and associated texts may be issued by hardware configuration definition (HCD) or IOS. If the COMPID is SC1XL, then CBD should be prefixed to the reason to determine the associated HCD message. See *z/OS and z/VM HCD Messages*. The IOS reason codes and texts are the following:

NOTE=01E0,NO NODE WAS FOUND

DESCTEXT=REQUEST INDICATED DISCOVER NODE CONTAINING CU=nnnn

NOTE=01E1,NO NEW NODES WERE FOUND

DESCTEXT=REQUEST INDICATED DISCOVER NEW NODES

| **NOTE=01E2,TARGET SYSTEM(S) EITHER NOT ACTIVE OR NOT CAPABLE**

| **DESCTEXT=system [system ...]**

REASON=01E2,TARGET SYSTEM(S) EITHER NOT ACTIVE OR NOT CAPABLE

DESCTEXT=system [system ...]

| **NOTE=01E3,TARGET SYSTEM(S) NOT CAPABLE OF DISCOVERY**

| **DESCTEXT=system [system ...]**

REASON=01E3,TARGET SYSTEM(S) NOT CAPABLE OF DISCOVERY

DESCTEXT=system [system ...]

NOTE=01E4,DEVICE NUMBERING FOR EXISTING CU xxxx IS NOT CONSISTENT

DESCTEXT= THE DENSE SCHEME WAS USED

NOTE=01E5,DEVICE NUMBERING POLICY FOR CU xxxx WAS NOT FOLLOWED

DESCTEXT= DEVICE NUMBER RANGE SUGGESTED BY POLICY WAS NOT FOLLOWED or

DESCTEXT= CU NUMBER RANGE SUGGESTED BY POLICY WAS NOT FOLLOWED or

DESCTEXT= MATCHING CU NUMBER AND DEVICE RANGE WAS NOT FOLLOWED or

DESCTEXT= SUGGESTED ALTERNATE SUBCHANNEL SET WAS NOT FOLLOWED or

DESCTEXT= POLICY NUMBERING SCHEME NOT FOLLOWED, DENSE SCHEME USED or

DESCTEXT=NUMBERED CONSISTENTLY WITH EXISTING DEFINITIONS

REASON=01E6,USER NOT AUTHORIZED TO USE DISCOVERY AND AUTOCONFIG

REASON=01E7,AUTHORIZATION COULD NOT BE DETERMINED

DESCTEXT=RACROUTE RETURN CODE: cc, REASON CODE 000000rr

REASON=01E8,INPUT WAS NOT VALID

DESCTEXT=DACB ACRONYM NOT VALID or

DESCTEXT=UNRECOGNIZED FUNCTION CODE or

DESCTEXT=UNRECOGNIZED VERSION CODE or

DESCTEXT=DACB NUMBER OF TARGET SYSTEMS NOT VALID or

DESCTEXT=DACB LENGTH TOO SMALL

REASON=01E9,PROCESSING TERMINATED DUE TO AN UNEXPECTED ERROR

DESCTEXT=ccccccc RECOVERY ROUTINE ENTERED WITH ABEND ??? or

DESCTEXT=THE RESOURCE MANAGER COULD NOT BE ESTABLISHED or

DESCTEXT=IOS ADDRESS SPACE NOT ACTIVE or

DESCTEXT=REQUEST WAS NOT SUCCESSFUL DUE TO AN ATTACH ERROR

REASON=01EA,SERIALIZATION COULD NOT BE OBTAINED, RC=xx

DESCTEXT=MAJOR NAME: SYSZIOS MINOR NAME: ZDAC

REASON=01EB,DYNAMIC I/O CHANGE CAPABILITY NOT AVAILABLE ON PROCESSORS

DESCTEXT=system [system ...]

REASON=01EC,COMMUNICATION FAILURE WITH THE FOLLOWING SYSTEMS

DESCTEXT=system [system ...]

REASON=01ED,COULD NOT OBTAIN CU OR DEVICE NUMBERS FOR DISCOVERY

REASON=01EE,COMMUNICATION NOT RECEIVED FROM THE FOLLOWING SYSTEM(S)

DESCTEXT=system [system ...]

REASON=01EF,UNABLE TO CHANGE CONFIGURATION ON THE FOLLOWING SYSTEM

DESCTEXT=SYSTEM=sssssss PROCESSOR=pppppppp

RC=xxxxxxxx RS=xxxxxxxx

REASON=01F0,UNEXPECTED CBDMGHOM RETURN CODE

DESCTEXT=FUNCTION: functionx OBJECT: objectxx

RC: xx, RSN: xxxxxxxx

NOTE=01F1,NODES COMMON TO ALL TARGET SYSTEMS WERE NOT FOUND

NOTE = 01F2,NO NEW CONTROL UNITS OR DEVICES FOUND ON SELECTED NODE

REASON=01F3,SYSTEM ssssssss IS NO LONGER AVAILABLE

DESCTEXT=THE SYSTEM WAS CRITICAL FOR THE CURRENT OPERATION

NOTE=01F4,NO NODES WERE FOUND DURING FABRIC DISCOVERY

IOS531I • IOS550I

REASON=01F5,CU OR DEVICE NUMBERS ARE NOT AVAILABLE FOR PROPOSAL

REASON=01F7,NO PATHS COULD BE PROPOSED FOR NEW CUADD xx
DESCTEXT=PROCESSOR=pppppppp CSS=cc

NOTE=01F8,ONLY x OF x PATHS COULD BE PROPOSED FOR NEW CUADD xx
DESCTEXT=PROCESSOR=pppppppp CSS=cc

REASON=01F9,THE FOLLOWING SYSTEM IS UNABLE TO CHANGE CONFIGURATION
DESCTEXT=SYSTEM=sssssss PROCESSOR=pppppppp
RC=xxxxxxxx RS=xxxxxxxx

NOTE=01FB,UNKNOWN UNIT ADDRESS CONFIGURATION INFORMATION RECEIVED
DESCTEXT= LOGICAL CU xx REPORTED
UNKNOWN UNIT ADDRESS TYPE(S) FOR:
DESCXT2=[ua,ua-ua,ua, ...]

IOS531I IOS531I ===== ssssssss MESSAGES BEGIN =====
IOS531I IOS531I ===== ssssssss MESSAGES END =====

Explanation: These messages are written to log, bracketing messages from the foreign system ssssssss that is received during a configuration change request.

In the message text, *substitution text* above are self explanatory with help panel text.

System action: None.

Operator response: None.

System programmer response: An attempt to use the discovery and autoconfiguration function failed. The IOS500I messages that appear between the IOS531I messages should be checked, and any problems preventing the configuration attempt should be corrected.

Source: Input/output supervisor (IOS)

Routing code: None.

Descriptor code: 4

IOS532I IOS532I *diagnostic text*

Explanation: These messages are written to log. They contain diagnostic information that might be helpful.

In the message text, *diagnostic text* is internal diagnostic information.

System action: None.

Operator response: None.

System programmer response: None. If it is necessary to contact IBM Software Support, a copy of the syslog containing these messages might be requested.

Source: Input/output supervisor (IOS)

Routing code: None.

Descriptor code: 4

IOS550I ASSIGN FAILED, DEVICE ALREADY ALLOCATED

Explanation: The operator entered a command to vary a path online. The system could not validate the path. The device is assigned to another system.

System action: The system does not vary the path online.

Operator response: Vary the device offline from the other system at the earliest convenience. Enter the vary command again.

Source: Input/output supervisor (IOS)

Module: IECVIOPM

Routing code: 1

Descriptor code: 4

IOS551I NO PATHS PHYSICALLY AVAILABLE

Explanation: The operator entered a command to vary a path online. The system could not validate the path. No paths to the device were physically available.

System action: The system does not vary the device online.

Operator response: Contact hardware support.

Source: Input/output supervisor (IOS)

Module: IECVIOPM

Routing code: 1

Descriptor code: 4

IOS552I PATH NOT PHYSICALLY AVAILABLE

Explanation: The operator entered a command to vary a path online. The system could not validate the path. The path is not physically available.

System action: The system does not vary the path online.

Operator response: Contact hardware support.

Source: Input/output supervisor (IOS)

Module: IECVIOPM

Routing code: 1

Descriptor code: 4

IOS553I I/O ERROR DURING DEVICE INITIALIZATION

Explanation: The operator entered a command to vary a device or path online. The system could not vary the device or path online. An I/O error occurred while the system was initializing the device.

System action: The system does not vary the device or path online.

Operator response: Contact hardware support.

Source: Input/output supervisor (IOS)

Module: IECVIOPM

Routing code: 1

Descriptor code: 4

IOS554I CONFIGURATION DATA PROCESSING FAILED

Explanation: The operator entered a command to vary a device or path online.

The device supports configuration data processing. The configuration data processing failed. The system could not read the configuration data information.

System action: The system does not vary the device or path online.

Operator response: Contact hardware support.

Source: Input/output supervisor (IOS)

Module: IECVIOPM

Routing code: 1

Descriptor code: 4

IOS555I UNABLE TO ESTABLISH DYNAMIC PATHING FOR THIS DEVICE

Explanation: The operator entered a command to vary a path online. The system could not verify the path.

System action: The system does not vary the path online.

Operator response: Vary the device online, using another channel path. If the command fails, contact hardware support.

Source: Input/output supervisor (IOS)

Module: IECVIOPM

Routing code: 1

Descriptor code: 4

IOS556I NO PATHS LOGICALLY AVAILABLE

Explanation: The operator entered a command to vary a path online. The system could not find any paths to the device.

System action: The system does not vary the device online.

Operator response: Contact hardware support.

Source: Input/output supervisor (IOS)

Module: IECVIOPM

Routing code: 1

Descriptor code: 4

IOS557I SPECIFIED PATH NOT VALID

Explanation: The operator entered a command to vary a path online. The system could not verify the path. The channel path identifier (CHPID) was not valid.

System action: The system does not vary the path online.

Operator response: Enter the vary command again, using a correct CHPID for the device.

Source: Input/output supervisor (IOS)

Module: IECVIOPM

Routing code: 1

Descriptor code: 4

IOS558I FUNCTION NOT PERFORMED, I/O TIMED OUT

Explanation: The operator entered a command to vary a device or path online. While the system was validating the path, an input/output (I/O) operation occurred along the path. The I/O operation timed out. The system could not verify the path. Possible causes include but are not limited to the following:

- The device is shared and is reserved by a system other than the processing system.
- A hardware malfunction has occurred that causes the device to appear busy.

System action: The system does not vary the path or device online.

Operator response: Enter the VARY command again. If the error occurs again, look for a reserve held on the device by a sharing system. If one exists, wait for the reserve to be released on the sharing system before trying the VARY command again. If the device is not reserved on a sharing system, contact hardware support.

Source: Input/output supervisor (IOS)

Module: IECVIOPM

Routing code: 1

Descriptor code: 4

IOS559I FUNCTION CODE NOT SUPPORTED

Explanation: The operator entered a command to vary a device or path online. An internal error occurred.

System action: The system does not vary the path or device online.

Operator response: Notify the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Input/output supervisor (IOS)

Module: IECVIOPM

Routing code: 1

Descriptor code: 4

IOS560I RELEASE TEST FOR SHARED DEVICE COULD NOT BE PERFORMED

Explanation: The operator entered a command to vary a device or path online. The path(s) are not available because the device is reserved and cannot be released.

System action: The system does not vary the path or device online.

Operator response: Enter the DEV SERV command to show DYNAMIC PATHING information on what system is really holding in the reserve. Enter the DISPLAY GRS, CONTENTION command on the system identified as holding the reserve to identify the address space involved.

System programmer response: Search the problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

User response: Do not attempt further I/O on this device.

Source: Input/output supervisor (IOS)

Module: IECVIOPM

Routing code: 1

Descriptor code: 4

IOS561I UNRECOVERABLE PROGRAM ERROR

Explanation: The operator entered a command to vary a device or path online. The system found an unrecoverable program error during path validation.

System action: The system does not vary the path or device online.

Operator response: Notify the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Input/output supervisor (IOS)

Module: IECVIOPM

Routing code: 1

Descriptor code: 4

IOS562I DEVICE NOT CONNECTED

Explanation: The operator entered a command to vary a device or path online. The device has no subchannel.

System action: The system does not vary the path or device online.

Operator response: If the device number was incorrect, enter the command again, specifying a correct device

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number. Otherwise, ask the system programmer to add the device to the input/output (I/O) configuration.

System programmer response: Add a device to the I/O configuration.

Source: Input/output Supervisor (IOS)

Module: IECVIOPM

Routing code: 1

Descriptor code: 4

IOS563I DEVICE IS IN BOXED STATE

Explanation: The system could not perform an I/O operation on one or more channel paths. The device was boxed.

System action: The system does not vary the device or path online.

Operator response: Contact hardware support.

User response: Do not try any further I/O operations on the device.

Source: Input/output supervisor (IOS)

Module: IECVIOPM

Routing code: 1

Descriptor code: 4

IOS564I ACTIVE TELEPROCESSING DEVICE

Explanation: The operator entered a command to vary a path online for one of the following teleprocessing devices:

- 2701
- 2702
- 2703

The device was active, but the system could not validate the device.

System action: The system does not vary the path online.

Operator response: Wait for I/O activity to the device to complete. Enter the command again.

Source: Input/output supervisor (IOS)

Module: IECVIOPM

Routing code: 1

Descriptor code: 4

IOS565I PATH OPERATIONAL BUT DEVICE COULD NOT BE ASSIGNED

Explanation: The operator entered a command to vary a path online. The system could not validate the path because the system could not assign the device. The device may be assigned to another system.

System action: The system does not vary the path online. The system marks the device offline.

Operator response: Do one of the following:

- If the device is assigned to another system, enter a VARY command from that system to vary the device online.
- If the device is not assigned to another system, contact hardware support.

Source: Input/output supervisor (IOS)

Module: IECVIOPM

Routing code: 1

Descriptor code: 4

IOS566I PATH OFFLINE DUE TO CONFIG MANAGER, CANNOT BE VARIED ONLINE

Explanation: The system tried to vary a path online. The system could not vary the path online because the operator varied the path offline.

System action: The system does not vary the path online.

Operator response: Follow operating procedures for configuring paths and devices using the enterprise systems connection (ESCON) Manager.

Source: Input/output supervisor (IOS)

Module: IECVIOPM

Routing code: 1

Descriptor code: 4

IOS567I PATH OPERATIONAL BUT DEVICE NOT BROUGHT ONLINE

Explanation: The operator entered a command to vary a path online. The system does vary the path online, but the device is not brought online for one of the following reasons:

- The device has been varied offline by the operator.
- The device has been varied offline by the system.
- The device is currently in use by a system component.

System action: The system does not vary the path online.

Operator response: If desired, attempt to vary the device online using the *VARY device ONLINE* command. If system message IEE329I appears, see the operator response for that message.

Source: Input/output supervisor (IOS)

Module: IECVIOPM

Routing code: 1

Descriptor code: 4

IOS568I PATH OFFLINE DUE TO C.U.I.R., CANNOT BE VARIED ONLINE

Explanation: The operator entered a command to vary a path online. The path is offline due to C.U.I.R. because of a service action. Therefore, the system can not vary the path online.

System action: The system does not vary the path online.

Operator response: Do one of the following:

- If you know that the path is no longer being serviced, enter a *VARY PATH* command, specifying the *FORCE* option, to vary the path online.
- If you do not know if the path is being serviced, contact hardware support. After confirming that the path is no longer being serviced, enter a *VARY PATH* command, specifying the *FORCE* option, to vary the path online.

Source: Input/output supervisor (IOS)

Module: IECVIOPM

Routing code: 1

Descriptor code: 4

IOS569I DEVICE IN PERMANENT ERROR STATE

Explanation: The operator entered a command to vary a path or a device online. The device was marked unusable.

System action: The system does not vary the device online.

Operator response: Contact hardware support.

Source: Input/output supervisor (IOS)

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Module: IECVIOPM

Routing code: 1

Descriptor code: 4

IOS570I PERMANENT ERROR WHILE ATTEMPTING TO ENABLE DEVICE

Explanation: The operator entered a command to vary a path or a device online. The system could not enable the device.

System action: The system does not vary the path or device online.

Operator response: Contact hardware support.

Source: Input/output supervisor (IOS)

Module: IECVIOPM

Routing code: 1

Descriptor code: 4

IOS571I VOLSER FOR PATH DOES NOT MATCH VOLSER FOR DEVICE

Explanation: The operator entered a command to vary a path online. The system could not vary the path online because the volume serial number did not match the volume serial number for a DASD device.

System action: The system does not vary the path online.

Operator response: Check the cabling and switch connections to the device. If no errors are found, enter an ACTIVATE request or reIPL the system, specifying an I/O configuration definition that has a consistent logical definition to the physical device.

Source: Input/output supervisor (IOS)

Routing code: 1

Descriptor code: 4

IOS572I I/O ERROR READING VOLUME LABEL

Explanation: The operator entered a command to vary a path online. The system could not vary the path online because the volume serial number could not be read for a DASD device due to an I/O error.

System action: The system does not vary the path online.

Operator response: Notify the system programmer of the I/O error that occurred while the system was reading the volume serial number.

Source: Input/output supervisor (IOS)

Routing code: 1

Descriptor code: 4

IOS573I OSAD DEVICE REQUIRES A UNIT ADDRESS OF FE BUT *ua* FOUND

Explanation: A VARY command was issued for an OSAD (open systems adapter diagnostic) device. The unit address was not correct for the OSAD device type. OSAD devices are special devices used by the OSA (open systems adapter) facility to control the configuration of an OSA control unit and its associated devices. These devices are only addressable from the FE unit address.

In the message text:

ua The unit address found for the OSAD device.

System action: The VARY command fails. If VARY dddd,ONLINE was issued, the device remains offline. If VARY PATH(dddd,cc),ONLINE was issued, the device path remains offline.

Operator response: Make sure that the correct I/O configuration definition is being used by the operating system

and channel subsystem. The DISPLAY IOS,CONFIG command displays the currently active IODF (I/O definition file) and currently active I/O configuration for the channel subsystem. The MVS ACTIVATE command can be used to dynamically switch to the correct I/O configuration definition, then the VARY command should be retried.

System programmer response: Correct the configuration error and retry the VARY command. Configuration errors can be corrected dynamically by updating the I/O configuration definition with the HCD (Hardware Configuration Definition) and issuing the MVS ACTIVATE command.

Source: Input/output Supervisor (IOS)

Module: IOSVDSEO

IOS574I OSA DEVICE REQUIRES THE UNIT ADDRESS NOT BE FE

Explanation: A VARY command was issued for an OSA (open systems adapter) device. The unit address for this device was not correct for the OSA device type. Instead, an FE unit address was found.

OSA devices are used to communicate from the host to the LAN (local area network). They require the use of unit addresses in the range of 00 through FD. Only open systems adapter diagnostic (OSAD) devices can have a unit address of FE.

System action: The VARY command fails. If VARY dddd,ONLINE was issued, the devices remains offline. If VARY PATH(dddd,cc),ONLINE was issued, the device path remains offline.

Operator response: Make sure that the correct I/O configuration definition is in use by the operating system and channel subsystem. The DISPLAY IOS,CONFIG command displays the currently active IODF (I/O definition file) and currently active I/O configuration for the channel subsystem. The MVS ACTIVATE command can be used to dynamically switch to the correct I/O configuration definition, then the VARY command should be retried.

System programmer response: Correct the configuration error and retry the VARY command. Configuration errors can be corrected dynamically by updating the I/O configuration definition with the HCD (Hardware Configuration Definition) and issuing the MVS ACTIVATE command.

Source: Input/output supervisor (IOS)

Module: IOSVDSEO

IOS575I SENSE-ID DATA NOT VALID FOR THIS DEVICE - *sense_id_data*

Explanation: VARY command was issued for an OSAD (open systems adapter diagnostic) device or an OSA (open systems adapter) device. The device support code attempted to validate that the correct control unit model and type are indicated in the data returned by the sense-id command. OSA and OSAD devices indicate that they are 3088 type devices with model numbers 60, 61, and 62 (OSAD).

In the message text:

sense_id_data

The sense-id data returned from the device.

System action: The VARY command fails. If VARY dddd,ONLINE was issued, the devices remain offline. If VARY PATH(dddd,cc),ONLINE was issued, the device path remains offline.

Operator response: Make sure that the operating system and channel subsystem are using the correct I/O configuration definition. DISPLAY IOS,CONFIG command displays the currently active IODF (I/O definition file) and currently active I/O configuration for the channel subsystem. The MVS ACTIVATE command can be used to dynamically switch to the correct I/O configuration definition. Then the VARY command should be retried.

System programmer response: Correct the configuration error and retry the VARY command. Configuration errors can be corrected dynamically by updating the I/O configuration definition with the HCD (hardware configuration definition) and issuing the MVS ACTIVATE command.

Source: Input/output supervisor (IOS)

Module: IOSVDSEO

IOS576I OSA | IQD DEVICES REQUIRE AN OSA | IQD CHANNEL PATH BUT TYPE *cc* FOUND
[TYPE=*channel_path_type*]

Explanation: A VARY command was issued for an OSA (open systems adapter) device or an IQD (internally queued direct) device. The device support code attempted to validate that the channel path type was OSA or IQD. The OSA and OSAD (open systems adapter diagnostic) devices must be defined on OSA channel paths. The IQD devices must be defined on IQD channel paths.

In the message text:

cc The channel path type found for the OSA or IQD device. Descriptions of all the supported channel path types can be displayed by using this command:

```
D M=CHP
```

channel_path_type

If provided, the channel path type found.

System action: The VARY command fails. If VARY *dddd*,ONLINE was issued, the device remains offline. If VARY PATH(*dddd,cc*),ONLINE was issued, the device path remains offline.

Operator response: Make sure that the operating system and channel subsystem are using the correct I/O configuration definition. DISPLAY IOS,CONFIG command displays the currently active IODF (I/O definition file) and currently active I/O configuration for the channel subsystem. The MVS ACTIVATE command can be used to dynamically switch to the correct I/O configuration definition. Then the VARY command should be retried.

System programmer response: Correct the configuration error and retry the VARY command. Configuration errors can be corrected dynamically by updating the I/O configuration definition with the HCD (hardware configuration definition) and issuing the MVS ACTIVATE command.

Source: IOS device service exit for OSA and IQD (IOSVDSEO).

Module: IOSVDSEO

IOS577I IQD INITIALIZATION FAILED, COMPLETION TABLE FULL | SET IQD PARAMETERS FAILED
| FEATURE NOT INSTALLED

Explanation: A VARY command was issued for an IQD (internal queued direct) device. The device is not allowed to come online for one of the following reasons:

1. COMPLETION TABLE FULL: All the completion vector slots have been assigned.
2. SET IQD PARAMETERS FAILED: The subchannel iQDIO (internal queued direct I/O) parameters can not be set.
3. FEATURE NOT INSTALLED: The iQDIO feature is not installed.

System action: The VARY command fails. If VARY *dddd*,ONLINE was issued, the device remains offline. If VARY PATH(*dddd,cc*),ONLINE was issued, the device path remains offline.

Operator response:

1. COMPLETION TABLE FULL: There is an MVS implementation limit for the number of IQD devices that can be online at one time (currently 1023). Online IQD devices may be varied offline, so that completion vector slots can be freed and the offline IQD devices can be brought online.
2. SET IQD PARAMETERS FAILED: N/A
3. FEATURE NOT INSTALLED: N/A

System programmer response:

1. COMPLETION TABLE FULL: There is an MVS implementation limit for the number of IQD devices that can be online at one time (currently 1023). Change the configuration definition to remove the devices that cause MVS to exceed this limit.
2. SET IQD PARAMETERS FAILED: There is a system error. Contact the IBM Support Center.
3. FEATURE NOT INSTALLED: The micro-code level needs to be updated.

Source: IOS device service exit for OSA and IQD (IOSVDSEO).

Module: IOSVDSEO

IOS578I RESET OF LINK RECOVERY THRESHOLD CONDITION FAILED

Explanation: A system error occurred when trying to reset the link recovery threshold condition for the path given in the VARY PATH(dddd,pp),ONLINE command.

System action: The system continues processing. The system does not access the devices over the path until the path becomes operational and varied online.

Operator response: Notify the system programmer.

System programmer response: Search problem reporting databases for a fix to the problem. If no fix exists, contact the IBM Support Center. Capture a console dump that includes the IOS address space and provide this information to IBM for analysis.

Source: Input/output supervisor (IOS)

Module: IECVDPATH/IECVIOPM

Routing code: 2,10

Descriptor code: 4

IOS579E IQD INITIALIZATION FAILED, COMPLETION TABLE FULL

Explanation: A VARY command was issued for an IQD (internal queued direct) device. The device is not allowed to come online because all the completion vector slots have been assigned.

System action: The VARY command fails. If VARY dddd,ONLINE was issued, the device remains offline. If VARY PATH(dddd,cc),ONLINE was issued, the device path remains offline.

Operator response: There is an MVS implementation limit for the number of IQD devices that can be online at one time (currently 1023). Online IQD devices may be varied offline, so that completion vector slots can be freed and the offline IQD devices can be brought online.

System programmer response: There is an MVS implementation limit for the number of IQD devices that can be online at one time (currently 1023). Change the configuration definition to remove the devices that cause MVS to exceed this limit.

Source: IOS device service exit for OSA and IQD (IOSVDSEO)

Module: IOSVDSEO

Routing code: 2,10

Descriptor code: 11

IOS580E LINK DEGRADED REPORTING CHPID=[nn | **] {INCIDENT UNIT *unit-ident* IC=*yy* INCIDENT UNIT *logical interface ident* | INCIDENT UNIT DATA COULD NOT BE OBTAINED} [ATTACHED UNIT *unit-ident*] [ATTACHED UNIT *logical interface ident*]

Explanation: A hardware error has occurred. A unit at one end of an optical interface link has detected a problem in the link or in one of the units attached to the link. As a result, data transfer across the link is degraded.

In the message text:

CHPID=*nn* | **

The reporting CHPID is not always associated with the actual link incident and might just represent the CHPID that is used to report the link incident. Therefore, never make the assumption that the reporting CHPID is associated with the link incident; instead, the incident unit should be analyzed by hardware support to determine the link incident source.

"**" indicates the reporting source was not a channel path.

INCIDENT UNIT *unit-ident*

The unit that detected the problem. The *unit-ident* contains the following fields:

- **TM=*ttttt*/*mdl* SER=*mmmp*pp-*sssss* IF=*xxx***

TM=*ttttt*/*mdl*

ttttt - machine type *mdl* - model number

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SER=mmmp-ssss

mmmm - manufacturer *pp* - manufacturing plant *sssss* - the right-most six characters of the unit sequence number - commonly known as the serial number

IF=xxxx

xxxx - physical interface number

IC=yy

The incident code that identifies the type of incident that occurred. This code is used by service personnel to help diagnose the problem.

INCIDENT UNIT *logical interface ident*

The unit that detected the problem. The *logical interface ident* contains the following fields:

- **LIF={zz | NOT APPLICABLE}**

LIF={zz | NOT APPLICABLE}

If it is available and is applicable, the logical interface number, *zz*, appears in this line. If the logical interface number is available but is not applicable, NOT APPLICABLE appears. If it is not available, this line is not displayed.

INCIDENT UNIT DATA COULD NOT BE OBTAINED

Either the incident unit could not be identified or it could be identified but the information may not be current and cannot be verified due to some problem, such as, loss of light.

ATTACHED UNIT *unit-ident*

The unit connected to the other end of the link. (The contents of *unit ident* were described previously.)

ATTACHED UNIT *logical interface ident*

The unit connected to the other end of the link. (The contents of *logical interface ident* were described previously.)

System action: The node is degraded. The system writes an error record to the logrec data set.

Operator response: Format and print the logrec data set error records and call hardware support.

Source: Input/output supervisor (IOS)

Module: IOSRACRW

Routing code: 2,10

Descriptor code: 3

IOS581E **LINK FAILED REPORTING CHPID=[nn | **] {INCIDENT UNIT *unit-ident* IC=*yy* INCIDENT UNIT *logical interface ident* | INCIDENT UNIT DATA COULD NOT BE OBTAINED} [ATTACHED UNIT *unit-ident*] [ATTACHED UNIT *logical interface ident*]**

Explanation: A hardware error has occurred. A unit at one end of an optical interface link has detected a failure in the link or in one of the units attached to the link. As a result, data transfer across the link has stopped.

In the message text:

CHPID=nn | **

The reporting CHPID is not always associated with the actual link incident and might just represent the CHPID that is used to report the link incident. Therefore, never make the assumption that the reporting CHPID is associated with the link incident; instead, the incident unit should be analyzed by hardware support to determine the link incident source.

"**" indicates the reporting source was not a channel path.

INCIDENT UNIT *unit-ident*

The unit that detected the failure. The *unit-ident* contains the following fields:

- **TM=ttttt/mdl SER=mmmp-sssss IF=xxxx**

TM=ttttt/mdl

ttttt - machine type *mdl* - model number

SER=mmmp-ssss

mmmm - manufacturer *pp* - manufacturing plant *sssss* - the right-most six characters of the unit sequence number - commonly known as the serial number

IF=xxxx

xxxx- physical interface number. This information is machine type dependent. For additional information see the system support documentation for that machine type and vendor, which can contain information about the type of port, lcss and chpid in use.

IC=yy

The incident code that identifies the type of incident that occurred. This code is used by service personnel to help diagnose the problem.

INCIDENT UNIT *logical interface ident*

The unit that detected the problem. The *logical interface ident* contains the following fields:

- **LIF={zz | NOT APPLICABLE}**

LIF={zz | NOT APPLICABLE}

If it is available and is applicable, the logical interface number, *zz*, appears in this line. If the logical interface number is available but is not applicable, NOT APPLICABLE appears. If it is not available, this line is not displayed.

INCIDENT UNIT DATA COULD NOT BE OBTAINED

Either the incident unit could not be identified or it could be identified but the information may not be current and cannot be verified due to some problem, such as, loss of light.

ATTACHED UNIT *unit-ident*

The unit connected to the other end of the link. (The contents of *unit ident* were described previously.)

ATTACHED UNIT *logical interface ident*

The unit connected to the other end of the link. (The contents of *logical interface ident* were described previously.)

System action: The node is not operational. The system writes an error record to the logrec data set.

Operator response: Format and print the logrec data set error records and call hardware support.

Source: Input/output supervisor (IOS)

Module: IOSRACRW

Routing code: 2,10

Descriptor code: 3

IOS582I **IOS1582I PATH** *chp* **NOW OPERATIONAL AND BROUGHT ONLINE FOR DEVICE(S):** *dev1,dev2...*

Explanation: The system determined that a path to one or more devices was previously offline and not operational. The path(s) are now operational and online.

In the message text:

chp The channel path identifier (CHPID).

dev1,dev2

The device number(s).

System action: The system continues processing.

Source: Input/output supervisor (IOS)

Module: IOSRSNDV

Routing code: 2,10

Descriptor code: 3

IOS583I **CAUSE OF FAILURE OF DEVICE** *dddd* **CORRECTED. REISSUE VARY COMMAND**

Explanation: The cause of the failure to bring the specified device online has been corrected. The operator is asked to reissue the vary device command.

In the message text:

dddd The device number.

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System action: None.

Operator response: Issue the vary device command again.

System programmer response: None.

Problem determination: None.

Source: Input/output supervisor (IOS)

Module: IECVIOPM

Routing code: 2

Descriptor code: 12

IOS600I IOACTION - THE FOLLOWING DEVICE(S) HAVE BEEN STOPPED: *dev,dev1-dev2*

Explanation: The operator entered an IOACTION STOP command to stop the specified devices.

In the message text:

dev,dev1-dev2

The device numbers of the devices stopped by the IOACTION STOP command.

System action: Only normal I/O activity to the listed devices has been stopped. IOS recovery and other I/O will still be active to the device.

Operator response: Enter the IOACTION RESUME command to allow normal I/O to continue.

Source: Input/output supervisor (IOS)

Module: IOSVQRDV

Routing code: 2,10

Descriptor code: 4

IOS601I IOACTION - DEVICES REMAIN IN THE STOPPED STATE. USE THE 'D IOS,STOP' COMMAND TO DISPLAY THE DEVICES

Explanation: The IOACTION STOP command has been used to stop normal I/O for a device or group of devices.

System action: The I/O to devices stopped by the IOACTION STOP command is being queued.

Operator response: Follow the recovery procedures documented in system message IOS427A. To continue I/O to these devices, enter the IOACTION RESUME command. To determine which devices are stopped, enter the DISPLAY IOS,STOP command.

Source: Input/output supervisor (IOS)

Module: IOSVQRDV

Routing code: 2,10

Descriptor code: 3

IOS602I IOACTION - STOP NOT ALLOWED FOR PAGING DEVICES. THE FOLLOWING DEVICE(S) ARE IGNORED: *dev dev1-dev2...*

Explanation: An IOACTION STOP command was entered for one or more paging devices. The IOACTION STOP command cannot be used on paging devices.

In the message text:

dev dev1-dev2

The device numbers of the ignored devices.

System action: The system ignores the listed devices.

Operator response: If recovery must include this device, then stop the system.

Source: Input/output supervisor (IOS)

Module: IOSVQRDV

Routing code: -

Descriptor code: 4

IOS603I IOACTION - STOP NOT ALLOWED FOR SYSRES DEVICE. THE FOLLOWING DEVICE IS IGNORED: *xxxx*

Explanation: An IOACTION STOP command was entered for the system resident (SYSRES) device. The IOACTION STOP command cannot be used on the SYSRES device.

In the message text:

xxxx The ignored SYSRES device.

System action: The system ignores the SYSRES device.

Source: Input/output supervisor (IOS)

Module: IOSVQRDV

Routing code: -

Descriptor code: 4

IOS604I IOACTION - STOP NOT ALLOWED FOR {RESERVED | ASSIGNED} OR {RESERVED | ASSIGN} PENDING DEVICES. THE FOLLOWING DEVICE(S) ARE IGNORED: *dev dev1-dev2...*

Explanation: An IOACTION STOP command was entered for one or more devices that are currently either assigned/reserved or pending assigned/reserved.

In the message text:

dev dev1-dev2

The device numbers of the ignored devices.

System action: The system ignores the command.

Operator response: To STOP I/O to a reserved/assigned device, do one of the following:

- Wait for the application or applications that are allocated to the device to end, then reenter the IOACTION STOP command.
- Cancel the application or applications that are allocated to the device, then reenter the IOACTION STOP command.

Source: Input/output supervisor (IOS)

Module: IOSVQRDV

Routing code: -

Descriptor code: 4

IOS605I IOACTION - STOP NOT ALLOWED FOR DEVICES IN USE BY THE SYSTEM. THE FOLLOWING DEVICE(S) ARE IGNORED: *dev dev1-dev2...*

Explanation: An IOACTION STOP command was entered for one or more devices currently in use by a system component. The IOACTION STOP command cannot be used for these devices.

In the message text:

dev dev1-dev2

The device numbers of the ignored devices.

System action: The system ignores the listed devices.

Operator response: If recovery must include any of the devices, then stop the system.

Source: Input/output supervisor (IOS)

Module: IOSVQRDV

IOS606I • IOS608I

Routing code: -

Descriptor code: 4

IOS606I IOACTION - STOP NOT ALLOWED FOR ALL DEVICE TYPES. THE FOLLOWING DEVICE(S) ARE IGNORED: *dev dev1-dev2...*

Explanation: An IOACTION STOP command was entered for one or more incorrect device types. The device numbers are either not valid device numbers for this system or they do not support IOACTION command processing. Only sharable DASD or assignable devices may be targeted.

In the message text:

dev dev1-dev2

The device numbers of the ignored devices.

System action: The system ignores the listed devices.

Operator response: Check the device numbers. Ensure that they are valid and either represent DASD devices or represent any other device type that supports assign/unassign processing (such as TAPE).

Source: Input/output supervisor (IOS)

Module: IOSVQRDV

Routing code: -

Descriptor code: 4

IOS607I IOACTION - THE FOLLOWING DEVICE(S) HAVE BEEN RESUMED: *dev,dev1-dev2*

Explanation: The operator entered an IOACTION RESUME command that successfully processed the listed devices to allow normal I/O to be processed.

In the message text:

dev,dev1-dev2

The device numbers of the resumed devices.

System action: Normal I/O activity to the listed devices is allowed to continue.

Source: Input/output supervisor (IOS)

Module: IOSVQRDV

Routing code: 2,10

Descriptor code: 4

IOS608I IOACTION - RESUME ONLY VALID FOR DEVICES WHICH ARE STOPPED. THE FOLLOWING DEVICE(S) ARE IGNORED: *dev dev1-dev2...*

Explanation: An IOACTION RESUME command was entered for one or more devices that are not among those in the stopped state. An IOACTION RESUME command is only valid for devices that have been stopped by the IOACTION STOP command.

In the message text:

dev dev1-dev2...

The device numbers of the ignored devices.

System action: The system ignores the listed devices.

Operator response: Enter the DISPLAY IOS,STOP command to list devices in the stopped state. Determine the devices to RESUME based on recovery actions taken on devices for which I/O has been stopped.

Source: Input/output supervisor (IOS)

Module: IOSVQRDV

Routing code: -

Descriptor code: 4

IOS609I IOACTION - NO DEVICES ARE STOPPED. REQUEST IGNORED

Explanation: An IOACTION RESUME command or a DISPLAY IOS,STOP command was entered, but no devices have had I/O stopped with the IOACTION STOP command.

System action: The system ignores the command.

Source: Input/output supervisor (IOS)

Module: IOSVQRDV

Routing code: -

Descriptor code: 4

IOS610I IOACTION - THE FOLLOWING DEVICE(S) ARE IN THE STOPPED STATE: *dev dev1-dev2...*

Explanation: A DISPLAY IOS,STOP command has been entered to display those devices stopped by the IOACTION STOP command.

In the message text:

dev dev1-dev2

The device numbers of the devices that are stopped.

System action: The system displays the devices in the stopped state.

Operator response: When recovery procedures are complete, enter the IOACTION RESUME command to resume normal I/O activity to the stopped devices.

Source: Input/output supervisor (IOS)

Module: IOSVQRDV

Routing code: -

Descriptor code: 8,9

IOS611I IOACTION - STOP/RESUME PROCESSING FAILURE

Explanation: An internal processing error occurred during the processing of an IOACTION STOP command, IOACTION RESUME command, or DISPLAY IOS,STOP command.

System action: The system does not perform the requested function. The system takes a dump and records the error in the logrec data set error record.

Operator response: Record any dump data and report this problem to a system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide any dump data.

Source: Input/output supervisor (IOS)

Module: IOSVQRDV

Routing code: 2,10

Descriptor code: 4

IOS612I IOACTION - STOP ALLOWED FOR SHARED {DASD} DEVICES ONLY. THE FOLLOWING DEVICE(S) ARE IGNORED: *dev,dev1-dev2...*

Explanation: An IOACTION STOP command was entered for one or more devices that are not shared. An IOACTION STOP command is only valid for direct access storage devices (DASD) capable of being shared, or devices that support assign/unassign processing. In the message text:

dev,dev1-dev2

The device numbers of the ignored devices.

IOS613I • IOS621I

System action: The system ignores the listed devices.

Operator response: Use the IOACTION command only for recovery situations involving shared devices.

Source: Input/output supervisor (IOS)

Module: IOSVQRDV

Routing code: -

Descriptor code: 4

**IOS613I IOACTION - STOP NOT ALLOWED FOR DEVICES WITH THE FOLLOWING RESOURCE(S):
XCF COUPLE DATA SET THE FOLLOWING DEVICE(S) ARE IGNORED: *dev,dev1-dev2...***

Explanation: An IOACTION STOP command was entered for one or more devices for which the STOP command is not allowed. The STOP is not allowed because the device contains a system critical resource as specified in the message text.

In the message text:

dev,dev1-dev2

The device numbers of the ignored devices.

System action: The system ignores the listed devices.

Operator response: Verify that correct device numbers were entered. If device numbers were correct and this command was issued in response to an IOS427A message, then proceed with the alternate recovery techniques listed in that message.

Source: Input/output supervisor (IOS)

Module: IOSVQRDV

Routing code: -

Descriptor code: 4

IOS620I IOS COMPONENT TRACE IS UNAVAILABLE - *text*

Explanation: The IOS component trace is not active.

In the message, *text* is one of the following:

COMPONENT TRACE DEFINE FAILED USING DEFAULT OPTIONS

IOS is unable to initialize its component tracing because it failed to define IOS component tracing to MVS.

AN UNEXPECTED ERROR OCCURRED

The system enters into recovery and takes a dump.

System action: Processing continues without IOS component tracing.

Operator response: Report this message to the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide any dump data.

Source: Input/output supervisor (IOS)

Module: IOSTRDEF, IOSTRRCD

Routing code: 2

Descriptor code: 4

IOS621I IOS COMPONENT TRACE FAILED USING PARMLIB MEMBER *membername* - TRACING WILL BE INITIALIZED USING DEFAULT OPTIONS

Explanation: IOS encountered an error during initialization while defining its component trace. The error is due to MVS component trace finding an error while reading the CTnIOSxx parmlib member.

In the message text:

membrname

Is the name of the failing IOS parmlib member.

System action: IOS component trace initialization continues with default options.

Operator response: See the operator response for the component trace messages (prefix ITT) accompanying this message.

System programmer response: See the system programmer response for the component trace messages, (prefix ITT), accompanying this message. Correct the parmlib member and ask the operator to issue the TRACE CT command specifying the corrected parmlib member after the system is IPLed to change the default trace to the desired options.

Note: If this message is issued at NIP then it is not accompanied by any ITT messages.

Source: Input/output supervisor (IOS)

Module: IOSTRDEF

Routing code: 2

Descriptor code: 4

IOS622I IOS COMPONENT TRACE OPTION *optname* IS NOT VALID - *text*

Explanation: A invalid trace option was specified for IOS component trace.

In the message text:

optname

Option name specified, or all asterisks if the name is greater than 8 characters.

In the message, *text* is one of the following:

- THE ALLOWABLE OPTIONS ARE EXTEND, STORAGE, NOFILTER, DCM, DS=nnnn, CAPTURE, HPAV
- A REQUESTED OPTION IS LONGER THAN 8 CHARACTERS
- NOFILTER OPTION NOT SPECIFIED AND ASID/JOBNAME FILTERING NOT ACTIVE
- THE TRACE DATA SPACE SIZE HAS ALREADY BEEN SET FOR THIS IPL
- THE REQUESTED SIZE FOR THE TRACE DATA SPACE IS INCORRECT

System action: The request is rejected, system processing continues.

Operator response: Issue the TRACE CT command with valid IOS component trace options.

System programmer response: None

Source: Input/output supervisor (IOS)

Module: IOSTRSSR

Routing code: -

Descriptor code: 5

IOS623I IOS COMPONENT TRACE ERROR - INSUFFICIENT STORAGE FOR TRACE BUFFERS

Explanation: There was not enough storage available to satisfy the request for IOS component trace buffers.

System action: The system rejects the TRACE CT command.

Operator response: Issue the TRACE CT command requesting a smaller size for the IOS component trace buffers.

System programmer response: None

Source: Input/output supervisor (IOS)

Module: IOSTRSSR

Routing code: -

Descriptor code: 5

IOS624I IOS COMPONENT TRACE FUNCTION IS LIMITED - THE TRACE DATA SPACE COULD NOT BE CREATED

Explanation: The IOS component trace data space could not be created.

System action: Processing continues. IOS component trace entries are still created but the number of entries available to be dumped is fewer than when a data space is available.

Operator response: Report this message to the system programmer.

System programmer response: Ask the operator to issue the TRACE CT command to increase the storage used for the IOS component trace buffers. Since the trace buffers are in common storage subpool 248, increase the trace buffers to the largest size your system will tolerate or up to the maximum allowed.

Source: Input/output supervisor (IOS)

Module: IOSTRSSR

Routing code: 1

Descriptor code: 5

IOS625I IOS COMPONENT TRACE OPTION *optname* NO LONGER SET - NOFILTER OPTION NOT SPECIFIED AND ASID/JOBNAME FILTERING NOT ACTIVE

Explanation: While the option named in the message text was turned on, NOFILTER was not specified and ASID or JOBNAME filtering was specifically turned off by the operator.

In the message text:

optname

Is the IOS component trace option specified.

System action: The option named in the message text is turned off.

Operator response: Report this message to the system programmer.

System programmer response: If the trace option is no longer desired, you might want to issue the TRACE CT command to decrease the buffer size. If the trace option is desired, reissue the TRACE CT command and either specify ASID/JOBNAME filtering or the NOFILTER option along with the option given in the message text.

Source: Input/output supervisor (IOS)

Module: IOSTRSSR

Routing code: 2

Descriptor code: 4

IOS626I IOS COMPONENT TRACE BUFFER SIZE SET TO *bufsizeK*

Explanation: Either the IOS component trace option specified caused the system to increase the buffer size to accommodate the increased tracing activity, or the operator changed the buffer size to a value that was not a multiple of 36K.

In the message text:

bufsize The size of IOS component trace buffer.

System action: IOS component trace processing continues using the buffer size indicated in the message. (The system rounds the value up to a multiple of 36k.)

Operator response: Report this message to the system programmer.

System programmer response: None

Source: Input/output supervisor (IOS)

Module: IOSTRSSR

Routing code: 2

Descriptor code: M4

IOS627E *text1* INTERFACE WITH ENCRYPTION KEY MANAGER CANNOT BE CONNECTED DUE TO
 text2

Explanation: Connectivity cannot be established for the host specified for the encryption key manager. This message is issued as a delayed response to a SETIOS EKM,PRIMARY=, SETIOS EKM,SECONDARY=, SET IOS=xx, D IOS,EKM,VERIFY= command. It is also issued during an encryption of a tape when the primary key manager failed to connect.

In the message text:

text1

The *text1* can be either PRIMARY or SECONDARY:

PRIMARY

The primary encryption key manager cannot be connected.

SECONDARY

The secondary encryption key manager cannot be connected.

text2

The *text2* can be one of the following reasons:

KEY MANAGER NOT SPECIFIED

A key manager was not specified at the time of encryption key manager verification.

SOCKET FAILURE RETVAL=*retval* ERRNO=*errno* ERRNOJR=*errnojr*

Encryption key manager processing failed to open a TCP/IP connection to the encryption key manager. *retval*, *errno*, and *errnojr* are the return values from the USS service that failed.

USS FAILURE

A failure in using USS services has prevented encryption.

OMVS SEGMENT FAILURE FOR IOSAS

The IOS address space (IOSAS) has determined that USS services are unavailable due to lack of permissions for IOSAS.

KEY MANAGER VERIFICATION FAILURE

The key manager was not verified correctly, and it has been determined that the connecting host was not a key manager.

COMMUNICATION TIME OUT

The key manager did not respond within a time-out value of three minutes.

System action: The system will still attempt connections with the primary or secondary host names in case that the error is temporary.

Operator response: If the host name is in error, issue a SETIOS EKM command to specify a correct encryption key manager, or NONE, to disable the in-band key management. Contact the system programmer to verify that the encryption key manager is currently running and TCP/IP and USS work correctly.

System programmer response: To determine the reason for the socket failure see *z/OS UNIX System Services Messages and Codes* or *z/OS Communications Server: IP Diagnosis Guide*.

For **USS FAILURE**, verify that USS is active.

For **OMVS SEGMENT FAILURE FOR IOSAS**, verify that IOSAS has permissions to an OMVS segment and that the security product is running.

Source: Input/output supervisor (IOS)

Routing code: 2, 10

Descriptor code: 5

IOS628E

IOS628E ENCRYPTION ON DEVICE *dddd* HAS FAILED DUE TO *text*

Explanation: Communication with the encryption key manager (EKM) has failed to retrieve the key after a predetermined time limit.

In the message text:

dddd

The device number.

text

The text can be one of the following reasons:

KEY MANAGER NOT SPECIFIED

A key manager was not specified at the time of key exchange.

SOCKET FAILURE RETVAL=*retval* ERRNO=*errno* ERRNOJR=*errnojr*

Encryption key manager processing failed to open a TCP/IP connection to the encryption key manager. *retval*, *errno* and *errnojr* are the return values from the USS service that failed.

CONNECTION FAILURE SOCKET ERNO=*xxxx*

Encryption key manager processing failed to open a TCP/IP connection to the encryption key manager. *xxxx* is the return code from the USS service that has failed.

COMMUNICATION TIME OUT

Encryption key manager processing communication reached a TCP/IP timeout.

INCORRECT DATA RECEIVED

There was an internal error communicating with the encryption key manager and the tape drive.

IO ERROR

An unrecoverable I/O error was encountered.

USS FAILURE

A failure in using USS services has prevented encryption.

ENCRYPTION STATUS NOT RETURNED

A hardware error has occurred. A key exchange was requested, however the encryption status message was not returned by the control unit.

PIN FAILURE

A software error has occurred.

OMVS SEGMENT FAILURE FOR IOSAS

The IOS address space (IOSAS) has determined that USS services could not be used due to a lack of permissions for IOSAS.

System action: The system will still attempt connections with the primary or secondary host names in case the error is temporary.

Operator response: If the host name is in error, issue a SETIOS EKM command to specify a correct encryption key manager or NONE to disable in-band key management. Contact the system programmer to verify that the encryption key manager is currently running and TCP/IP and USS work correctly.

System programmer response: To determine the reason for the socket failure see *z/OS UNIX System Services Messages and Codes* or *z/OS Communications Server: IP Diagnosis Guide*.

For **USS FAILURE**, verify that USS is active.

For **OMVS SEGMENT FAILURE FOR IOSAS**, verify that IOSAS has permissions to an OMVS segment and the security product is running.

Source: Input/output supervisor (IOS)

Routing code: 2,10

Descriptor code: 5

IOS630I *hh:mm:ss* ZHPF FACILITY | HIGH PERFORMANCE FICON FACILITY *text*

Explanation: The system displays this message in response to a D IOS,ZHPF command. See *z/OS MVS System Commands* on how to enable and disable the High Performance FICON for z Systems (zHPF) facility.

In the message text:

hh:mm:ss

The time in hours, minutes, and seconds.

text The text can be one of the following:

IS ENABLED

The ZHPF facility is enabled.

IS DISABLED

The ZHPF facility is disabled.

NOT SUPPORTED BY PROCESSOR

The ZHPF facility is not supported by the processor.

System action: The system continues processing.

Operator response: None.

Source: Input/output supervisor (IOS)

Module: IOSCPARZ

Routing code: 2

Descriptor code: 12

IOS631I *text* ENCRYPTION KEY MANAGER WAS SUCCESSFULLY CONNECTED

Explanation: In response to a D IOS,EKM,VERIFY= command, this message verifies that the host name specified with the SETIOS or IECIOSxx parmlib member (through the EKM command) can communicate with the encryption key manager.

In the message text:

text

The *text* can be either PRIMARY or SECONDARY:

PRIMARY

The primary encryption key manager was verified.

SECONDARY

The secondary encryption key manager was verified.

System action: The system continues processing.

Operator response: None.

System programmer response: None.

Routing code: 2, 10

Descriptor code: 5

IOS632I *hh:mm:ss* CU GROUP DATA*text*CONTROL UNITS: *cuno cuno...*THE GROUP IS INELIGIBLE FOR DCM FOR THE FOLLOWING REASONS:*rsntext*

Explanation: This message is issued in response to a D IOS,CUGRP command.

In the message text:

text

```
GROUP STATIC CHPIDS          MAX #CUS DCM
grpId chpids                 max #cu dcm
PCU ID=pcuid ND=ttttt.mmm.nnn.pp.sssssssssss.uuuu MGD=mgd
```

IOS632I

grpId

The control unit group identifier. The control unit group identifier is set to the lowest control unit number in the group.

chpids

A list of static CHPIDs defined to each control unit in the group.

max

The maximum managed CHPID count for the group.

#cu

The number of control units in the group.

dcm

Indicates whether the group is eligible (Y) or ineligible (N) for Dynamic Channel-Path Management (DCM).

PCU

Information is displayed for each physical control unit (storage controller) in the group. Managed and non-managed control units in the group are separated into unique PCU lines.

pcuid

The physical control unit group ID. This value is set to the lowest control unit number in the PCU for this group.

ttttt.mmm.nnn.pp.ssssssssss.uuuu

The node descriptor for the physical control unit. The node descriptor consists of the following items:

ttttt

Type number of the device.

mmm

Model number of the device.

nnn

Manufacturer identification code.

pp

Plant of manufacture number.

sssssssssss

Sequence number.

uuuu

Two-byte tag.

mgd

Indicates whether the control units in this group are managed by DCM (Y) or not managed by DCM (N). A control unit is managed if it has a non-zero maximum managed CHPID count.

CONTROL UNITS:

cuno One or more control units for the PCU within this control unit group.

THE GROUP IS INELIGIBLE FOR DCM FOR THE FOLLOWING REASONS:

rsntext

The group contains managed control units and the group is ineligible for DCM processing. *rsntext* is one or more of the following items:

CONTROL UNITS HAVE INCONSISTENT MAX MANAGED CHPID COUNT

The managed control units in the group do not have consistent maximum managed CHPID counts. For example, one control unit has a maximum value of 3, and another control unit has a maximum value of 4.

SYNCHRONIZATION FAILED FOR THE GROUP OR A CONTROL UNIT

DCM ensures that all managed control units in the group are connected to the same set of managed CHPIDs. If the control units in the group are not connected to the same set of managed CHPIDs, synchronization processing is performed to add and/or delete managed CHPIDs to make all of the control units consistent. If synchronization processing fails, the control unit group is not eligible for DCM. DCM will retry the synchronization request after 30 minutes. The SETIOS DCM=REFRESH command can also be used to force DCM to retry synchronization.

System action: The system continues processing.

Operator response: None.

Routing code: 2, 10

Descriptor code: 5

| **IOS634I** **IOS SYSTEM OPTION**
| **HYPERWRITE IS** *status*

| **Explanation:** The system displays this message in response to a DISPLAY IOS command when one of the following options are specified:

- | • HYPERWRITE

| For information about how to change the current option for the specified keyword, see the SETIOS command in *z/OS MVS System Commands*.

| In the message text:

| **HYPERWRITE IS** *status*

| Indicates the status of IBM zHyperWrite data replication on a system-wide basis.

| **Note:** Certain exploiting applications, such as DB2, may also provide their own controls to enable or disable the use of this function.

| **HYPERWRITE IS ENABLED**

| Indicates that IBM zHyperWrite data replication is enabled system-wide. IBM zHyperWrite data replication allows I/O drivers to write to both primary and secondary devices for some or all of the write I/O operations that are performed. This can provide improvements in I/O latency.

| **HYPERWRITE IS DISABLED**

| Indicates that IBM zHyperWrite data replication is disabled.

| **System action:** None.

| **Operator response:** None.

| **System programmer response:** None.

| **Problem determination:** None.

| **Source:** I/O Supervisor

| **Module:** IOSCPARZ

| **Routing code:** 2

| **Descriptor code:** 12

| **IOS635I** **STATE SAVE FOR CONTROLLER** *nodedesc* **INITIATED BY DEVICE** *sdddd*. **REQUESTOR:** *requestor*

| **Explanation:** A state save has been requested for the specified storage controller.

| In the message text:

| *nodedesc*

| The node descriptor of the storage controller whose state data is being dumped. The node descriptor is in the form *ttttt.mmm.nnn.pp.ssssssssss*; where:

| *ttttt*

| Type number of the device.

| *mmm*

| Model number of the device.

| *nnn*

| Manufacturer identification code.

| *pp* Plant of manufacture number.

| *sssssssssss*

| Sequence number.

IOS636I

| *sdddd* The subchannel set identifier and device number that initiated the state save operation of the controller.

| *requestor*
| The processing that triggered the state save request:

| **SLIP TRAP ID=xxxx**
| *xxxx* is the SLIP trap identifier.

| **System action:** Diagnostic state save data is dumped on the storage controller and can be obtained using the Storage Hardware Management Console.

| **Operator response:** None.

| **System programmer response:** Use the specified storage controller identification to locate the state save dump. Review the diagnostic data to determine whether a problem exists on the storage controller. If requested, provide the diagnostic data to the IBM Support Center.

| **Source:** Input/output supervisor (IOS)

| **Module:** IOSVALOG

| **Routing code:** 2

| **Descriptor code:** 4

| **IOS636I STATE SAVE FOR CONTROLLER *nodedesc* NOT TAKEN.**

| *Reason*

| **Explanation:** A requested storage controller state save has not been taken.

| In the message text:

| *nodedesc*

| The node descriptor of the storage controller whose state data was requested, but could not be taken. The node descriptor is in the form *ttttt.mmm.nnn.pp.ssssssssss*; where:

| *ttttt*

| Type number of the device.

| *mmm*

| Model number of the device.

| *nnn*

| Manufacturer identification code.

| *pp* Plant of manufacture number.

| *sssssssssss*

| Sequence number.

| *Reason* The reason that the requested storage controller state save was not taken:

| **DEVICE NOT FOUND**

| The device could not be found.

| **FUNCTION NOT SUPPORTED**

| The device does not support the non-disruptive state save function.

| **STATE SAVE REQUEST TOO FREQUENT**

| The frequency of NDSS data collection is too high.

| **ANTRQST SERVICE RC:rc RSN:rsn**

| Where:

| *rc* Return code from the ANTRQST service.

| *rsn*

| Reason code from the ANTRQST service.

| **System action:** None.

| **Operator response:** None.

- | **System programmer response:** If the reason is DEVICE NOT FOUND and the requestor is a SLIP TRAP, ensure that the SLIP command is issued correctly.
- | **Source:** Input/output supervisor (IOS)
- | **Module:** IOSVALOG
- | **Routing code:** 2
- | **Descriptor code:** 4

IOS650I PATH VALIDATION NOT DONE, DEVICE IN USE BY VTAM

Explanation: A VARY PATH ONLINE request was issued to a device that VTAM® has in use with a long running channel program. To avoid disrupting the VTAM I/O, the system does not validate the device path.

System action: The system bypasses a validity check of the physical path to the device. For a VARY PATH ONLINE request, the system marks the path online.

Operator response: Notify the system programmer.

System programmer response: Examine any related messages. Use the D M=DEV(dev) command to determine the state of the device path.

Source: Input/output Supervisor (IOS)

Module: IECVIOPM

Routing code: 1

Descriptor code: 4

IOS2001I *devn*,INOPERATIVE PATHS *chp,chp,...* STATUS FOR PATH(S) *chp,chp,...* *errortype* [*errormsg*]

Explanation: A device was unable to operate on the specified channel paths.

See the table below for *errortype* and *errormsg* text.

In the message text:

devn The device number. The subchannel set identifier is indicated where appropriate.

chp An inoperative channel path identifier (CHPID).

errortype
Reason for the inoperative path.

errormsg
Reason for the inoperative path.

errortype/errormsg text

errortype

PATH IS AVAILABLE, INITIALIZED & OPERATIONAL (00)

errortype

PATH DEFINITION ERROR (10)

errormsg

- [INSTALLED CHANNEL H/W DOES NOT MATCH DEFINED (10)]
- [INTEGRATED CTC FEATURE NOT INSTALLED (20)]
- [ESCON CHANNEL CONNECTED TO ANOTHER ESCON CHANNEL (30)]
- [INTEGRATED CTC CONNECTED TO ESCON CONTROL UNIT (40)]
- [NON-ES CONVERSION CHANNEL CONNECTED TO ES CONVERTER (50)]

IOS2001I

- [ES CONVERSION CHANNEL NOT CONNECTED TO ES CONNECTION CONVERTER (60)]
- [ESCON CHANNEL WITH MULTI LINKS DEFINED NOT CONNECTED TO SWITCH (70)]
- [ESCON CHANNEL HAS MULTI LINKS DEFINED CONNECTED TO STATIC PORT (71)]
- [ESCON CHANNEL CONNECTED TO SWITCH BUT CU LINK ADDR NOT DEFINED (80)]
- [ESCON CHANNEL IS CONNECTED TO A SWITCH HAVING SAME CU LINK ADDR (90)]
- [CFS CHANNEL IS CONNECTED TO ANOTHER CFS (A0)]
- [BUFFER SIZE DEFINITIONS INCOMPATABLE (C0)]

errortype

CHANNEL PATH NOT AVAILABLE (20)

errormsg

- [CHANNEL PATH NOT CONFIGURED ONLINE (10)]
- [CHANNEL PATH IN CHECK-STOP STATE (20)]
- [CHANNEL PATH IN PERMANENT ERROR STATE (30)]
- [LINK RCVY THRESHOLD EXCEEDED FOR ALL LOGICAL PATHS OF CHNL PATH (60)]

errortype

WRAP BLOCK IS INSTALLED (30)

errortype

CHANNEL PATH IS IN TERMINAL STATE (40)

errortype

CHANNEL SUBSYSTEM DETECTED A LINK FAILURE CONDITION (50)

errormsg

- [LOSS OF SIGNAL OR SYNCHRONIZATION CONDITION RECOGNIZED (10)]
- [NOT OPERATIONAL SEQUENCE RECOGNIZED (20)]
- [SEQUENCE TIMEOUT RECOGNIZED (30)]
- [ILLEGAL SEQUENCE RECOGNIZED (40)]

errortype

CHANNEL LINK LEVEL FACILITY IN OFFLINE RECEPTION STATE (60)

errortype

PORT REJECT WAS ENCOUNTERED (70)

errormsg

- [ADDRESS INVALID ERROR (10)]
- [UNDEFINED DESTINATION ADDRESS ERROR (11)]
- [DESTINATION PORT MALFUNCTION (12)]
- [DYNAMIC SWITCH PORT INTERVENTION REQUIRED (13)]

errortype

LINK LEVEL REJECT WAS ENCOUNTERED (80)

errormsg

- [TRANSMISSION ERROR (01)]
- [DESTINATION ADDRESS INVALID ERROR (05)]
- [RESERVED FIELD ERROR (07)]
- [UNRECOGNIZED LINK CONTROL FUNCTION (08)]
- [PROTOCOL ERROR (09)]
- [ACQUIRE LINK ADDRESS ERROR (0A)]
- [UNRECOGNIZED DEVICE LEVEL (0B)]

errortype

CHANNEL LINK LEVEL FACILITY DETECTED A LINK ERROR (90)

errmsg

- [CONNECTION ERROR (10)]
- [TRANSMISSION ERROR (20)]
- [PROTOCOL ERROR (30)]
- [DESTINATION ADDRESS INVALID ERROR (40)]
- [DEVICE LEVEL ERROR (50)]
- [LINK RCVY THRESHOLD EXCEEDED FOR ALL LOGICAL PATHS OF DEST LINK (60)]

errortype

LOGICAL PATH IS REMOVED OR NOT ESTABLISHED (A0)

errmsg

- [PACING PARAMETERS ERROR (01)]
- [NO RESOURCES AVAILABLE (02)]
- [DESIGNATED CONTROL UNIT IMAGE DOES NOT EXIST (04)]
- [LOGICAL PATH PRECLUDED BY CONFIGURATION AT CONTROL UNIT IMAGE (05)]
- [LINK RECOVERY THRESHOLD EXCEEDED FOR LOGICAL PATH (06)]

errortype

IN PROCESS OF INITIALIZING PATH (B0)

errmsg

- [CONTROL UNIT DEVICE LEVEL INITIALIZATION IS NOT COMPLETE (10)]
- [LINK BUSY CONDITION LAST ENCOUNTERED (20)]
- [PORT BUSY CONDITION LAST ENCOUNTERED (30)]
- [CHANNEL PATH BUSY CONDITION LAST ENCOUNTERED (40)]

errortype

SUBCHANNEL PATH AVAILABLE, BUT DEVICE NOT OPERATIONAL (C0)

errmsg

- [SELECT-IN OR ADDRESS EXCEPTION CONDITION (10)]

errortype

NO FURTHER INFORMATION AVAILABLE OR UNKNOWN CONDITION (FF)

System action: Until the operator reactivates the inoperative path(s), the system continues to use the device over paths that are operational. This message is written to SYSLOG only.

Operator response: Do the following:

- Isolate the failing storage director. Contact hardware support to repair it.
- If only one functional path remains, transfer critical applications to backup.
- Check for a disabled control unit, an altered switching unit, or a disabled channel path.
- If the problem persists, vary the path(s) to the device offline to prevent the channel from selecting paths that are not operational.

Source: Input/output supervisor (IOS)

Module: IOSVIRBN

Routing code: -

Descriptor code: -

IOS2002I *devn*, NO PATHS AVAILABLE *chp,chp,...* STATUS FOR PATH(S) *chp,chp,...* *errortype* [*errormsg*]

Explanation: The system selected a device for operation. The device did not respond to any online path. The system requires an online interrupt to retry I/O requests to the device.

See the table below for *errortype* and *errormsg* text.

In the message text:

devn The device number. The subchannel set identifier is indicated where appropriate.

chp An inoperative channel path identifier (CHPID).

errortype
Reason for the inoperative path.

errormsg
Reason for the inoperative path.

See message IOS2001I for a description of the *errortype* and *errormsg* text.

System action: In most cases, subsequent I/O requests to the device wait until the device becomes available. This message is written to SYSLOG only.

Operator response: An I/O interrupt is required to cause I/O requests to the device to be retried. Do one of the following to simulate an I/O interrupt and cause queued requests to be retried:

- Enter a VARY DEVICE ONLINE command for *devn*
- Enter a VARY PATH ONLINE command for a path to device *devn*
- If a serial fiber is not connected, connect the serial fiber to device *devn*.

Source: Input/output supervisor (IOS)

Module: IOSVIRBN, IOSRDPSV

Routing code: -

Descriptor code: -

Messages with subchannel set identifiers

IEA1522I This message indicates that there is a subchannel set identifier associated with the device number. See IEA522I for the full message explanation.

IEA1525W This message indicates that there is a subchannel set identifier associated with the device number. See IEA525W for the full message explanation.

IEA1774I	This message indicates that there is a subchannel set identifier associated with the device number. See IEA774I for the full message explanation.
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IOS1003A	This message indicates that there is a subchannel set identifier associated with the device number. See IOS003A for the full message explanation.
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IOS1017I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS017I for the full message explanation.
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IOS1050I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS050I for the full message explanation.
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IOS1051E	This message indicates that there is a subchannel set identifier associated with the device number. See IOS051E for the full message explanation.
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IOS1071I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS071I for the full message explanation.
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IOS1075E	This message indicates that there is a subchannel set identifier associated with the device number. See IOS075E for the full message explanation.
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IOS1076E	This message indicates that there is a subchannel set identifier associated with the device number. See IOS076E for the full message explanation.
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IOS1077E	This message indicates that there is a subchannel set identifier associated with the device number. See IOS077E for the full message explanation.
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IOS1078I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS078I for the full message explanation.
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IOS1079I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS079I for the full message explanation.
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IOS1080I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS080I for the full message explanation.
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IOS1102I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS102I for the full message explanation.
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IOS1104I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS104I for the full message explanation.
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IOS1105I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS105I for the full message explanation.
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IOS1109E	This message indicates that there is a subchannel set identifier associated with the device number. See IOS109E for the full message explanation.
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IOS1110D • IOS1157I

IOS1110D	This message indicates that there is a subchannel set identifier associated with the device number. See IOS110D for the full message explanation.
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IOS1111D	This message indicates that there is a subchannel set identifier associated with the device number. See IOS111D for the full message explanation.
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IOS1112D	This message indicates that there is a subchannel set identifier associated with the device number. See IOS112D for the full message explanation.
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IOS1117A	This message indicates that there is a subchannel set identifier associated with the device number. See IOS117A for the full message explanation.
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IOS1118A	This message indicates that there is a subchannel set identifier associated with the device number. See IOS118A for the full message explanation.
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IOS1119A	This message indicates that there is a subchannel set identifier associated with the device number. See IOS119A for the full message explanation.
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IOS1120D	This message indicates that there is a subchannel set identifier associated with the device number. See IOS120D for the full message explanation.
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IOS1124A	This message indicates that there is a subchannel set identifier associated with the device number. See IOS124A for the full message explanation.
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IOS1150I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS150I for the full message explanation.
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IOS1151I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS151I for the full message explanation.
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IOS1152E	This message indicates that there is a subchannel set identifier associated with the device number. See IOS152E for the full message explanation.
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IOS1153E	This message indicates that there is a subchannel set identifier associated with the device number. See IOS153E for the full message explanation.
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IOS1154I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS154I for the full message explanation.
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IOS1155I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS155I for the full message explanation.
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IOS1156I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS156I for the full message explanation.
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IOS1157I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS157I for the full message explanation.
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IOS1158I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS158I for the full message explanation.
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IOS1159I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS159I for the full message explanation.
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IOS1161I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS161I for the full message explanation.
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IOS1164I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS164I for the full message explanation.
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IOS1165I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS165I for the full message explanation.
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IOS1202E	This message indicates that there is a subchannel set identifier associated with the device number. See IOS202E for the full message explanation.
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IOS1203I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS203I for the full message explanation.
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IOS1207I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS207I for the full message explanation.
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IOS1208I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS208I for the full message explanation.
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IOS1250I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS250I for the full message explanation.
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IOS1251I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS251I for the full message explanation.
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IOS1275I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS275I for the full message explanation.
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IOS1278I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS278I for the full message explanation.
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IOS1279I	This message indicates that there is a subchannel set identifier associated with the device number.
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IOS1280I	This message indicates that there is a subchannel set identifier associated with the device number.
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IOS1282I	This message indicates that there is a subchannel set identifier associated with the device number.
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IOS1283I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS283I for the full message explanation.
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IOS1291I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS291I for the full message explanation.
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IOS1426I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS426I for the full message explanation.
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IOS1428I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS428I for the full message explanation.
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IOS1429I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS429I for the full message explanation.
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IOS1444I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS444I for the full message explanation.
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IOS1450E	This message indicates that there is a subchannel set identifier associated with the device number. See IOS450E for the full message explanation.
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IOS1451I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS451I for the full message explanation.
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IOS1452I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS452I for the full message explanation.
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IOS1500I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS500I for the full message explanation.
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IOS1502I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS502I for the full message explanation.
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IOS1515A	This message indicates that there is a subchannel set identifier associated with the device number. See IOS515A for the full message explanation.
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IOS1582I	This message indicates that there is a subchannel set identifier associated with the device number. See IOS582I for the full message explanation.
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Basic HyperSwap Messages

HyperSwap messages have the following ID convention:

IOSH The HyperSwap subcomponent of IOS

S | M where:

S - HyperSwap API Service address space

M - HyperSwap Management address space

nnnn The four-digit message number

T The message type identifier (for example, Informational or Eventual)

IOSHS0000I HyperSwap Services ready *address*

Explanation: The HyperSwap Services address space has been successfully started.

In the message text:

address

The common storage address of the HyperSwap Services cross-memory control block.

System action: None.

Operator response: None.

Module: IOSHSAPI

Routing code: 2

Descriptor code: 6

IOSHS0001I HyperSwap Services is already active.

Explanation: HyperSwap Services address space is already active.

System action: The started task is ended.

Operator response: None.

Module: IOSHSAPI

Routing code: 2

Descriptor code: 6

IOSHS0002I Stop command received - HyperSwap Services shutting down

Explanation: HyperSwap Services is shutting down.

System action: The HyperSwap Services address space is ended.

Module: IOSHSAPI

Routing code: 2

Descriptor code: 6

IOSHS0009I *reason devn*

Explanation: A reserve existed on the PPRC primary device prior to the HyperSwap but HyperSwap Services failed to obtain a reserve for the new PPRC primary device or release the reserve for the old PPRC primary device after the HyperSwap.

In the message text:

HyperSwap failed to obtain reserve on new primary, device

HyperSwap was unable to obtain the reserve to the specified new primary device after the HyperSwap completed.

HyperSwap failed to release reserve on old primary, device

HyperSwap was unable to release the reserve to the specified old primary device after the HyperSwap completed.

devn

The associated PPRC device number.

System action: The PPRC primary device is boxed and HyperSwap continues.

Operator response: Follow installation procedure for reporting problems.

System programmer response: Determine why the HyperSwap Services reserve request to the PPRC primary volume failed and correct the problem. If you are not able to resolve the problem, contact the IBM Support Center.

Module: IOSHSSUB

IOSHS0010I

Routing code: 2

Descriptor code: 6

IOSHS0010I *reason devn*

Explanation: HyperSwap Services detected a PPRC device error condition and are not able to complete the requested function.

In the message text:

reason

One of the following:

PPRC secondary device is online, device

The specified PPRC secondary device was found to be online. PPRC secondary devices must be offline to be monitored for HyperSwap.

PPRC secondary device is not defined as a DASD device

The specified PPRC secondary device is not defined as a DASD device.

No operational paths to device

The specified PPRC device was found to have no operational channel paths.

Subchannel is not connected to device

The specified PPRC device UCB was found to have no operational subchannel defined.

Subchannel is unusable for device

The specified PPRC device UCB was found to be unusable because of a permanent error condition.

PPRC secondary device is boxed, device

The specified PPRC secondary device was found to be in the boxed state and unusable.

PPRC primary device is not defined as a DASD device

The specified PPRC primary device is not defined as a DASD device.

PPRC primary device is boxed, device

The specified PPRC primary device was found to be in the boxed state and unusable.

Dynamic Pathing is not initialized for PPRC Secondary device

The specified PPRC secondary device was found to not have Dynamic Pathing established. The Hyperswap configuration may need to be purge and re-loaded.

| **Alternate subchannel set not consistent with other PPRC primary devices**

| The specified PPRC primary device had a different subchannel set from other PPRC primary devices.

| **Alternate subchannel set not consistent with other PPRC secondary devices**

| The specified PPRC secondary device had a different subchannel set from other PPRC secondary devices.

| **PPRC primary and secondary devices are both in alternate subchannel sets**

| Both a PPRC primary and a PPRC secondary device were found to be in an alternate subchannel set. The primary device number is shown.

devn

The associated PPRC device number.

System action: The HyperSwap Services request is terminated.

Operator response: Follow installation procedure for reporting problems.

System programmer response: Correct the PPRC device configuration problem indicated. If you are unable to correct the problem, purge and re-load the Hyperswap Configuration. If you still are not able to resolve the problem, contact the IBM Support Center.

Module: IOSHSAPI

Routing code: 2

Descriptor code: 6

IOSHS0011I MIDAW support does not match between *pdevicenum* and *sdevicenum*

Explanation: HyperSwap Services detected incompatible MIDAW support characteristics between the Primary and Secondary PPRC devices.

Note: This condition may exist due to a prior failure initializing an offline PPRC Primary device as reported via message IOSHS0018I.

In the message text:

pdevicenum

Primary device number

sdevicenum

Secondary device number

System action: The HyperSwap Services request is terminated.

Operator response: Follow installation procedure for reporting problems.

System programmer response: Correct the PPRC device configuration problem indicated. If you are not able to resolve the problem, contact the IBM Support Center.

Module: IOSHSAPI

Routing code: 2

Descriptor code: 6

IOSHS0012I Test secondary I/O failed. Dev=*sdevicenum* IOSCOD=*ioscode* IOSTATUS=*iostatus* IOSSNS=*iosense*

Explanation: HyperSwap Services encountered a permanent I/O error when attempting to access the PPRC secondary volume.

In the message text:

sdevicenum

Secondary device number

ioscode

IOS completion code

iostatus

I/O status

iosense

I/O sense data

System action: The HyperSwap Services request is terminated.

Operator response: Follow installation procedure for reporting problems.

System programmer response: Determine why the HyperSwap Services I/O request to the PPRC secondary volume failed and correct the problem. If you are not able to resolve the problem, contact the IBM Support Center.

Module: IOSHSSUB

Routing code: 2

Descriptor code: 6

IOSHS0013I No operational paths to device *pdevicenum*

Explanation: HyperSwap Services detected that there were no operational channel paths to the associated PPRC primary device.

In the message text:

pdevicenum

Primary device number

System action: The HyperSwap Services request is terminated.

IOSHS0014I • IOSHS0015I

Operator response: Follow installation procedure for reporting problems.

System programmer response: Determine why there are no operational channel paths to the associated PPRC primary volume and correct the problem. If you are not able to resolve the problem, contact the IBM Support Center.

Module: IOSHSSUB

Routing code: 2

Descriptor code: 6

IOSHS0014I *Device devicenum is not in the correct state. State=devicestate Flags=deviceflags step#=stepnumber*

Explanation: HyperSwap Services detected that a pprc volume was not in the expected state for the requested function call.

In the message text:

devicenum

Device number

devicestate

Device state

deviceflags

Device flags

stepnumber

Step number

System action: The HyperSwap Services request is terminated.

Operator response: Follow installation procedure for reporting problems.

System programmer response: Determine why the pprc volume is not in the expected state and correct the problem. If you are not able to resolve the problem, contact the IBM Support Center.

Module: IOSHSSUB

Routing code: 2

Descriptor code: 6

IOSHS0015I *reason Dev=sdevicenum IOSCOD=ioscode IOSTATUS=iostatus SNS=iosense1iosense2iosense3iosense4iosense5iosense6iosense7iosense8*

Explanation: HyperSwap Services encountered a permanent I/O error when attempting to access the PPRC secondary volume.

In the message text:

reason

One of the following:

Failover failed

A failover establish order I/O request failed to the specified device with the associated sense data indicated.

Failback failed

A failback establish order I/O request failed to the specified device with the associated sense data indicated.

sdevicenum

Secondary device number

ioscode

IOS completion code

iostatus

I/O status

iosense1

Sense bytes 0 to 3

iosense2

Sense bytes 4 to 7

iosense3

Sense bytes 8 to 11

iosense4

Sense bytes 12 to 15

iosense5

Sense bytes 16 to 19

iosense6

Sense bytes 20 to 23

iosense7

Sense bytes 24 to 27

iosense8

Sense bytes 28 to 31

System action: The HyperSwap Services request is terminated.**Operator response:** Follow installation procedure for reporting problems.**System programmer response:** Determine why the HyperSwap Services I/O request to the PPRC secondary volume failed and correct the problem. If you are not able to resolve the problem, contact the IBM Support Center.**Module:** IOSHSSUB**Routing code:** 2**Descriptor code:** 6**IOSHS0016I Query Unit Address Configuration I/O failed. Dev=*pdevicenum* IOSCOD=*ioscode* IOSTATUS=*iostatus* IOSSNS=*iosense*****Explanation:** HyperSwap Services encountered a permanent I/O error attempting to query unit address information for a new Primary device.

In the message text:

pdevicenum

New primary device number

ioscode

IOS completion code

iostatus

I/O status

iosense

I/O sense data

System action: The HyperSwap Services request processing continues. One or more Parallel Access Volume alias devices might not have been bound to their base volume.**Operator response:** See System Programmer response. Allow WLM to select the alias volumes for work or manually vary the base device online unconditionally.**System programmer response:** Determine why the HyperSwap Services I/O request to the new primary volume failed and correct the problem.**Note:** For IOSCOD x'53' the I/O time out might be due to a device reserve moved to the new primary volume and not yet released by the application. If you are not able to resolve the problem, contact the IBM Support Center.**Module:** IOSHSSUB**Routing code:** 2**Descriptor code:** 6

| **IOSHS0018I Initialization failed for device** *pdevicenum*

| **Explanation:** HyperSwap Services was unable to initialize a device for use as a PPRC primary or secondary volume.

| In the message text:

| *pdevicenum*

| Primary device number

| **System action:** The HyperSwap Services request processing continues.

| **Operator response:** Follow installation procedure for reporting problems.

| **System programmer response:** Determine why the device could not be initialized and correct the problem. If unable to resolve the problem, contact the IBM Support Center.

| **Module:** IOSHSSUB

| **Routing code:** 2

| **Descriptor code:** 6

| **IOSHS0019I STATE SAVE FOR CONTROLLER** *nodedesc* **INITIATED BY DEVICE** *sdddd*. **FUNCTION:** *function-code*

| **Explanation:** A state save has been requested for the specified storage controller. The state save may or may not have been completed for the specified storage controller.

| In the message text:

| *nodedesc*

| The node descriptor of the storage controller whose state data is being dumped. The node descriptor is in the form *ttttt.mmm.nnn.pp.ssssssssss*; where:

| *ttttt*

| Type number of the device.

| *mmm*

| Model number of the device.

| *nnn*

| Manufacturer identification code.

| *pp* Plant of manufacture number.

| *sssssssssss*

| Sequence number.

| *sdddd* The subchannel set identifier and device number that initiated the state save operation of the controller.

| *function-code*

| The function code passed to the HyperSwap API.

| **System action:** Diagnostic state save data has been requested on the storage controller and can be obtained using the Storage Hardware Management Console.

| **Operator response:** None.

| **System programmer response:** Use the specified storage controller identification to locate the state save dump, if one has been successfully generated. Review the diagnostic data to determine whether a problem exists on the storage controller. If requested, provide the diagnostic data to the IBM Support Center.

| **Source:** HyperSwap API

| **Module:** IOSHSSUB

| **Routing code:** 2

| **Descriptor code:** 4

IOSHM0200I [HyperSwap|MetroMirror] configuration *actionname*

Explanation: Basic HyperSwap has successfully processed the indicated request.

In the message text:

actionname

One of the following:

Load complete

A configuration data file is activated.

LoadTest complete

A configuration data file is verified.

Purge complete

The current configuration data file is deactivated.

Load for New Member complete

A configuration data file is activated for a new member of Basic HyperSwap.

Load complete - Duplicate data

A duplicate configuration data file is received for a Load request.

System action: None.

Operator response: None.

System programmer response: None.

Module: IOSHMCFG

Routing code: 2

Descriptor code: 4

IOSHM0201I [HyperSwap|MetroMirror] configuration *actionone* fails

Reason: IOSHXSND processing fails

Reason: Device configuration error

Reason: Swap in progress

Reason: Load in progress

Reason: Purge in progress

Reason: No active configuration

Reason: A Configuration Data exists

Reason: New Session not supported

Reason: Unexpected result received

Reason: Configuration priority is not valid

Reason: Prohibited by multi-target policy

Reason: Configuration priority conflicts with active configuration

Reason: Configuration replacement must be for the same type

Reason: *actiontwo* on member *memname*

Reason code: *failrsn* Devices: *primdev-secdev*

Explanation: Basic HyperSwap is not able to process the indicated request.

In the message text:

actionone

One of the following:

Load

A configuration data file is verified and activated.

Purge

The current configuration data file is deactivated.

LoadTest

The current configuration file is to be deactivated.

IOSHM0201I

actiontwo

One of the following:

Configuration Validation fails

Validation fails for the configuration file.

Configuration Deactivation fails

Deactivation fails for the current configuration.

Configuration Activation fails

Activation fails for the configuration file.

Response error

The member did not respond to the request to process the function.

memname

Name of the SYSPLEX member.

failrsn

One of the following:

If *actiontwo* is Configuration Validation fails, the *failrsn* is one of the following hexadecimal values:

- 2 Device pair not full duplex
- 4 Storage unavailable
- 8 Invalid input configuration file
- C Multiple secondary LSSs for one primary LSS
- 10 Only one secondary LSS for multiple primary LSSs
- 20 Processing timeout
- 24 Primary device is boxed
- 28 Primary device not connected
- 2C Path not available for primary device
- 30 Primary device is set up as PPRC secondary
- 34 Secondary device is boxed
- 38 Secondary device not connected
- 3C Path not available for secondary device
- 40 Secondary device is set up as PPRC primary
- 44 UCB not found for device
- 48 IO error on primary device
- 4C IO error on secondary device
- 50 Secondary device online
- 58 Secondary device is in alternate subchannel set, but primary and secondary device numbers are not the same.
- 5C I/O activity to the primary device had been stopped by Basic HyperSwap.
- 60 I/O activity to the secondary device had been stopped by Basic HyperSwap.
- 64 An XCF couple data set is on one of the primary devices.
- 70 Primary or secondary devices found in more than one alternate subchannel sets.
- | 78 The primary device is in soft fence state.
- | 7C The secondary device is in soft fence state.
- 80 The primary or secondary device is already included in an active configuration.
- | 84 The secondary device in the new configuration that is intended to be part of a multi-target environment is

not in the same subchannel set as the primary and secondary devices of the existing configuration or it is not in a different subchannel set than both of the primary and secondary devices in the existing configuration.

88 The new configuration is not allowed to be part of a multi-target environment because it does not contain the same primary devices as the existing configuration and it does not replace an existing configuration.

If *actiontwo* is Configuration Activation fails or Configuration Deactivation fails or Response Error, the *failrsn* is N/A.

primdev

If *actiontwo* is Configuration Validation fails, the *primdev* is the primary device number.

If *actiontwo* is Configuration Activation fails or Configuration Deactivation fails or Response Error, the *primdev* is N/A.

secdev

If *actiontwo* is Configuration Validation fails, the *secdev* is the secondary device number.

If *actiontwo* is Configuration Activation fails or Configuration Deactivation fails or Response Error, the *secdev* is N/A.

System action: The request is terminated.

Operator response: Check the configuration data file or the current system configuration, and issue the request again.

For failure reason code X'5C' and X'60', you can issue command SETHS RESUMEIO to resume normal I/O activity to all DASD devices that had been stopped by Basic HyperSwap. For details of the SETHS command, see *z/OS MVS System Commands*.

System programmer response: None.

Module: IOSHMCFG

Routing code: 2

Descriptor code: 4

IOSHM0300I HyperSwap function enabled for all PPRC pairs.

Explanation: Basic HyperSwap had a status change and is now enabled for HyperSwap.

System action: Basic HyperSwap continues to run and is ready to perform a Swap operation if requested.

Operator response: None.

System programmer response: None.

Module: IOSHMEPT

Routing code: 2

Descriptor code: 4

IOSHM0302I HyperSwap *reason* request complete

Explanation: The request to enable or disable HyperSwap is complete.

In the message text:

reason

One of the following:

enable

HyperSwap enabled by operator

disable

HyperSwap disabled by operator

Operator response: None.

IOSHM0303I

System programmer response: None.

Module: IOSHMEPT

Routing code: 2

Descriptor code: 4

IOSHM0303I HyperSwap status

text

Explanation: Indicates the status of Basic HyperSwap. The *text* is:

```
| Number of configurations: numofconfig
| Replication Session: replsession_name
| Socket Port: socknumb
| New member configuration load failed: loadpolicy
| Planned swap recovery: plannedswappolicy
| Unplanned swap recovery: unplannedswappolicy
| FreezeAll: {Yes|No}
| Stop: {Yes|No}
| Swap Highest Priority: {Yes|No}
| Disallow Non-MultiTarget System: {Yes|No}
| HyperSwap enabled | HyperSwap enabled with
| Metro Global Mirror [pending]
| HyperSwap enabled with limited capability:
HyperSwap disabled:
  By operator
  No configuration data
  Couple data set in configuration
  Member failed configuration data validation
  HyperSwap is not started on at least one member
  HyperSwap in progress
  Configuration data load in progress
HyperSwap not started
HyperSwap not initialized
system_name
reason2
  Configuration load failed
  API function failed during swap processing
HyperSwap in progress phase
| Hyperswap programmatically blocked by application
| named applname
  Configuration data purge in progress
  Member terminating
  Unable to verify PPRC status
  One or more members unable to verify PPRC
  secondary device connectivity
  Member unable to verify PPRC secondary device
  connectivity
| Couple Data Set in configuration
| Hyperswap enabled with limited capability
| New Member configuration load failed: {Disable|Partition}
| Planned swap recovery: {Partition|Disable}
| Unplanned swap recovery {Disable|Partition}
| FreezeAll: {No|Yes}
| Stop: {Yes|No}
```

In the message text:

```
| numofconfig
|   Number of active HyperSwap configurations.
| replsession_name
|   The name of the replication session.
| socknumb
|   The socket number on which Basic HyperSwap will listen.
```

loadpolicy

One of the following:

Disable

Alternate policy setting

Partition

Default policy setting

plannedswappolicy

One of the following:

Disable

Alternate policy setting

Partition

Default policy setting

unplannedswappolicy

One of the following:

Disable

Alternate policy setting

Partition

Default policy setting

FreezeAll

Indicates whether or not a Freeze will be issued when a suspended PPRC link is detected or requested.

Yes

Freeze is issued to all LSSs in the configuration.

No UnFreeze is issued instead of Freeze to the LSS with the suspended PPRC link.

Stop

Inhibit I/O to all DASD devices in the configuration when a suspended PPRC link is detected or requested.

Yes

I/O is inhibited to all DASD devices in the configuration.

No I/O is not inhibited to all DASD devices in the configuration.

| Swap Highest Priority

| Indicates whether the HyperSwap configuration with the highest priority will be used for unplanned
| HyperSwap.

| Yes

| Perform the unplanned HyperSwap using the HyperSwap configuration with the highest priority, even
| though it is not the current preferred configuration because more systems will be removed from the sysplex
| as a result of the HyperSwap as compared to another capable configuration.

| **No** Perform the unplanned HyperSwap using the currently preferred configuration.

| Disallow Non-MultiTarget System

| Indicates whether a system that is not capable of supporting Multi-target PPRC will be allowed to join the
| sysplex after HyperSwap configurations have been successfully loaded to form a multi-target environment. A
| system is considered not capable of supporting Multi-target PPRC if it is at a z/OS level earlier than z/OS 1.13,
| or it is at z/OS 1.13 or z/OS 2.1 but does not have the PTFs for APARs OA44240 and OA46683 installed.

| Yes

| A system that is not capable of supporting Multi-target PPRC will not be allowed to join the sysplex if a
| multi-target environment has been established (that is, multiple HyperSwap configurations with the same
| primary device set have been loaded successfully by existing systems in the sysplex).

| **No** A system that is not capable of supporting Multi-target PPRC will be allowed to join the sysplex. However,
| the system will be removed from the sysplex if an unplanned HyperSwap is performed using the
| HyperSwap configuration that has not been loaded by that system.

| HyperSwap enabled with Metro Global Mirror [pending]

| Basic HyperSwap is currently enabled for HyperSwap for the Metro Mirror session *session_name*. When an

IOSHM0304I

| unplanned HyperSwap is triggered or a planned HyperSwap is requested by the operator, Freeze and UnFreeze
| is also issued to the Global Mirror session. If 'pending' is included in the message text, Basic HyperSwap is
| currently unable to obtain information for the devices in the GM session, but it continues to attempt the query
| for the information.

| **HyperSwap enabled with limited capability**

| HyperSwap is enabled for unplanned HyperSwap, but some systems may not be able to perform HyperSwap
| processing.

system_name

Sysplex member name

reason2

One of the following:

HyperSwap API not started

Basic HyperSwap API Services address space is not started

HyperSwap API not active

Basic HyperSwap API Services address space is not active

phase

One of the following:

- Connectivity validation

HyperSwap Validation phase is active

- Freeze and quiesce I/O

HyperSwap Freeze and quiesce DASD I/O phase is active

- End PPRC

HyperSwap Failover PPRC phase is active

- Swap UCBs

HyperSwap swap UCBs phase is active

- Resume I/O

HyperSwap Resume DASD I/Os phase is active

applname

Name of application blocking HyperSwap.

| *Disable*

| Alternate policy setting.

| *Partition*

| Default policy setting.

| *No* No Freeze issued.

| *Yes*

| Freeze all LSSes.

System action: None.

Operator response: None.

System programmer response: None.

Module: IOSHMDSP

Routing code: -

Descriptor code: 5, 8, 9

| **IOSHM0304I {HyperSwap| Active} configuration[s]**

text

Explanation: Indicates the status of PPRC pairs or list of current configurations. The *text* is:

```

config_reason
Prim. SSID UA          DEV#          VOLSER   Sec. SSID UA          DEV#
pssid      punitaddr pdevicenum volser   sssid     sunitaddr sdevicenum number-of-devices
Device(s) not displayed
Prim. SSID UA          DEV#          VOLSER   Sec. SSID UA          DEV#   Status
pssid      punitaddr pdevicenum volser   sssid     sunitaddr sdevicenum excp_reason

```

or

```

Active configurations
Replication Session Name:  Replication Session Type:
session_name                session_type

```

| or

```

| Active configurations
| Session Name      Session Type      Priority      Status      System
|                  |                  |              |            | Impacted
| session_name     session_type     priority     status     numofsys

```

In the message text:

config_reason

One of the following:

All Duplex

All PPRC pairs are indicate Full Duplex status

None Duplex

One or more PPRC pairs do not indicate Full Duplex status

PPRC Suspended

The PPRC pair indicates suspended status

No access to device

A PPRC pair volume was not accessible

pssid

Primary SSID

punitaddr

Primary Unit Address

pdevicenum

Primary Device Number

volser

Volume Serial Number

sssid

Secondary SSID

sunitaddr

Secondary Unit Address

sdevicenum

Secondary Device Number

number-of-devices

The number of devices not displayed

excp_reason

Exception

session_name

Name of the replication session.

session_type

One of the following:

IOSHM0305I

MetroMirror

Only freeze action can be performed on the devices in this configuration.

HyperSwap

Normal HyperSwap replication session.

| *priority*

| Priority of the HyperSwap configuration.

| *status*

| The HyperSwap ready status of the configuration, one of the following:

| **Hyperswap Ready**

| All PPRC pairs in the configuration are ready for HyperSwap

| **PPRC Not Duplex**

| One or more PPRC pairs in the configuration is not full duplex.

| **CDS included**

| One of the couple data sets resides on one of the PPRC devices included in the configuration.

| **Ineligible by JES3**

| One of the PPRC devices included in the configuration is currently in use from a JES3 point of view.

| **Must be upgraded**

| The configuration was part of a multi-target environment but must now be updated (replaced) to be part of the multi-target environment again because the other configuration(s) in the same multi-target environment has been updated to contain a different set of primary devices.

| *numofsys*

| Number of systems that have lost connectivity to one or more PPRC secondary devices in the configuration. Those systems will be removed from the sysplex if an unplanned HyperSwap is performed using the configuration.

| *nn* The number of systems.

| **ALL**

| Indicates that all systems in the sysplex will be removed if an unplanned HyperSwap is performed using the configuration.

System action: None.

Operator response: None.

System programmer response: None.

Module: IOSHMDSP

Routing code: -

Descriptor code: 5, 8, 9

IOSHM0305I HyperSwap allowed by operator

Explanation: An authorized operator has requested that 'HyperSwap inhibited by operator' condition be removed.

System action: 'HyperSwap inhibited by operator' condition is reset.

Operator response: None.

System programmer response: None.

Module: IOSHMEPT

Routing code: 2

Descriptor code: 4

IOSHM0306I HyperSwap disallowed by operator

Explanation: An authorized operator has requested that 'HyperSwap inhibited by operator' condition be established.

System action: 'HyperSwap inhibited by operator' condition is set.

Operator response: None.

System programmer response: None.

Module: IOSHMEPT

Routing code: 2

Descriptor code: 4

IOSHM0307I HyperSwap disallowed: PPRC-pair suspended

Explanation: A PPRC-pair associated with the HyperSwap configuration has terminated or been suspended. This results in a 'HyperSwap inhibited by PPRC-Suspension' condition.

System action: 'HyperSwap inhibited by PPRC-Suspension' condition is set.

Operator response: None.

System programmer response: None.

Module: IOSHMEPT

Routing code: 2

Descriptor code: 4

IOSHM0308I PPRC suspension *eventtype* for replication session *sessionname* *eventaction* *eventresult*. Reason *reasoncode*

Explanation: Either the TPC-R has requested a PPRC link suspension, or a suspension is detected on one or more device pairs in the replication group *group_name*.

In the message text:

eventtype

One of the following event types:

Detected

PPRC suspension detected by the system.

Requested

PPRC suspension requested by the user.

eventresult

The result can be one of the following:

Completed

The action is successful.

Failed

The action failed.

sessionname

The name of the replication group.

eventaction

The action can be one of the following:

FreezeAll

Freeze is issued to all LSSs.

Run UnFreeze is issued to all LSSs.

Stop I/O to all devices in the configuration is stopped.

IOSHM0309I

FreezeAll and Run

Freeze followed by UnFreeze is issued to all LSSs.

FreezeAll and Stop

Freeze is issued and I/O to all devices is stopped.

reasoncode

The action completion code can be one of the following:

- 8 An invalid option is specified for the PPRC suspension request.
- C No active configuration exists.
- 10 No storage is available.
- 14 Unable to send the request to all members of the SYSPLEX.
- 18 No device is found in configuration.
- 1C Request can not be completed by the HyperSwap API Services address space.
- 20 Internal error occurs.
- 24 One of the SYSPLEX members times out during the processing.
- 28 The group name in the suspension request is not valid.
- | 2C Unable to reserve the HyperSwap API.
- | 30 The freeze action taken was due to a suspension caused by a false freeze event.
- | 34 Freeze and Stop requested, but the Basic HyperSwap Management address space is not active on one or
| more systems in the sysplex.
- | 38 The HyperSwap API address space is not active on any of the systems in the sysplex.
- | 40 Unable to perform false freeze determination. Action(s) taken based on current specification of FreezeAll
| and Stop policies.

System action: PPRC links are suspended for the indicated replication group. If the FreezeAll and Stop options are currently specified, I/O activity to the devices in the indicated replication group has been stopped.

Operator response: Follow installation procedure to report problems. If devices have been stopped by Basic HyperSwap, determine if the SETHS RESUMEIO command can be issued to resume I/O to the devices.

System programmer response: Follow installation procedure for problem analysis and reporting.

Module: IOSHMEPT

Routing code: 2

Descriptor code: 4

IOSHM0309I SETHS RESUMEIO has completed *text* Where the *text* is: {Member: *name* Total devices: *nnnn*
Devices not resumed: *mmmm*} {Member: *name* No devices processed} {Member: *name* Failed to process
SETHS RESUMEIO}{Unable to route request to other members}

Explanation: The SETHS RESUMEIO command has completed.

In the message text:

name

The name of the SYSPLEX member.

nnnn

Total number of the devices that are processed by SETHS RESUMEIO.

mmmm

Number of the devices that are not resumed by Basic HyperSwap because the devices are also stopped by other reasons (for example, the IOACTION command).

System action: None.

Operator response: None.

System programmer response: None.

Module: IOSHMEPT

Routing code: 2

Descriptor code: 4

IOSHM0310I HyperSwap unblocked by application named *applname* using programmatic blocking interface

Explanation: An authorized program has requested that a **HyperSwap inhibited by programmatic blocking** condition be removed.

In the message text:

applname

Name of application unblocking Basic HyperSwap.

System action: **HyperSwap inhibited by programmatic blocking interface** condition is reset. Basic HyperSwap activities will be allowed to resume. Any Basic HyperSwap requests queued up while Basic HyperSwap activities were inhibited will now be processed.

Operator response: None.

System programmer response: None.

Module: IOSHMBLK

Routing code: 2

Descriptor code: 4

IOSHM0311I HyperSwap blocked by application named *applname* using programmatic blocking interface

Explanation: An authorized program has requested that a **HyperSwap inhibited by programmatic blocking** condition be established.

In the message text:

applname

Name of application blocking Basic HyperSwap.

System action: **HyperSwap inhibited by programmatic blocking interface** condition is set. Basic HyperSwap activities will not be performed until the condition is reset.

Operator response: None.

System programmer response: None.

Module: IOSHMBLK

Routing code: 2

Descriptor code: 4

IOSHM0313I Basic HyperSwap system, *sysname*, does not support programmatic blocking.

Explanation: The identified system does not support Basic HyperSwap blocking.

In the message text:

sysname

Name of system that does not support blocking.

System action: Basic HyperSwap blocking request is rejected.

Operator response: None.

System programmer response: Install Basic HyperSwap APAR service for programmatic blocking support.

Module: IOSHMBLK

Routing code: 2

IOSHM0314I • IOSHM0316I

Descriptor code: 4

IOSHM0314I System, *sysname*, not allowed to join while Basic HyperSwap is programmatically blocked.

Explanation: The system *sysname* does not support Basic HyperSwap blocking and attempts to join the SYSPLEX while Basic HyperSwap activities are programmatically blocked.

In the message text:

sysname

Name of system that does not support blocking.

System action: The system is not allowed to become a Basic HyperSwap member.

Operator response: None.

System programmer response: Install Basic HyperSwap APAR service for programmatic blocking support.

Module: IOSHM0314I

Routing code: 2

Descriptor code: 4

IOSHM0315I HyperSwap unblocked by operator using SETHS UNBLOCK.

Explanation: An authorized operator has requested that a HyperSwap inhibited by programmatic blocking condition be removed.

System action: 'HyperSwap inhibited by programmatic blocking interface' condition is reset.

Operator response: None.

System programmer response: None.

Module: IOSHM0315I

Routing code: 2

Descriptor code: 4

| IOSHM0316I SETHS UNFENCE has completed

| *text*

| **Explanation:** The SETHS UNFENCE command processing has completed.

| The *text* is:

| {**Member:** *memname* **Devices Processed:** *nnnn*

| **Reason:** *reasoncode*}

| In the message text:

| *memname*

| The name of the sysplex member.

| *nnnn*

| Total number of devices processed by the SETHS UNFENCE command.

| *reasoncode*

| One of the following processing completion reason codes:

| **0** Successful completion.

| **4** Processing is incomplete because of a sysplex communication failure or the device is not accessible.

| **System action:** None.

| **Operator response:** None.

| **System programmer response:** None.

| **Source:** Input/Output Supervisor (IOS)
 | **Module:** IOSHMEPT
 | **Routing code:** 2
 | **Descriptor code:** 4

IOSHM0398E *SETHS* command failed – sysplex routing error

Explanation: An internal error prevented proper routing of a SETHS operator command.

System action: A 2E0 diagnostic abend is requested and the system continues.

Operator response: Follow installation procedure for reporting problems.

System programmer response: Follow installation procedure for analyzing problems.

Module: IOSHMEPT

Routing code: 2

Descriptor code: 4

| **IOSHM0399I** *hsc*command command rejected - reason

Explanation: The command has not executed. The operator used incorrect syntax or did not have authority to use this command.

In the message text:

*hsc*command

One of the following:

SETHS

Either the syntax used by the operator for SETHS was incorrect or the operator did not have sufficient authority to issue a SETHS command.

DISPLAY HS

Either the syntax used by the operator for DISPLAY HS was incorrect or the operator did not have sufficient authority to issue a DISPLAY HS command.

reason

One of the following:

| **authority not valid**

The installation has not granted either the console or operator who is logged onto the console sufficient authority to issue this command.

| **syntax not valid**

The operator did not correctly follow the syntax rules for this command.

| **name not found**

The configuration name specified on the command does not match any of the currently active configurations.

System action: None.

Operator response: If authorized, re-enter the command.

System programmer response: None.

Module: IOSHMEPT

Routing code: -

Descriptor code: -

IOSHM0400I *hh:mm:ss.nn* **HyperSwap requested**

Explanation: A planned or unplanned HyperSwap was requested. Other Basic HyperSwap messages accompany this message indicating the status of the swap processing.

In the message text:

hh:mm:ss.nn

The actual time of the request. The time is represented as hours hh (00-23), minutes mm (00-59), seconds ss (00-59), and hundredths of a second nn (00-99).

System action: If conditions allow, Basic HyperSwap performs the steps necessary to complete the swap request. If a failure occurs recovery actions are taken based upon specified the swap policy options in effect.

Operator response: For an unplanned HyperSwap notify the system programmer.

System programmer response: For an unplanned HyperSwap identify the source of the failure condition that triggered the HyperSwap. Perform any necessary repair action to resolve the problem.

Module: IOSMHST

Routing code: 2

Descriptor code: 4

IOSHM0401I *hh:mm:ss.nn* *reason* **HyperSwap started - trigger source**

Configuration: *name*

Explanation: A planned or unplanned HyperSwap is starting.

In the message text:

hh:mm:ss.nn

The actual time of the request. The time is represented as hours hh (00-23), minutes mm (00-59), seconds ss (00-59), and hundredths of a second nn (00-99).

reason

One of the following:

planned

A planned HyperSwap was requested.

unplanned

An unplanned HyperSwap was requested.

trigger source

Source of the initiated HyperSwap.

name

Name of the configuration being used for the HyperSwap.

System action: Basic HyperSwap begins swap processing.

Operator response: Monitor the status of the HyperSwap process. Notify the system programmer for an unplanned swap or if the HyperSwap does not complete successfully.

System programmer response: For an unplanned HyperSwap identify the source of the failure condition that triggered the HyperSwap. Perform any necessary repair action to resolve the problem.

Module: IOSMHST

Routing code: 2

Descriptor code: 4

IOSHM0402I *hh:mm:ss.nn* **HyperSwap Phase – Validation of I/O connectivity starting**

Explanation: Basic HyperSwap is starting the Validation of I/O connectivity HyperSwap phase.

In the message text:

hh:mm:ss.nn

The actual time of the request. The time is represented as hours hh (00-23), minutes mm (00-59), seconds ss (00-59), and hundredths of a second nn (00-99).

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: IOSMHST

Routing code: 2

Descriptor code: 4

IOSHM0403I *hh:mm:ss.nn* **HyperSwap phase - Validation of I/O connectivity completed**

Explanation: Basic HyperSwap has completed the Validation of I/O connectivity HyperSwap phase.

In the message text:

hh:mm:ss.nn

The actual time of the request. The time is represented as hours hh (00-23), minutes mm (00-59), seconds ss (00-59), and hundredths of a second nn (00-99).

System action: Processing continues to the next HyperSwap phase.

Operator response: None.

System programmer response: None.

Module: IOSMHST

Routing code: 2

Descriptor code: 4

IOSHM0404I *hh:mm:ss.nn* **HyperSwap Phase – Freeze and Quiesce DASD I/O starting**

Explanation: Basic HyperSwap is starting the Freeze and quiesce DASD I/O HyperSwap phase.

In the message text:

hh:mm:ss.nn

The actual time of the request. The time is represented as hours hh (00-23), minutes mm (00-59), seconds ss (00-59), and hundredths of a second nn (00-99).

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: IOSMHST

Routing code: 2

Descriptor code: 4

IOSHM0405I *hh:mm:ss.nn* **HyperSwap phase - Freeze and quiesce DASD I/O completed**

Explanation: Basic HyperSwap has completed the Freeze and quiesce DASD I/O HyperSwap phase.

In the message text:

hh:mm:ss.nn

The actual time of the request. The time is represented as hours hh (00-23), minutes mm (00-59), seconds ss (00-59), and hundredths of a second nn (00-99).

System action: Processing continues to the next HyperSwap phase.

Operator response: None.

IOSHM0406I • IOSHM0408I

System programmer response: None.

Module: IOSMHST

Routing code: 2

Descriptor code: 4

IOSHM0406I *hh:mm:ss.nn* HyperSwap phase - Failover PPRC volumes starting

Explanation: Basic HyperSwap is starting the Failover PPRC HyperSwap phase.

In the message text:

hh:mm:ss.nn

The actual time of the request. The time is represented as hours hh (00-23), minutes mm (00-59), seconds ss (00-59), and hundredths of a second nn (00-99).

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: IOSMHST

Routing code: 2

Descriptor code: 4

IOSHM0407I *hh:mm:ss.nn* HyperSwap phase - Failover PPRC volumes completed

Explanation: Basic HyperSwap has completed the Failover PPRC HyperSwap phase.

In the message text:

hh:mm:ss.nn

The actual time of the request. The time is represented as hours hh (00-23), minutes mm (00-59), seconds ss (00-59), and hundredths of a second nn (00-99).

System action: Processing continues to the next HyperSwap phase.

Operator response: None.

System programmer response: None.

Module: IOSMHST

Routing code: 2

Descriptor code: 4

IOSHM0408I *hh:mm:ss.nn* HyperSwap phase - Swap UCBs starting

Explanation: Basic HyperSwap is starting the Swap UCBs HyperSwap phase.

In the message text:

hh:mm:ss.nn

The actual time of the request. The time is represented as hours hh (00-23), minutes mm (00-59), seconds ss (00-59), and hundredths of a second nn (00-99).

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: IOSMHST

Routing code: 2

Descriptor code: 4

IOSHM0409I *hh:mm:ss.nn* **HyperSwap phase - Swap UCBs completed**

Explanation: Basic HyperSwap has completed the Swap UCBs HyperSwap phase.

In the message text:

hh:mm:ss.nn

The actual time of the request. The time is represented as hours hh (00-23), minutes mm (00-59), seconds ss (00-59), and hundredths of a second nn (00-99).

System action: Processing continues to the next HyperSwap phase.

Operator response: None.

System programmer response: None.

Module: IOSMHST

Routing code: 2

Descriptor code: 4

IOSHM0410I *hh:mm:ss.nn* **HyperSwap phase - Resume DASD I/O starting**

Explanation: Basic HyperSwap is starting the Resume DASD I/O HyperSwap phase.

In the message text:

hh:mm:ss.nn

The actual time of the request. The time is represented as hours hh (00-23), minutes mm (00-59), seconds ss (00-59), and hundredths of a second nn (00-99).

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: IOSMHST

Routing code: 2

Descriptor code: 4

IOSHM0411I *hh:mm:ss.nn* **HyperSwap phase - Resume DASD I/O completed**

Explanation: Basic HyperSwap has completed the Resume DASD I/O HyperSwap phase.

In the message text:

hh:mm:ss.nn

The actual time of the request. The time is represented as hours hh (00-23), minutes mm (00-59), seconds ss (00-59), and hundredths of a second nn (00-99).

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: IOSMHST

Routing code: 2

Descriptor code: 4

IOSHM0412I *hh:mm:ss.nn* **HyperSwap phase - Cleanup starting**

Explanation: Basic HyperSwap is starting the swap Cleanup HyperSwap phase.

In the message text:

IOSHM0413I • IOSHM0414I

hh:mm:ss.nn

The actual time of the request. The time is represented as hours hh (00-23), minutes mm (00-59), seconds ss (00-59), and hundredths of a second nn (00-99).

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: IOSMHST

Routing code: 2

Descriptor code: 4

IOSHM0413I *hh:mm:ss.nn* HyperSwap phase - Cleanup completed

Explanation: Basic HyperSwap has completed the swap Cleanup HyperSwap phase.

In the message text:

hh:mm:ss.nn

The actual time of the request. The time is represented as hours hh (00-23), minutes mm (00-59), seconds ss (00-59), and hundredths of a second nn (00-99).

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: IOSMHST

Routing code: 2

Descriptor code: 4

IOSHM0414I *hh:mm:ss.nn reason* HyperSwap Completed

Explanation: A planned or unplanned HyperSwap completed successfully.

In the message text:

hh:mm:ss.nn

The actual time of the request. The time is represented as hours hh (00-23), minutes mm (00-59), seconds ss (00-59), and hundredths of a second nn (00-99).

reason

One of the following:

planned

Planned HyperSwap completed

unplanned

Unplanned HyperSwap completed

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: IOSMHST

Routing code: 2

Descriptor code: 4

IOSHM0415I *hh:mm:ss.nn* *reason* **HyperSwap Failed**

Explanation: A planned or unplanned HyperSwap was requested but the system could not complete the request.

In the message text:

hh:mm:ss.nn

The actual time of the request. The time is represented as hours hh (00-23), minutes mm (00-59), seconds ss (00-59), and hundredths of a second nn (00-99).

reason

One of the following:

planned

Planned HyperSwap

unplanned

Unplanned HyperSwap

System action: Processing continues.

Operator response: Notify the system programmer.

System programmer response: Determine the cause of the failed HyperSwap request.

Module: IOSMHST

Routing code: 2

Descriptor code: 4

IOSHM0416I *hh:mm:ss.nn* *reason* **phase skipped**

Explanation: A planned or unplanned HyperSwap failed and HyperSwap swap policy indicates the Disable option. The associated HyperSwap phase is bypassed.

In the message text:

hh:mm:ss.nn

The actual time of the request. The time is represented as hours hh (00-23), minutes mm (00-59), seconds ss (00-59), and hundredths of a second nn (00-99).

reason

One of the following:

validation

Validation of I/O connectivity HyperSwap phase

quiesce I/O

Freeze and quiesce DASD I/O HyperSwap phase

failover

Failover PPRC HyperSwap phase

swap UCBs

Swap UCBs HyperSwap phase

resume I/O

Resume DASD I/O HyperSwap phase

alias bind

Swap Cleanup HyperSwap phase

Soft Fence

Soft Fence primary devices phase

System action: The requested HyperSwap is abandoned.

Operator response: Notify the system programmer.

System programmer response: Determine the cause of the HyperSwap failure.

IOSHM0417I • IOSHM0419I

Module: IOSMHST

Routing code: 2

Descriptor code: 4

IOSHM0417I *hh:mm:ss.nn* **HyperSwap response from** *sysname*, **API RC =** *return-code*, **Rsn =** *reason code*

Explanation: Reports the HyperSwap API services request completion status for the local system for the current HyperSwap processing phase.

In the message text:

hh:mm:ss.nn

The actual time of the request. The time is represented as hours hh (00-23), minutes mm (00-59), seconds ss (00-59), and hundredths of a second nn (00-99).

sysname

The system name

return-code

The return code from HyperSwap API

reason-code

The reason code from HyperSwap API

System action: Processing continues. Actions taken for a failure condition are performed based on the swap policy options in effect at the time of the failure.

Operator response: None.

System programmer response: None.

Module: IOSMHST

Routing code: 2

Descriptor code: 4

IOSHM0418I **HyperSwap Sequencing Task received unknown request**

Explanation: The Basic HyperSwap Sequencing Task received a request that is unknown.

System action: A 2E0 diagnostic abend is requested and processing continues.

Operator response: Follow installation procedure for reporting problems.

System programmer response: Follow installation procedure for analyzing problems.

Module: IOSHMPCR

Routing code: 2

Descriptor code: 2

IOSHM0419I **HyperSwap Sequencing Task received request, but is not the master**

Explanation: The Basic HyperSwap Sequencing Task received a request but was not running on the master system member.

System action: A 2E0 diagnostic abend is requested and processing continues.

Operator response: Follow installation procedure for reporting problems.

System programmer response: Follow installation procedure for analyzing problems.

Module: IOSHMPCR

Routing code: 2

Descriptor code: 2

IOSHM0420I HyperSwap not done because *reason*

Explanation: A HyperSwap request was received but could not be processed because the HyperSwap function is disabled. The HyperSwap request is out of sequence, or this is a planned HyperSwap request and Basic HyperSwap activities are programmatically blocked by an authorized application.

In the message text:

reason

One of the following:

HyperSwap is not enabled

HyperSwap is not enabled

HyperSwap sequence number does not match

HyperSwap request sequence error

Basic HyperSwap is programmatically blocked

Basic HyperSwap is programmatically blocked

configuration not found or not usable

The configuration name specified on the SETHS SWAP command is not valid or the configuration is not ready for HyperSwap.

System action: Processing continues.

Operator response: If the message indicates that Basic HyperSwap is programmatically blocked, command DISPLAY HS,STATUS might be issued to obtain the name of the application currently blocking Basic HyperSwap.

If the message indicates that the specified configuration is not found or not usable, use the DISPLAY HS,CONFIG command to determine the reason why the specified configuration is not ready for HyperSwap.

System programmer response: None.

Module: IOSMHST

Routing code: 2

Descriptor code: 4

IOSHM0421I HyperSwap ENF trigger received

Explanation: An unplanned HyperSwap event occurred on the local

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: IOSMHST

Routing code: 2

Descriptor code: 4

IOSHM0422I Bad return code received from IOSHXSND RC = *return-code* **,** **RSN =** *reason-code*

Explanation: The Basic HyperSwap Sequencing Task attempted to send a signal via the IOSHXSND service but the service returned a non-zero completion status.

In the message text:

return-code

The return code from the IOSHXSND service

reason-code

The reason code from the IOSHXSND service

System action: Processing continues. Additional messages and/or diagnostic 2E0 abend dumps may be requested.

Operator response: Follow installation procedure for reporting problems.

IOSHM0423I • IOSHM0425I

System programmer response: Follow installation procedure for analyzing problems.

Module: IOSHMHST

Routing code: 2

Descriptor code: 4

IOSHM0423I *hh:mm:ss.nn* System *sysname* timed out doing HyperSwap function

Explanation: During HyperSwap processing the indicated system member did not respond to the HyperSwap master member within the defined time period.

In the message text:

hh:mm:ss.nn

The actual time of the request. The time is represented as hours hh (00-23), minutes mm (00-59), seconds ss (00-59), and hundredths of a second nn (00-99).

sysname

The system name

System action: Processing continues. Additional messages and/or diagnostic 2E0 abend dumps may be requested. Recovery actions depend on the swap policy option in effect when the time out occurred.

Operator response: Follow installation procedure for reporting problems.

System programmer response: Follow installation procedure for analyzing problems.

Module: IOSHMHST

Routing code: 2

Descriptor code: 4

IOSHM0424I Master status = *n n n*

Explanation: Reports the hexadecimal value of the Basic HyperSwap master status.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Module: IOSHMHST

Routing code: 2

Descriptor code: 4

IOSHM0425I *hh:mm:ss.nn* IXCMGSI error on HyperSwap function sent to system *sysname*

Explanation: During HyperSwap processing a signal was unable to be delivered to the indicated system member via the IOSHXSND service.

In the message text:

hh:mm:ss.nn

The actual time of the request. The time is represented as hours hh (00-23), minutes mm (00-59), seconds ss (00-59), and hundredths of a second nn (00-99).

sysname

The system name

System action: Processing continues. Additional messages and/or diagnostic 2E0 abend dumps may be requested. Recovery actions depend on the swap policy option in effect when the time out occurred.

Operator response: Follow installation procedure for reporting problems.

System programmer response: Follow installation procedure for analyzing problems.

Module: IOSMHST

Routing code: 2

Descriptor code: 4

IOSHM0426I *hh:mm:ss.nn* **SETHS SWAP request completed**

Explanation: A SETHS SWAP request has been processed successfully.

In the message text:

hh:mm:ss.nn

The actual time of the request. The time is represented as hours hh (00-23), minutes mm (00-59), seconds ss (00-59), and hundredths of a second nn (00-99).

System action: None.

Operator response: None.

System programmer response: None.

Module: IOSMHST

Routing code: 2

Descriptor code: 4

IOSHM0427I *hh:mm:ss.nn* **HyperSwap *reason* phase failed**

Explanation: An error occurred during a HyperSwap sequence. The HyperSwap recovery policy in effect directed that the HyperSwap sequence be abandoned.

In the message text:

hh:mm:ss.nn

The actual time of the request. The time is represented as hours hh (00-23), minutes mm (00-59), seconds ss (00-59), and hundredths of a second nn (00-99).

reason

One of the following:

initialization

HyperSwap Initialization phase

validation

HyperSwap Validation of I/O connectivity phase

quiesce I/O

HyperSwap freeze and quiesce DASD I/O phase

failover

HyperSwap failover PPRC phase

swap UCBs

HyperSwap swap UCBs phase

resume I/O

HyperSwap resume DASD I/O phase

alias bind

HyperSwap swap Cleanup phase

Soft Fence

HyperSwap soft fence primary devices phase

System action: HyperSwap failure processing continues.

Operator response: None.

System programmer response: None.

IOSHM0428I • IOSHM0429I

Module: IOSHMHST

Routing code: 2

Descriptor code: 4

IOSHM0428I *hh:mm:ss.nn* HyperSwap failed on this processor - System Stopped

Explanation: A HyperSwap failed on this processor and the recovery action specified was to stop the system.

In the message text:

hh:mm:ss.nn

The actual time of the request. The time is represented as hours hh (00-23), minutes mm (00-59), seconds ss (00-59), and hundredths of a second nn (00-99).

System action: The system enters a disabled wait state.

Operator response: None.

System programmer response: None.

Module: IOSHMHST

Routing code: 2

Descriptor code: 4

| **IOSHM0429I** *hh:mm:ss.nn text*

| **Explanation:** In the message text:

| *hh:mm:ss.nn*

| The actual time of the request. The time is represented as hours hh (00-23), minutes mm (00-59), seconds ss (00-59), and hundredths of a second nn (00-99).

| *text*

| One of the following:

| **HyperSwap processing issued an UnFreeze**

| HyperSwap processing has issued unfreeze to the old PPRC primary LSSs.

| **UnFreeze processing is delayed due to system partitioning**

| HyperSwap processing delays issuing unfreeze because one or more systems targeted for removal from the SYSPLEX have not been completely removed.

| **UnFreeze processing has been skipped due to system partitioning**

| HyperSwap processing skips issuing unfreeze because one or more systems were targeted for removal from the SYSPLEX, but the removal processing has not completed within the 10 minute interval that is required.

| **System action:** Basic HyperSwap continues the HyperSwap processing. If unfreeze has been skipped, the old PPRC primary LSSs may not be accessible until the Extended Long Busy (ELB) time expires.

| **Operator response:** If unfreeze processing is being delayed, perform the necessary steps to manually remove the targeted system or systems before the Extended Long Busy (ELB) time expires to prevent unintended access to the old PPRC primary LSSs.

| **System programmer response:** Investigate the reason delaying the system removal processing. If unfreeze processing has been delayed or skipped, ensure that the Extended Long Busy (ELB) time for all PPRC storage controllers is set to a value high enough to allow the system or systems to be removed manually if necessary.

| Module: IOSHMHST

| Routing code: 2

| Descriptor code: 4

IOSHM0430I *hh:mm:ss.nn* **HyperSwap error encountered. System *sysname* being stopped via Policy**

Explanation: The system identified was unable to complete a requested HyperSwap sequence phase. The HyperSwap recovery policy in effect indicates that the system is to be removed.

In the message text:

hh:mm:ss.nn

The actual time of the request. The time is represented as hours hh (00-23), minutes mm (00-59), seconds ss (00-59), and hundredths of a second nn (00-99).

sysname

System name.

System action: HyperSwap processing requests that the system be stopped and the HyperSwap sequence continue.

Operator response: None.

System programmer response: None.

Module: IOSMHST

Routing code: 2

Descriptor code: 4

IOSHM0431I *hh:mm:ss.nn* **HyperSwap error encountered. Processing continues via policy**

Explanation: The system identified was unable to complete a requested HyperSwap sequence phase. The HyperSwap recovery policy in effect indicates that HyperSwap processing is to be continued.

In the message text:

hh:mm:ss.nn

The actual time of the request. The time is represented as hours hh (00-23), minutes mm (00-59), seconds ss (00-59), and hundredths of a second nn (00-99).

System action: HyperSwap processing continues.

Operator response: None.

System programmer response: None.

Module: IOSMHST

Routing code: 2

Descriptor code: 4

IOSHM0432I *hh:mm:ss.nn* **HyperSwap error encountered. HyperSwap sequencing is abandoned via policy**

Explanation: An error occurred during a HyperSwap sequence. HyperSwap policy in effect indicates the HyperSwap sequence is to be abandoned.

In the message text:

hh:mm:ss.nn

The actual time of the request. The time is represented as hours hh (00-23), minutes mm (00-59), seconds ss (00-59), and hundredths of a second nn (00-99).

System action: HyperSwap processing is abandoned.

Operator response: None.

System programmer response: None.

Module: IOSMHST

Routing code: 2

Descriptor code: 4

| **IOSHM0433I** *hh:mm:ss.nn* **HyperSwap phase - Soft Fence starting**

| **Explanation:** Basic HyperSwap is starting the soft fence HyperSwap phase.

| In the message text:

| *hh:mm:ss.nn*

| The actual time of the request. The time is represented as hours *hh* (00-23), minutes *mm* (00-59), seconds *ss* (00-59), and hundredths of a second *nn* (00-99).

| **System action:** Processing continues.

| **Operator response:** None.

| **System programmer response:** None.

| **Module:** IOSMHST

| **Routing code:** 2

| **Descriptor code:** 4

| **IOSHM0434I** *hh:mm:ss.nn* **HyperSwap phase - Soft Fence completed**

| **Explanation:** Basic HyperSwap has completed the soft fence HyperSwap phase.

| In the message text:

| *hh:mm:ss.nn*

| The actual time of the request. The time is represented as hours *hh* (00-23), minutes *mm* (00-59), seconds *ss* (00-59), and hundredths of a second *nn* (00-99).

| **System action:** Processing continues to the next HyperSwap phase.

| **Operator response:** None.

| **System programmer response:** None.

| **Module:** IOSMHST

| **Routing code:** 2

| **Descriptor code:** 4

| **IOSHM0435I** *hh:mm:ss.nn* **HyperSwap suspend processing for Global Mirror relationships has completed**

| **Explanation:** HyperSwap processing has requested Freeze and then Unfreeze to be issued to the LSSs in Global Mirror relationships.

| In the message text:

| *hh:mm:ss.nn*

| The actual time of the request. The time is represented as hours *hh* (00-23), minutes *mm* (00-59), seconds *ss* (00-59), and hundredths of a second *nn* (00-99).

| **System action:** HyperSwap processing continues.

| **Operator response:** None.

| **System programmer response:** None.

| **Module:** IOSMHST

| **Routing code:** 2

| **Descriptor code:** 4

| **IOSHM0436I STATE SAVE FOR CONTROLLER** *nodedesc* **INITIATED BY DEVICE** *sdddd*. **REQUESTOR:** *requestor*

| **Explanation:** A state save has been requested for the specified storage controller. The state save may or may not have been completed for the specified storage controller.

| In the message text:

| *nodedesc*

| The node descriptor of the storage controller whose state data is being dumped. The node descriptor is in the form *ttttt.mmm.nnn.pp.ssssssssss*; where:

| *ttttt*

| Type number of the device.

| *mmm*

| Model number of the device.

| *nnn*

| Manufacturer identification code.

| *pp* Plant of manufacture number.

| *ssssssssss*

| Sequence number.

| *sdddd* The subchannel set identifier and device number that initiated the state save operation of the controller.

| *requestor*

| The name of the process that triggered the state save request.

| **System action:** Diagnostic state save data has been requested on the storage controller and can be obtained using the Storage Hardware Management Console.

| **Operator response:** None.

| **System programmer response:** Use the specified storage controller identification to locate the state save dump, if one has been successfully generated. Review the diagnostic data to determine whether a problem exists on the storage controller. If requested, provide the diagnostic data to the IBM Support Center.

| **Source:** Basic HyperSwap

| **Module:** IOSMHST

| **Routing code:** 2

| **Descriptor code:** 4

IOSHM0500E HyperSwap API address space not started

Explanation: The Basic HyperSwap Management address space has determined the Basic HyperSwap API Services address space is not currently started on the local system.

System action: Basic HyperSwap functionality is disabled.

Operator response: Start the Basic HyperSwap API Services address space.

System programmer response: None.

Module: IOSHSPCR

Routing code: 2

Descriptor code: 2

IOSHM0501I Response from API for FC = *function-code* . RC = *return-code* , Rsn = *reason-code*

Explanation: Reports the Basic HyperSwap API Services function request completion status on the local system.

Note: Message IOSHM0501I is intended for internal IBM information only to aid in problem diagnosis. Related IOS messages may accompany this message, where appropriate, to further identify specific error conditions encountered. Likely messages would include Basic HyperSwap IOSHS or IOSHM prefixed messages.

IOSHM0502I • IOSHM0504I

In the message text:

function-code

The function code passed to the API

return-code

The return code from HyperSwap API

reason-code

The reason code from HyperSwap API

System action: Basic HyperSwap processing continues.

Operator response: None.

System programmer response: None.

Module: IOSHSPCR

Routing code: 2

Descriptor code: 4

IOSHM0502I Stop command received – *adr_space_name* shutting down

Explanation: An operator command to STOP the Basic HyperSwap Management address space was received.

In the message text:

adr_space_name

The name of the address space

System action: The Basic HyperSwap Management address space is shut down on the local system.

Operator response: None.

System programmer response: None.

Module: IOSHSPCR

Routing code: 2

Descriptor code: 4

IOSHM0503I *adr_space_name* not stopping because HyperSwap in progress

Explanation: An operator command to STOP the Basic HyperSwap Management address space was received.

In the message text:

adr_space_name

The name of the address space

System action: The STOP request is not honored because a HyperSwap sequence is currently in progress.

Operator response: None.

System programmer response: None.

Module: IOSHSPCR

Routing code: 2

Descriptor code: 4

IOSHM0504I Function code failed on device pair = *pdevicenum,sdevicenum* RC = *return-code* , Rsn = *reason-code* , Step# = *step-num*

Explanation: Reports individual PPRC device pair status for a failed Basic HyperSwap API Services function request.

In the message text:

pdevicenum

Primary Device Number

sdevicenum

Secondary Device Number

return-code

The return code from HyperSwap API

reason-code

The reason code from HyperSwap API

step-num

The step number

System action: Processing continues.**Operator response:** None.**System programmer response:** None.**Module:** IOSHSPCR**Routing code:** 2**Descriptor code:** 4**IOSHM0600I HyperSwap failed to create the *xcf member* member – RC: *return-code* RS: *reason-code*****Explanation:** Basic HyperSwap was unable to create a required group member.

In the message text:

xcf member

One of the following:

master owner

Attempting to create the XCF member used to assign master responsibility to a basic HyperSwap member.

master status

Attempting to create the XCF member used by the master to track status information.

return-code

The hexadecimal return code from IXCCREAT.

reason-code

The hexadecimal reason code from IXCCREAT.

System action: Basic HyperSwap initialization is terminated.**Operator response:** Follow installation procedure for reporting problems.**System programmer response:** Correct the problem indicated by the supplied return and reason codes. If unable to determine or correct the problem, contact the IBM Support Center.**Module:** IOSHIMSG**Routing code:** 2**Descriptor code:** 4**IOSHM0601I HyperSwap unable to obtain group information – RC: *return-code* RS: *reason-code*****Explanation:** Basic HyperSwap was unable to obtain required information about the members of the HyperSwap group.

In the message text:

return-code

The hexadecimal return code from IXCQUERY.

IOSHM0602I • IOSHM0800I

reason-code

The hexadecimal reason code from IXCQUERY.

System action: Basic HyperSwap initialization is terminated.

Operator response: Follow installation procedure for reporting problems.

System programmer response: Correct the problem indicated by the supplied return and reason codes. If unable to determine or correct the problem, contact the IBM Support Center.

Module: IOSHIMSG

Routing code: 2

Descriptor code: 4

IOSHM0602I HyperSwap unable to join the group – RC: *return-code* RS: *reason-code*

Explanation: Basic HyperSwap was unable to join the HyperSwap group.

In the message text:

return-code

The hexadecimal return code from IXCJOIN.

reason-code

The hexadecimal reason code from IXCJOIN.

System action: Basic HyperSwap initialization is terminated.

Operator response: Follow installation procedure for reporting problems.

System programmer response: Correct the problem indicated by the supplied return and reason codes. If unable to determine or correct the problem, contact the IBM Support Center.

Module: IOSHIMSG

Routing code: 2

Descriptor code: 4

IOSHM0800I *task_name* task ended normally. Return code = *return-code*

Explanation: A Basic HyperSwap task terminated.

In the message text:

task_name

The name of the task that ended.

return_code

The return code from the task.

System action: This is normal if HyperSwap was requested to stop. If the return code is not zero, and this is a critical task, HyperSwap will terminate.

Operator response: Follow installation procedure for reporting problems.

System programmer response: The task should have issued a message or taken a dump prior to terminating. Address the problem indicated by any messages or report the problem to the IBM Support Center.

Module: IOSHIMSG

Routing code: 2

Descriptor code: 4

IOSHM0801I HyperSwap terminating due to task failure.

Explanation: A task critical to Basic HyperSwap has terminated.

System action: Basic HyperSwap will terminate.

Operator response: Follow installation procedure for reporting problems.

System programmer response: This message was preceded by message IOSHM0800 and possibly other messages and/or a dump. Determine the reason for the message and/or dump, or contact the IBM Support center.

Module: IOSHIMSG

Routing code: 2

Descriptor code: 6

IOSHM0802I HyperSwap Management Address Space already active

Explanation: Basic HyperSwap is already running and may be active only once on a system.

System action: This instance of Basic HyperSwap is terminated.

Operator response: None.

System programmer response: None.

Module: IOSHMCTL

Routing code: 2

Descriptor code: 6

IOSHM0803E HyperSwap *text*

Explanation: The *text* is one of the following:

Disabled

Basic HyperSwap had a status change and is now disabled for HyperSwap.

Enabled with limited capability

Basic HyperSwap had a status change and is now enabled for unplanned HyperSwaps with a potential for HyperSwap failure on one or more systems in the sysplex.

System action: If HyperSwap Disabled is displayed, Basic HyperSwap continues to run, but will not be able to perform HyperSwap.

If HyperSwap Enabled with limited capability is displayed, Basic HyperSwap is enabled for unplanned HyperSwaps, but HyperSwap may fail on one or more systems in the sysplex.

Operator response: Issue the Display HS,Status command to determine the reason HyperSwap is not fully enabled. Take corrective action for the system(s) indicated in the command output as having one or more conditions preventing HyperSwap from being enabled.

System programmer response: Address the conditions preventing the system(s) from being fully enabled for HyperSwap. If this is not able to be determined or corrected, Basic HyperSwap may not be fully enabled or permanently disabled.

Module: IOSHMEDS

Routing code: 1

Descriptor code: 2

IOSHM0804I Failure in service *servicename* RC: *return-code* RSN: *reason-code*

Explanation: The identified service returned a failure indication.

In the message text:

IOSHM0805I • IOSHM0807I

servicename

The name of the service that failed

return-code

The hexadecimal return code from the service

| *reason-code*

| The hexadecimal reason code from the service

System action: Basic HyperSwap initialization processing terminates.

Operator response: Follow installation procedure for reporting problems.

System programmer response: Correct the condition indicated by the return code from the specified service. If unable to determine the cause, contact the IBM support Center.

Module: IOSHMEDS

Routing code: 2

Descriptor code: 4

IOSHM0805I HyperSwap Enabled

Explanation: Basic HyperSwap had a status change and is now enabled for HyperSwap.

System action: Basic HyperSwap is ready to process a swap request.

Operator response: None.

System programmer response: None.

Module: IOSHMEDS

Routing code: 2

Descriptor code: 4

IOSHM0806I Unable to verify PPRC secondary device connectivity - *configname*

Explanation: Basic HyperSwap configuration monitoring was unable to validate Secondary PPRC volume connectivity on the local system.

| In the message text:

| *configname*

| The name of the HyperSwap configuration containing the PPRC secondary device(s) with a connectivity issue.

System action: Basic HyperSwap functionality is disabled.

Operator response: Notify the system programmer.

System programmer response: Determine the reason why the local system is unable to access one or more PPRC Secondary volumes.

| **Module:** IOSHMCMT, IOSHMEPT

Routing code: 2

Descriptor code: 4

IOSHM0807I HyperSwap Management Address Space ready

Explanation: Basic HyperSwap is fully initialized.

System action: None.

Operator response: None.

System programmer response: None.

Module: IOSHMCTL

Routing code: 2

Descriptor code: 6

IOSHM0808I HyperSwap Configuration Monitoring started, time interval = *scan-int* minutes

Explanation: A HyperSwap configuration definition has successfully been loaded and the system begins periodic monitoring activities to insure HyperSwap readiness.

In the message text:

scan-int

The frequency in minutes at which configuration monitoring is performed.

System action: Periodic HyperSwap configuration monitoring is active.

Operator response: None.

System programmer response: None.

Module: IOSHMCMT

Routing code: 2

Descriptor code: 4

IOSHM0809I HyperSwap Configuration Monitoring stopped

Explanation: A HyperSwap configuration definition has successfully been purged and the system ends periodic monitoring activities for HyperSwap readiness.

System action: Periodic HyperSwap configuration monitoring is ended.

Operator response: None.

System programmer response: None.

Module: IOSHMCMT

Routing code: 2

Descriptor code: 4

IOSHM0810I HyperSwap disallowed: Monitor detected condition

Explanation: A condition has been detected by the HyperSwap Configuration Monitor that precludes a HyperSwap from being attempted.

System action: HyperSwap is disallowed while this condition persists.

Operator response: None.

System programmer response: None.

Module: IOSHMCMT

Routing code: 2

Descriptor code: 4

IOSHM0811I *task_name* ended abnormally. System code = *completion-code -reason-code*

Explanation: A Basic HyperSwap task terminated abnormally.

In the message text:

task_name

The name of the task that ended.

completion-code

The hexadecimal system abend completion code of the terminating task

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reason-code

The hexadecimal abend reason code of the terminating task

System action: If this is a critical task, HyperSwap terminates.

Operator response: Follow installation procedure for reporting problems.

System programmer response: The task should have issued a message or taken a dump prior to terminating. Address the problem indicated by any messages or report the problem to the IBM Support Center.

Module: IOSHIMSG

Routing code: 2

Descriptor code: 6

IOSHM0812I *task_name* ended abnormally. User code = *completion-code* -*reason-code*

Explanation: A Basic HyperSwap task terminated abnormally.

In the message text:

task_name

The name of the task that ended.

completion-code

The hexadecimal system abend completion code of the terminating task

reason-code

The hexadecimal abend reason code of the terminating task

System action: If this is a critical task, HyperSwap terminates.

Operator response: Follow installation procedure for reporting problems.

System programmer response: The task should have issued a message or taken a dump prior to terminating. Address the problem indicated by any messages or report the problem to the IBM Support Center.

Module: IOSHIMSG

Routing code: 2

Descriptor code: 6

| **IOSHM0813I** HyperSwap CTRACE definition failed using CTIBHI00. RC=, rcRSN=*rsn*

| **Explanation:** The system could not define the HyperSwap component trace using the CTIBHI00 parmlib member.

| In the message text:

| *rc* The return code provided by the CTRACE DEFINE macro

| *rsn*

| The reason code provided by the CTRACE DEFINE macro

| **System action:** The system will attempt to define the HyperSwap component trace without the CTIBHI00 parmlib member.

| **Operator response:** Contact the system programmer.

| **System programmer response:** If the return and reason codes refer to a CTIBHI00 parmlib member error, correct the member and have the operator either re-IPL or use the TRACE CT command to use the corrected member. Else search the problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

| **Module:** IOSHMSTR

| **Routing code:** -

| **Descriptor code:** 4

| **IOSHM0814I Failure in service** *servicename* **RetValue:** *return-value* **RC:** *return-code* **RSN:** *reason-code*

| **Explanation:** The identified service returned a failure indication.

| In the message text:

| *servicename*
| The name of the service which failed

| *return-value*
| The hexadecimal return value from the service

| *return-code*
| The hexadecimal return code from the service

| *reason-code*
| The hexadecimal reason code from the service

| **System action:** Basic HyperSwap initialization processing terminates.

| **Operator response:** Follow installation procedure for reporting problems.

| **System programmer response:** Correct the condition indicated by the return code from the specified service. If unable to determine the cause, contact the IBM Support Center.

| **Module:** IOSHMSRT

| **Routing code:** 2

| **Descriptor code:** 4

| **IOSHM0815I Socket connection rejected. Maximum number of connections (*numconn*) reached.**

| **Explanation:** A socket connection was attempted but it was determined that the maximum number of socket connections has been reached.

| In the message text:

| *numconn*
| The maximum number of supported socket connections.

| **System action:** The socket connection will not be used.

| **Operator response:** None.

| **System programmer response:** None.

| **Module:** IOSHMSRT

| **Routing code:** 10

| **Descriptor code:** 4

| **IOSHM0817A Basic HyperSwap is waiting for {OMVS|TCP/IP} to become available.**

| **Explanation:** Basic HyperSwap initialization has determined that a required function has not been made available.

| **System action:** Basic HyperSwap will wait for the function to become initialized.

| **Operator response:** Ensure the function has been started before starting Basic HyperSwap.

| **System programmer response:** None.

| **Module:** IOSHMSRT

| **Routing code:** 2, 10

| **Descriptor code:** 2, 7

| **IOSHM0818I Configuration *configname* will now be used for HyperSwap**

| **Explanation:** The configuration *configname* is currently the preferred configuration and will be used if and when a HyperSwap is initiated. A configuration is preferred for HyperSwap if it has the highest priority and all of its device pairs are ready for HyperSwap.

| In the message text:

| *configname*

| Name of the configuration.

| **System action:** None.

| **Operator response:** None.

| **System programmer response:** None.

| **Source:** z/OS IOS Basic HyperSwap

| **Module:** IOSHMCFG, IOSHMCMT

| **Routing code:** 2

| **Descriptor code:** 4

| **IOSHM0819I Configuration *configname* is not preferred for HyperSwap - *reason***

| **Explanation:** The configuration *configname* is no longer preferred for HyperSwap and may not be used if and when a HyperSwap is initiated.

| In the message text:

| *configname*

| Name of the configuration.

| *reason*

| One of the following reasons:

| **Not duplex**

| One or more device pairs in the configuration is not in full duplex.

| **CDS included**

| An XCF couple data set resides on one of the devices in the configuration.

| **Ineligible by JES3**

| One or more devices in the configuration is allocated and determined not eligible for HyperSwap by JES3.

| **Unknown reason**

| Configuration is disabled for HyperSwap due to an unknown reason.

| **System action:** None.

| **Operator response:** Determine the reason that causes the configuration not ready for HyperSwap and make corrections so that the configuration becomes ready for HyperSwap again.

| **System programmer response:** None.

| **Source:** z/OS IOS Basic HyperSwap

| **Module:** IOSHMCMT

| **Routing code:** 2

| **Descriptor code:** 4

| **IOSHM0900I HyperSwap request not accepted – RC:*return-code* RS:*reason-code***

| **Explanation:** A function request was made to the Basic HyperSwap Management address space but the calling environment was not correct.

| In the message text:

return-code

The hexadecimal return code

reason-code

The hexadecimal reason code

System action: The function request is ignored.

Operator response: None.

System programmer response: None.

Module: IOSHMPCR

Routing code: -

Descriptor code: -

IOSPF Messages

IOSPF100I Device *sddd* could not be found.

Explanation: The single point of failure service has detected that the device is not attached, that the device does not exist in the I/O definition or is not a DASD.

In the message text:

sddd

The subchannel set and device number of the device that could not be found.

System action: The system continues processing.

Operator response: None.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPOF

IOSPF101I Device *sddd* is not online.

Explanation: The single point of failure service has detected that the device is not online.

In the message text:

sddd

The subchannel set and device number of the device is not online.

System action: The system continues processing.

Operator response: Vary the device online if possible.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPOF

IOSPF102I Device *sddd* has no operational paths.

Explanation: The single point of failure service has detected that the device has no operational paths.

In the message text:

sddd

The subchannel set and device number of the device that has no operational paths.

System action: In most cases, subsequent I/O requests to the device wait until the device becomes available.

IOSPF103I • IOSPF105I

Operator response: Retry the I/O requests to the device. Do one of the following actions to simulate an I/O interrupt and get the queued requests retried:

- Enter a VARY DEVICE ONLINE command for device *sdddd*.
- Enter a VARY PATH ONLINE command for a path to device *sdddd*.
- If a serial fiber is not connected, connect the serial fiber to device *sdddd*.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPOF

IOSPF103I Device *sdddd* has only one online path.

Explanation: The single point of failure service has detected that device *sdddd* has only one online CHPID. If the channel path were to fail the device would be unavailable.

In the message text:

sdddd

The subchannel set and device number of the device that has the single point of failure.

System action: The system continues processing.

Operator response: Issue a VARY PATH(*dddd*;*nn*) to vary another path online; if more than one path is defined. If there is only one path defined; the I/O configuration should be updated to define at least 2 paths.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPOF

IOSPF104I Device *sdddd* has all online paths go through one switch.

Explanation: The single point of failure service has detected that the device *sdddd* has all of its paths go through one switch. If that switch would fail the device would be unavailable.

In the message text:

sdddd

The subchannel set and device number of the device that has the single point of failure

System action: The system continues processing.

Operator response: None.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPOF

IOSPF105I Device *sdddd* has only non-preferred paths online.

Explanation: The single point of failure service has detected that device *sdddd* has only non-preferred paths online. This means a single point of failure on the control unit and possible performance degradation.

In the message text:

sdddd

The subchannel set and device number of the device that has the single point of failure and possible performance degradation.

System action: The system continues processing.

Operator response: If a preferred path is operational, vary a preferred path online to the device.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPOF

IOSPF106I Device *sdddd* has only preferred paths online.

Explanation: The single point of failure service has detected that device *sdddd* has only preferred paths online. This is a single point of failure with accessing the control unit.

In the message text:

sdddd

The subchannel set and device number of the device that has the single point of failure.

System action: The system continues processing.

Operator response: If a non-preferred path is operational, vary a non-preferred path online to the device.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPOF

IOSPF107I Device *sdddd* has only one preferred path online.

Explanation: The single point of failure service has detected that device *sdddd* has only one preferred path online. A possibility exists of severe performance degradation if such path would fail.

In the message text:

sdddd

The subchannel set and device number of the device with the severe performance degradation possibility.

System action: The system continues processing.

Operator response: If a preferred path is operational, vary a preferred path online to the device.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPOF

**IOSPF108I Device *sdddd* has all CHPIDs share a single point of failure, component indicators =
xxxxxxxxxxxxxxxxxxxxxxxxxxxx (model dependent).**

Explanation: The single point of failure service has detected that all of device *sdddd* CHPIDs share an I/O component internally in the host machine that has a possibility of failing.

In the message text:

sdddd

The subchannel set and device number with the single point of failure.

xxxxxxxxxxxxxxxxxxxxxxxxxxxx

A 12-byte identifier, that is host-dependent, representing I/O components on the host. Bits being set in this field help to identify the single point of failure and indicate that all channel paths have the component identified in common.

The current identifier is mapped as follows (from left to right) :

Byte (1-12)	Bit (1-8)	Component identified
1	1-2	Comparison Status. These bits being on indicates the comparison is invalid and can be ignored.
	3	Book. If you have a multi-book system, you might consider finding alternate paths to the device from a different

IOSPF109I

- book.
- 4 Cage. If you have multiple I/O cages in your configuration, you might consider finding paths from different I/O cages to your device.
 - 5 Failover Domain. If there is a failure of the IFB-MP card, some paths to the device will be lost. Some priority should be given to finding paths from different redundant domains to the device.
 - 6 Fanout. Although redundant I/O interconnect will prevent any loss of connectivity, some thought should be given to spreading paths across different fanout cards.
 - 7 Domain. If there is a failure of the IFB-MP card, all paths to the device will be lost. Priority should be given to finding paths from multiple domains to the device.
 - 8 Secondary STI/STI. Indicates all paths to the device are from the same channel card. Priority should be given to spreading the paths across this single point of failure.
- 2 1 Internal BUS. This is for internal use only and can be ignored.
 - 2 IBU. This is for internal use only and can be ignored.
 - 3 Channel. Indicates a single path exists to the device.
 - 4-8 Reserved
- 3-12 Reserved

System action: The system continues processing.

Operator response: None.

System programmer response: The single point of failure might be expected because of hardware limitations within your machine configuration. If the single point of failure is not expected, consult configuration experts to analyze the condition.

Source: IOS

Module: IOSVSP0F

IOSPF109I Device *sddd* has all control unit interfaces share *d1* of *d2* common components.

Explanation: The single point of failure service has detected that all paths to device *sddd* share components such as host adapter or host port on the control unit.

In the message text:

sddd

The subchannel set and device number of the device with the single point of failure.

d1 The number of shared components in the control unit interface.

d2 The number of possible shared components in the control unit interface.

System action: The system continues processing.

Operator response: None.

System programmer response: There are 4 model dependent hardware redundancy levels that are obtained from the control unit by the software. An error message for a given level means that there are two or more channel paths that are configured through the same hardware component on a given level.

Because the common components are model dependent, consult your H/W reference material or H/W support to determine what the single point of failure is.

The following example is for the IBM DS8000® control unit:

The 4 common component levels reported for the DS8000 control unit are presented here in hierarchical order. In other words, a single point of failure citing 1 of 4 components means that the single point of failure is with the first level only. 2 of 4 means that the single point of failure is with the second level and the first level, and so on.

DS8000 single point of failure common component levels:

Level Description

- 1 All interfaces are to enclosures in the same rack. If your control unit has more than one rack, consider configuring channels to enclosures in different racks.
- 2 All interfaces are to a single set of odd/even enclosures. For example, all interfaces go to enclosure 0 and 1, or 2 and 3, and so on. If more than one odd/even enclosure pair exists, consider configuring channels to different odd/even enclosure pairs.
- 3 All interfaces are to the same enclosure. If multiple enclosures exist, consider configuring channels to different enclosures.
- 4 All interfaces are to the same host adapter card. If multiple host adapter cards exist, consider configuring channels to different adapter cards.

Note: Based on the configuration, it is possible that a single point of failure is expected. For example, control units that have only a single rack might report a single point of failure existing because all channels are configured to the same rack. In this case, the single point of failure message can be ignored.

Source: IOS

Module: IOSVSPDF

IOSPF150I Devices *sddd1* and *sddd2* are the same device.

Explanation: The single point of failure service has detected that the pair of devices were the same device. Refer to the issuer of the single point of failure check to verify why these need to separate devices.

In the message text:

sddd1

The device number of the first device.

sddd2

The device number of the second device.

System action: The system continues processing.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPDF

IOSPF151I Devices *sddd1* and *sddd2* share a logical subsystem.

Explanation: The single point of failure service has detected that the pair of devices share a logical subsystem.

In the message text:

sddd1

The device number of the first device.

sddd2

The device number of the second device.

System action: The system continues processing.

System programmer response: Refer to the service that issued this message.

IOSPF152I • IOSPF154I

Source: IOS

Module: IOSVSPOF

IOSPF152I Devices *sddd1* and *sddd2* share the same physical control unit

Explanation: The single point of failure service has detected that the pair of devices share a physical control unit.

In the message text:

sddd1

The device number of the first device.

sddd2

The device number of the second device.

System action: The system continues processing.

Operator response: None.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPOF

IOSPF153I Devices *sddd1* and *sddd2* have all paths share the same switch.

Explanation: The single point of failure service has detected that all paths to the pair of devices specified share a switch.

In the message text:

sddd1

The device number of the first device.

sddd2

The device number of the second device.

System action: The system continues processing.

Operator response: None.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPOF

IOSPF154I Devices *sddd1* and *sddd2* have all CHPIDs share a single point of failure, component indicators = *xxxxxxxxxxxxxxxxxxxxxxxx* (model dependent).

Explanation: The single point of failure service has detected that all paths to the pair of devices specified share a switch.

In the message text:

sddd1

The device number of the first device.

sddd2

The device number of the second device.

xxxxxxxxxxxxxxxxxxxxxxxx

A 12-byte identifier, that is host-dependent, representing I/O components on the host. Bits being set in this field help to identify the single point of failure and indicate that all channel paths have the component identified in common.

The current identifier is mapped as follows (from left to right) :

Byte (1-12)	Bit (1-8)	Component identified
1	1-2	Comparison Status. These bits being on indicates the comparison is invalid and can be ignored.
	3	Book. If you have a multi-book system, you might consider finding alternate paths to the device from a different book.
	4	Cage. If you have multiple I/O cages in your configuration, you might consider finding paths from different I/O cages to your device.
	5	Failover Domain. If there is a failure of the IFB-MP card, some paths to the device will be lost. Some priority should be given to finding paths from different redundant domains to the device.
	6	Fanout. Although redundant I/O interconnect will prevent any loss of connectivity, some thought should be given to spreading paths across different fanout cards.
	7	Domain. If there is a failure of the IFB-MP card, all paths to the device will be lost. Priority should be given to finding paths from multiple domains to the device.
	8	Secondary STI/STI. Indicates all paths to the device are from the same channel card. Priority should be given to spreading the paths across this single point of failure.
2	1	Internal BUS. This is for internal use only and can be ignored.
	2	IBU. This is for internal use only and can be ignored.
	3	Channel. Indicates a single path exists to the device.
	4-8	Reserved
3-12		Reserved

System action: The system continues processing.

Operator response: None.

System programmer response: The single point of failure might be expected because of hardware limitations within your machine configuration. If the single point of failure is not expected, consult configuration experts to analyze the condition.

Source: IOS

Module: IOSVSPOF

IOSPF155I Devices *sddd1* and *sddd2* have all control unit interfaces share *d1* of *d2* common components.

Explanation: The single point of failure service has detected that all paths to the pair of devices specified share a switch.

In the message text:

sddd1

The device number of the first device.

sddd2

The device number of the second device.

IOSPF200I • IOSPF202I

d1 The number of shared components in the control unit interface.

d2 The number of possible shared components in the control unit interface.

System action: The system continues processing.

Operator response: None.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPPOF

IOSPF200I Volume *vvvvvv* could not be found.

Explanation: The single point of failure service has detected that the volume is not attached, the volume could not be found in the I/O definition, the volume is offline or is not a DASD.

In the message text:

vvvvvv

The volume that could not be found.

System action: The system continues processing.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPPOF

IOSPF201I Volume *vvvvvv* is not valid.

Explanation: The single point of failure service has detected that the volume is not online at the time of single point of failure determination.

In the message text:

vvvvvv

The volume that is not online.

System action: The system continues processing.

Operator response: Vary the device online if possible.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPPOF

IOSPF202I Volume *vvvvvv (sdddd)* has no operational paths.

Explanation: The single point of failure service has detected that the volume has no operational paths.

In the message text:

vvvvvv

The volume that has no operational paths.

sdddd

The device number of the device that has no operational paths.

System action: In most cases, subsequent I/O requests to the device wait until the device becomes available.

Operator response: An I/O interrupt is required to cause I/O requests to the device to be retried. Do one of the following to simulate an I/O interrupt and cause queued request to be retired:

- Enter a VARY DEVICE ONLINE command for *vvvvvv*
- Enter a VARY PATH ONLINE command for a path to volume *vvvvvv*
- If a serial fiber is not connected, connect the serial fiber to volume *vvvvvv*.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPOF

IOSPF203I Volume *vvvvvv* (*sddd*) has only one online path.

Explanation: The single point of failure service has detected that volume *vvvvvv* has only one online CHPID. If the channel path were to fail the device would be unavailable.

In the message text:

vvvvvv

The volume with the single point of failure.

sddd

The subchannel set and device number of the device with a single point of failure.

System action: The system continues processing.

Operator response: If more than one path is defined, issue a VARY PATH(*dddd*;nn) to vary another path online. If there is only one path defined, the I/O configuration should be updated to define at least two paths.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPOF

IOSPF204I Volume *vvvvvv* (*sddd*) has all online paths go through the same switch.

Explanation: The single point of failure service has detected that volume *vvvvvv* has all of its paths go through one switch. If that switch would fail, the device would be unavailable.

In the message text:

vvvvvv

The volume with the single point of failure.

sddd

The subchannel set and device number of the device with a single point of failure.

System action: The system continues processing.

Operator response: None.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPOF

IOSPF205I Volume *vvvvvv* has only non-preferred paths online.

Explanation: The single point of failure service has detected that volume *vvvvvv* has only non-preferred paths online. This means a single point of failure on the control unit and a possible performance degradation.

In the message text:

vvvvvv

The volume with the single point of failure and possible performance degradation.

sddd

The subchannel set and device number of the device with possible performance degradation.

System action: The system continues processing.

Operator response: If a preferred path is operational, vary a preferred path online to the device.

System programmer response: Refer to the service that issued this message.

IOSPF206I • IOSPF208I

Source: IOS

Module: IOSVSPOF

IOSPF206I Volume *vvvvvv* (*sddd*) has only preferred paths online.

Explanation: The single point of failure service has detected that volume *vvvvvv* has only preferred paths online. This is a single point of failure with accessing the control unit.

In the message text:

vvvvvv

The volume with the single point of failure.

sddd

The subchannel set and device number of the device with a single point of failure.

System action: The system continues processing.

Operator response: If a non-preferred path is operational, vary a non-preferred path online to the device.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPOF

IOSPF207I Volume *vvvvvv* (*sddd*) has only one preferred path online.

Explanation: The single point of failure service has detected that volume *vvvvvv* has only one preferred path online. A possibility exists of severe performance degradation if that path fails.

In the message text:

vvvvvv

The volume with the severe performance degradation possibility.

sddd

The subchannel set and device number of the device with severe performance degradation possibility.

System action: The system continues processing.

Operator response: If a preferred path is operational, vary a preferred path online to the device.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPOF

IOSPF208I Volume *vvvvvv* (*sddd*) has all CHPIDs share a single point of failure, component indicators = *xxxxxxxxxxxxxxxxxxxxxxxx* (model dependent).

Explanation: The single point of failure service has detected that all of volume *vvvvvv* CHPIDs share an I/O component internally in the host machine that has a possibility of failing.

In the message text:

vvvvvv

The volume with CHPIDs that share the single point of failure.

sddd

The subchannel set and device number of the device with a single point of failure.

xxxxxxxxxxxxxxxxxxxxxxxx

A 12-byte identifier, that is host-dependent, representing I/O components on the host. Bits being set in this field help to identify the single point of failure and indicate that all channel paths have the component identified in common.

The current identifier is mapped as follows (from left to right) :

Byte (1-12)	Bit (1-8)	Component identified
1	1-2	Comparison Status. These bits being on indicates the comparison is invalid and can be ignored.
	3	Book. If you have a multi-book system, you might consider finding alternate paths to the device from a different book.
	4	Cage. If you have multiple I/O cages in your configuration, you might consider finding paths from different I/O cages to your device.
	5	Failover Domain. If there is a failure of the IFB-MP card, some paths to the device will be lost. Some priority should be given to finding paths from different redundant domains to the device.
	6	Fanout. Although redundant I/O interconnect will prevent any loss of connectivity, some thought should be given to spreading paths across different fanout cards.
	7	Domain. If there is a failure of the IFB-MP card, all paths to the device will be lost. Priority should be given to finding paths from multiple domains to the device.
	8	Secondary STI/STI. Indicates all paths to the device are from the same channel card. Priority should be given to spreading the paths across this single point of failure.
2	1	Internal BUS. This is for internal use only and can be ignored.
	2	IBU. This is for internal use only and can be ignored.
	3	Channel. Indicates a single path exists to the device.
	4-8	Reserved
3-12		Reserved

System action: The system continues processing.

Operator response: None.

System programmer response: The single point of failure might be expected because of hardware limitations within your machine configuration. If the single point of failure is not expected, consult configuration experts to analyze the condition.

Source: IOS

Module: IOSVSPOF

IOSPF209I Volume *vvvvvv* (*sddd*) has all control unit interfaces share *d1* of *d2* common components.

Explanation: The single point of failure service has detected that all paths to volume *vvvvvv* share components such as host adapter or host port on the control unit.

In the message text:

vvvvvv

The volume with the single point of failure.

sddd

The subchannel set and device number of the device with a single point of failure.

IOSPF250I

d1 The number of shared components in the control unit interface.

d2 The number of possible shared components in the control unit interface.

System action: The system continues processing.

Operator response: None.

System programmer response: There are 4 model dependent hardware redundancy levels that are obtained from the control unit by the software. An error message for a given level means that there are two or more channel paths that are configured through the same hardware component on a given level.

Because the common components are model dependent, consult your H/W reference material or H/W support to determine what the single point of failure is.

The following example is for the IBM DS8000 control unit:

The 4 common component levels reported for the DS8000 control unit are presented here in hierarchical order. In other words, a single point of failure citing 1 of 4 components means that the single point of failure is with the first level only. 2 of 4 means that the single point of failure is with the second level and the first level, and so on.

DS8000 single point of failure common component levels:

Level	Description
1	All interfaces are to enclosures in the same rack. If your control unit has more than one rack, consider configuring channels to enclosures in different racks.
2	All interfaces are to a single set of odd/even enclosures. For example, all interfaces go to enclosure 0 and 1, or 2 and 3, and so on. If more than one odd/even enclosure pair exists, consider configuring channels to different odd/even enclosure pairs.
3	All interfaces are to the same enclosure. If multiple enclosures exist, consider configuring channels to different enclosures.
4	All interfaces are to the same host adapter card. If multiple host adapter cards exist, consider configuring channels to different adapter cards.

Note: Based on the configuration, it is possible that a single point of failure is expected. For example, control units that have only a single rack might report a single point of failure existing because all channels are configured to the same rack. In this case, the single point of failure message can be ignored.

Source: IOS

Module: IOSVSP0F

IOSPF250I Volumes *vvvvv1 (sddd1)* and *vvvvv2 (sddd2)* are the same volume.

Explanation: The single point of failure service has detected that the pair of volumes were the same volume. Refer to issuer of the single point of failure check to verify why these need to be separate volumes.

In the message text:

vvvvv1

The volume serial of the first volume checked.

sddd1

The device number of the first device.

vvvvv2

The volume serial of the second volume checked.

sddd2

The device number of the second device.

System action: The system continues processing.

Operator response: None.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPDF

IOSPF251I Volumes *vvvvv1 (sddd1)* and *vvvvv2 (sddd2)* share a logical subsystem.

Explanation: The single point of failure service has detected that the pair of volumes share a logical subsystem.

In the message text:

vvvvv1

The volume serial of the first volume checked.

sddd1

The device number of the first device.

vvvvv2

The volume serial of the second volume checked.

sddd2

The device number of the second device.

System action: The system continues processing.

Operator response: None.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPDF

IOSPF252I Volumes *vvvvv1 (sddd1)* and *vvvvv2 (sddd2)* share the same physical control unit

Explanation: The single point of failure service has detected that the pair of volumes share a physical control unit.

In the message text:

vvvvv1

The volume serial of the first volume checked.

sddd1

The device number of the first device.

vvvvv2

The volume serial of the second volume checked.

sddd2

The device number of the second device.

System action: The system continues processing.

Operator response: None.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPDF

IOSPF253I Volumes *vvvvv1 (sddd1)* and *vvvvv2 (sddd2)* have all paths share the same switch.

Explanation: The single point of failure service has detected that all paths to the pair of volumes specified share a switch.

In the message text:

vvvvv1

The volume serial of the first volume checked.

sddd1

The device number of the first device.

IOSPF254I

vvvvv2

The volume serial of the second volume checked.

sddd2

The device number of the second device.

System action: The system continues processing.

Operator response: None.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPOF

IOSPF254I Volumes *vvvvv1* (*sddd1*) and *vvvvv2* (*sddd2*) have all CHPIDs share a single point of failure, component indicators = *xxxxxxxxxxxxxxxxxxxxxxxx* (model dependent).

Explanation: The single point of failure service has detected that all CHPIDs of volumes *vvvvv1* and *vvvvv2* share an I/O component internally in the host machine that has a possibility of failing.

In the message text:

vvvvv1

The volume serial of the first volume checked.

sddd1

The device number of the first device.

vvvvv2

The volume serial of the second volume checked.

sddd2

The device number of the second device.

xxxxxxxxxxxxxxxxxxxxxxxx

A 12-byte identifier, that is host-dependent, representing I/O components on the host. Bits being set in this field help to identify the single point of failure and indicate that all channel paths have the component identified in common.

The current identifier is mapped as follows (from left to right) :

Byte (1-12)	Bit (1-8)	Component identified
1	1-2	Comparison Status. These bits being on indicates the comparison is invalid and can be ignored.
	3	Book. If you have a multi-book system, you might consider finding alternate paths to the device from a different book.
	4	Cage. If you have multiple I/O cages in your configuration, you might consider finding paths from different I/O cages to your device.
	5	Failover Domain. If there is a failure of the IFB-MP card, some paths to the device will be lost. Some priority should be given to finding paths from different redundant domains to the device.
	6	Fanout. Although redundant I/O interconnect will prevent any loss of connectivity, some thought should be given to spreading paths across different fanout cards.
	7	Domain. If there is a failure of the IFB-MP card, all paths to the device

- will be lost. Priority should be given to finding paths from multiple domains to the device.
- 8 Secondary STI/STI. Indicates all paths to the device are from the same channel card. Priority should be given to spreading the paths across this single point of failure.
 - 2 1 Internal BUS. This is for internal use only and can be ignored.
 - 2 IBU. This is for internal use only and can be ignored.
 - 3 Channel. Indicates a single path exists to the device.
 - 4-8 Reserved
 - 3-12 Reserved

System action: The system continues processing.

Operator response: None.

System programmer response: The single point of failure might be expected because of hardware limitations within your machine configuration. If the single point of failure is not expected, consult configuration experts to analyze the condition.

Source: IOS

Module: IOSVSPOF

IOSPF255I Volumes *vvvvv1* (*sddd1*) and *vvvvv2* (*sddd2*) have all control unit interfaces share *d1* of *d2* common components.

Explanation: The single point of failure service has detected that all paths to the pair of devices specified share a switch.

In the message text:

vvvvv1

The volume serial of the first volume checked.

sddd1

The device number of the first device.

vvvvv2

The volume serial of the second volume checked.

sddd2

The device number of the second drive.

d1 The number of shared components in the control unit interface.

d2 The number of possible shared components in the control unit interface.

System action: The system continues processing.

Operator response: None.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPOF

IOSPF300I Volume *vvvvvv* (*sdddd*) with *dsn* could not be found.

Explanation: The single point of failure service has detected that the volume that contains the data set is not attached, the volume could not be found in the I/O definition, the volume is offline or is not a DASD.

In the message text:

IOSPF301I • IOSPF302I

vvvvvv

The volume with the single point of failure is not valid.

sdddd

The subchannel set and device number of the device with the single point of failure is not valid.

dsn

The dataset name or dataset description that resides on the volume that is not valid.

System action: The system continues processing.

Operator response: None.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPOF

IOSPF301I Volume *vvvvvv* (*sdddd*) with *dsn* is not online.

Explanation: The single point of failure service has detected that the volume that contains the data set is not online at the time of single point of failure determination.

In the message text:

vvvvvv

The volume with the single point of failure that is not online.

sdddd

The subchannel set and device number of the device with the single point of failure that is not online.

dsn

The dataset name or dataset description that resides on the volume that is not online.

System action: The system continues processing.

Operator response: Vary the device online if possible.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPOF

IOSPF302I Volume *vvvvvv* (*sdddd*) with *dsn* has no operational paths.

Explanation: The single point of failure service has detected that the volume containing the dataset or the description of the dataset has no operational paths.

In the message text:

vvvvvv

The volume that has no operational paths.

sdddd

The subchannel set and device number of the device that has no operational paths.

dsn

The dataset name or dataset description that resides on the volume that has no operational paths.

System action: In most cases, subsequent I/O requests to the device wait until the device becomes available.

Operator response: An I/O interrupt is required to cause I/O requests to the device to be retired. Do one of the following actions to simulate an I/O interrupt and get the queued requests retried:

- Enter a VARY DEVICE ONLINE command for the volume *vvvvvv*
- Enter a VARY PATH ONLINE command for a path to the volume *vvvvvv*.
- If a serial fiber is not connected, connect the serial fiber to the volume *vvvvvv*.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPOF

IOSPF303I Volume *vvvvvv* (*sddd*) with *dsn* has only one online path.

Explanation: The single point of failure service has detected that the volume containing the dataset has only one online CHPID. If the channel path were to fail the device would be unavailable.

In the message text:

vvvvvv

The volume with the single point of failure.

sddd

The subchannel set and device number of the device with the single point of failure.

dsn

The dataset name or dataset description that resides on the volume that has a single point of failure.

System action: The system continues processing.

Operator response: If more than one path is defined, issue a VARY PATH(*dddd;nn*) to vary another path online. If there is only one path defined, the I/O configuration should be updated to define at least two paths.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPOF

IOSPF304I Volume *vvvvvv* (*sddd*) with *dsn* has all online paths go through one switch.

Explanation: The single point of failure service has detected that volumes containing the dataset have all of their paths go through one switch. If that switch fails, the device will be unavailable.

In the message text:

vvvvvv

The volume with the single point of failure.

sddd

The subchannel set and device number of the device with the single point of failure.

dsn

The dataset name or dataset description that resides on the volume that has a single point of failure.

System action: The system continues processing.

Operator response: None.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPOF

IOSPF305I Volume *vvvvvv* (*sddd*) with *dsm* has only non-preferred paths online.

Explanation: The single point of failure service has detected that the volume that contains the data set has only non-preferred paths online. This means a single point of failure on the control unit and a possible performance degradation.

In the message text:

vvvvvv

The volume that has a single point of failure and possible performance degradation.

sddd

The subchannel set and device number that has a single point of failure and possible performance degradation.

IOSPF306I • IOSPF307I

dsn

The dataset name or dataset description that resides on the volume that has a single point of failure and possible performance degradation.

System action: The system continues processing.

Operator response: If a preferred path is operational, vary a preferred path online to the device.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPOF

IOSPF306I Volume *vvvvvv* (*sddd*) with *dsn* has only preferred paths online.

Explanation: The single point of failure service has detected that the volume that contains the data set has only preferred paths online. This is a single point of failure on accessing the control unit.

In the message text:

vvvvvv

The volume with the single point of failure.

sddd

The subchannel set and device number of the device with the single point of failure.

dsn

The dataset name or dataset description that resides on the volume that has a single point of failure.

System action: The system continues processing.

Operator response: If a non-preferred path is operational, vary a non-preferred path online to the device.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPOF

IOSPF307I Volume *vvvvvv* (*sddd*) with *dsn* has only one preferred path online.

Explanation: The single point of failure service has detected that the volume that contains the data set has only one preferred path online. A possibility exists of severe performance degradation if such a path would fail.

In the message text:

vvvvvv

The volume with the single point of failure.

sddd

The subchannel set and device number of the device with the single point of failure.

dsn

The dataset name or dataset description that resides on the volume that has a single point of failure.

System action: The system continues processing.

Operator response: If a preferred path is operational, vary a preferred path online to the device.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPOF

IOSPF308I Volume *vvvvvv* (*sdddd*) with *dsn* has all CHPIDs share a single point of failure, component indicators = *xxxxxxxxxxxxxxxxxxxxxxxxxxxx* (model dependent).

Explanation: The single point of failure service has detected that all of the volume's CHPIDs share an I/O component internally in the host machine that has a possibility of failing.

In the message text:

vvvvvv

The volume with CHPIDs that share the single point of failure.

sdddd

The subchannel set and device number of the device with the single point of failure.

dsn

The dataset name or dataset description that resides on the volume that has a single point of failure.

xxxxxxxxxxxxxxxxxxxxxxxxxxxx

A 12-byte identifier, that is host-dependent, representing I/O components on the host. Bits being set in this field help to identify the single point of failure and indicate that all channel paths have the component identified in common.

The current identifier is mapped as follows (from left to right) :

Byte	Bit	
(1-12)	(1-8)	Component identified
1	1-2	Comparison Status. These bits being on indicates the comparison is invalid and can be ignored.
	3	Book. If you have a multi-book system, you might consider finding alternate paths to the device from a different book.
	4	Cage. If you have multiple I/O cages in your configuration, you might consider finding paths from different I/O cages to your device.
	5	Failover Domain. If there is a failure of the IFB-MP card, some paths to the device will be lost. Some priority should be given to finding paths from different redundant domains to the device.
	6	Fanout. Although redundant I/O interconnect will prevent any loss of connectivity, some thought should be given to spreading paths across different fanout cards.
	7	Domain. If there is a failure of the IFB-MP card, all paths to the device will be lost. Priority should be given to finding paths from multiple domains to the device.
	8	Secondary STI/STI. Indicates all paths to the device are from the same channel card. Priority should be given to spreading the paths across this single point of failure.
2	1	Internal BUS. This is for internal use only and can be ignored.
	2	IBU. This is for internal use only and can be ignored.
	3	Channel. Indicates a single path exists to the device.
	4-8	Reserved
3-12		Reserved

System action: The system continues processing.

IOSPF309I

Operator response: None.

System programmer response: The single point of failure might be expected because of hardware limitations within your machine configuration. If the single point of failure is not expected, consult configuration experts to analyze the condition.

Source: IOS

Module: IOSVSP0F

IOSPF309I Volume *vvvvvv* (*sddd*) with *dsn* has all control unit interfaces share *d1* of *d2* common components.

Explanation: The single point of failure service has detected that all paths to the volume that contains data set *dsn* share components such as host adapter or host port on the control unit.

In the message text:

vvvvvv

The volume with the single point of failure.

sddd

The subchannel set and device number of the device with the single point of failure.

dsn

The dataset name or dataset description that resides on the volume that has a single point of failure.

d1 The number of shared components in the control unit interface.

d2 The number of possible shared components in the control unit interface.

System action: The system continues processing.

Operator response: None.

System programmer response: There are 4 model dependent hardware redundancy levels that are obtained from the control unit by the software. An error message for a given level means that there are two or more channel paths that are configured through the same hardware component on a given level.

Because the common components are model dependent, consult your H/W reference material or H/W support to determine what the single point of failure is.

The following example is for the IBM DS8000 control unit:

The 4 common component levels reported for the DS8000 control unit are presented here in hierarchical order. In other words, a single point of failure citing 1 of 4 components means that the single point of failure is with the first level only. 2 of 4 means that the single point of failure is with the second level and the first level, and so on.

DS8000 single point of failure common component levels:

Level	Description
-------	-------------

- | | |
|---|--|
| 1 | All interfaces are to enclosures in the same rack. If your control unit has more than one rack, consider configuring channels to enclosures in different racks. |
| 2 | All interfaces are to a single set of odd/even enclosures. For example, all interfaces go to enclosure 0 and 1, or 2 and 3, and so on. If more than one odd/even enclosure pair exists, consider configuring channels to different odd/even enclosure pairs. |
| 3 | All interfaces are to the same enclosure. If multiple enclosures exist, consider configuring channels to different enclosures. |
| 4 | All interfaces are to the same host adapter card. If multiple host adapter cards exist, consider configuring channels to different adapter cards. |

Note: Based on the configuration, it is possible that a single point of failure is expected. For example, control units that have only a single rack might report a single point of failure existing because all channels are configured to the same rack. In this case, the single point of failure message can be ignored.

Source: IOS

Module: IOSVSP0F

IOSPF350I Volumes *vvvvv1 (sddd1)* with *dsn1* and *vvvvv2 (sddd2)* with *dsn2* are on the same volume.

Explanation: The single point of failure service has detected that the pair of volumes that contains the data sets were the same volumes. Refer to the issuer of the single point of failure check to verify why these need to be in separate volumes.

In the message text:

vvvvv1

The volume serial of the first volume checked.

sddd1

The device number of the first device.

dsn1

The first dataset name or dataset description that is on the volume.

vvvvv2

The volume serial of the second volume checked.

sddd2

The device number of the second device.

dsn2

The second dataset name or dataset description that is on the volume.

System action: The system continues processing.

Operator response: None.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPOF

IOSPF351I Volumes *vvvvv1 (sddd1)* with *dsn1* and *vvvvv2 (sddd2)* with *dsn2* share a logical subsystem (LSS).

Explanation: The single point of failure service has detected that the pair of volumes with the specified datasets share a logical subsystem. Refer to the issuer of the single point of failure check to verify why these datasets need to reside on separate volumes.

In the message text:

vvvvv1

The volume serial of the first volume checked.

sddd1

The device number of the first device.

dsn1

The first dataset name or dataset description that is on the volume.

vvvvv2

The volume serial of the second volume checked.

sddd2

The device number of the second device.

dsn2

The second dataset name or dataset description that is on the volume.

System action: The system continues processing.

Operator response: None.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPOF

IOSPF352I Volumes *vvvvv1 (sddd1)* with *dsn1* and *vvvvv2 (sddd2)* with *dsn2* share the same physical control unit

Explanation: The single point of failure service has detected that the pair of volumes share a physical control unit.

In the message text:

vvvvv1

The volume serial of the first volume checked.

sddd1

The device number of the first device.

dsn1

The first dataset name or dataset description that is on the volume.

vvvvv2

The volume serial of the second volume checked.

sddd2

The device number of the second device.

dsn2

The second dataset name or dataset description that is on the volume.

System action: The system continues processing.

Operator response: None.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPOF

IOSPF353I Volumes *vvvvv1 (sddd1)* with *dsn1* and *vvvvv2 (sddd2)* with *dsn2* have all paths share the same switch.

Explanation: The single point of failure service has detected that all paths to the pair of volumes on which the datasets specified reside share a switch.

In the message text:

vvvvv1

The volume serial of the first volume checked.

sddd1

The device number of the first device.

dsn1

The first dataset name or dataset description that is on the volume.

vvvvv2

The volume serial of the second volume checked.

sddd2

The device number of the second device.

dsn2

The second dataset name or dataset description that is on the volume.

System action: The system continues processing.

Operator response: None.

System programmer response: Refer to the service that issued this message.

Source: IOS

Module: IOSVSPOF

IOSPF354I Volumes with *vvvvv1 (sddd1)* with *dsn1* and *vvvvv2 (sddd2)* with *dsn2* have all CHPIDs share a single point of failure, component indicators = xxxxxxxxxxxxxxxxxxxxxxxxxxxx (model dependent).

Explanation: The single point of failure service has detected that all CHPIDs of volumes on which data sets *dsn1* and *dsn2* reside share an I/O component internally in the host machine that has a possibility of failing.

In the message text:

vvvvv1

The volume serial of the first volume checked.

sddd1

The device number of the first device.

dsn1

The first dataset name or dataset description that is on the volume.

vvvvv2

The volume serial of the second volume checked.

sddd2

The device number of the second device.

dsn2

The second dataset name or dataset description that is on the volume.

xxxxxxxxxxxxxxxxxxxxxxxxxxxx

A 12-byte identifier, that is host-dependent, representing I/O components on the host. Bits being set in this field help to identify the single point of failure and indicate that all channel paths have the component identified in common.

The current identifier is mapped as follows (from left to right) :

Byte (1-12)	Bit (1-8)	Component identified
1	1-2	Comparison Status. These bits being on indicates the comparison is invalid and can be ignored.
	3	Book. If you have a multi-book system, you might consider finding alternate paths to the device from a different book.
	4	Cage. If you have multiple I/O cages in your configuration, you might consider finding paths from different I/O cages to your device.
	5	Failover Domain. If there is a failure of the IFB-MP card, some paths to the device will be lost. Some priority should be given to finding paths from different redundant domains to the device.
	6	Fanout. Although redundant I/O interconnect will prevent any loss of connectivity, some thought should be given to spreading paths across different fanout cards.
	7	Domain. If there is a failure of the IFB-MP card, all paths to the device will be lost. Priority should be given to finding paths from multiple domains to the device.
	8	Secondary STI/STI. Indicates all paths to the device are from the same channel card. Priority should be given to spreading the paths across this single point of failure.
2	1	Internal BUS. This is for internal use

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only and can be ignored.
2 IBU. This is for internal use only and
can be ignored.
3 Channel. Indicates a single path exists
to the device.
4-8 Reserved
3-12 Reserved

System action: The system continues processing.

Operator response: None.

System programmer response: The single point of failure might be expected because of hardware limitations within your machine configuration. If the single point of failure is not expected, consult configuration experts to analyze the condition.

Source: IOS

Module: IOSVSPOF

IOSPF355I Volumes *vvvvv1 (vvvvv1)* with *dsn1* and *vvvvv2 (sddd2)* with *dsn2* have all control unit interfaces share *d1* of *d2* common components.

Explanation: The single point of failure service has detected that all paths to the pair of devices specified share a switch.

In the message text:

vvvvv1

The volume serial of the first volume checked.

sddd1

The device number of the first device.

dsn1

The first dataset name or dataset description that is on the volume.

vvvvv2

The volume serial of the second volume checked.

sddd2

The device number of the second device.

dsn2

The second dataset name or dataset description that is on the volume.

d1 The number of shared components in the control unit interface.

d2 The number of possible shared components in the control unit interface.

System action: The system continues processing.

Operator response: None.

System programmer response: See the service that issued this message.

Source: IOS

Module: IOSVSPOF

| **IOSPF500I** All online paths on device *sdddd* share common hardware components on *snd*:
| hardware component 0,
| hardware component 1,
| hardware component 2,
| hardware component 3,
| hardware component 4,
| hardware component 5,
| hardware component 6,
| hardware component 7

| **Explanation:** The single point of failure service has detected that all online paths on the device (specified by *sddd*) share the listed common hardware components. This message is preceded by message IOSPF104I and displayed if the switch device (FICON director) has defined hardware components.

| In the message text:

| *sddd*

| The subchannel set and device number of the device that has the single point of failure.

| *snd*

| The physical node descriptor for the switch, in the form:

| *tttttt.mmm.nnn.pp.sssssssssss*

| where:

| *tttttt*

| Type number of this device.

| *mmm*

| Model number of the device.

| *nnn*

| Manufacturer identification code.

| *pp* Plant of manufacture number.

| *ssssssssssss*

| Sequence number.

| *hardware components 0-7*

| A list of one to eight switch hardware components that are common among the online paths. The names of the hardware components are reported by the switch device (FICON director).

| **System action:** The system continues processing.

| **Operator response:** None.

| **System programmer response:** Adjust I/O setup to remove the single point of failure.

| **Source:** IOS

| **Module:** IOSVSPOF

| **IOSPF501I** All online paths on devices *sddd1* and *sddd2* share common hardware components on *snd*:
 | hardware component 0,
 | hardware component 1,
 | hardware component 2,
 | hardware component 3,
 | hardware component 4,
 | hardware component 5,
 | hardware component 6,
 | hardware component 7

| **Explanation:** The single point of failure service has detected that all online paths on the devices (specified by *sddd1* and *sddd2*) share the listed common hardware components. This message is preceded by message IOSPF153I and displayed if the switch device (FICON director) has defined hardware components.

| In the message text:

| *sddd1*

| The subchannel set and device number of the first device that shares a single point of failure with the second device (specified by *sddd2*).

| *sddd2*

| The subchannel set and device number of the second device that shares a single point of failure with the first device (specified by *sddd1*).

| *snd*

| The physical node descriptor for the switch, in the form:

IOSPF502I

| *ttttt.mmm.nnn.pp.sssssssssss*

| where:

| *ttttt*

| Type number of this device.

| *mmm*

| Model number of the device.

| *nnn*

| Manufacturer identification code.

| *pp* Plant of manufacture number.

| *ssssssssss*

| Sequence number.

| *hardware components 0-7*

| A list of one to eight switch hardware components that are common among the online paths. The names of the hardware components are reported by the switch device (FICON director).

| **System action:** The system continues processing.

| **Operator response:** None.

| **System programmer response:** Adjust I/O setup to remove the single point of failure.

| **Source:** IOS

| **Module:** IOSVSPOF

| **IOSPF502I** All online paths on volume *vvvvv* (*sdddd*) share common hardware components on *snd*:

| hardware component 0,

| hardware component 1,

| hardware component 2,

| hardware component 3,

| hardware component 4,

| hardware component 5,

| hardware component 6,

| hardware component 7

| **Explanation:** The single point of failure service has detected that all online paths on the volume (specified by *vvvvv*) share the listed common hardware components. The devices that the volume is associated with (specified by *sdddd*) are displayed. This message is preceded by message IOSPF253I and displayed if the switch device (FICON director) has defined hardware components.

| In the message text:

| *vvvvv*

| The name of the volume that has the single point of failure.

| *sdddd*

| The subchannel set and device number of the device that the volume defined.

| *snd*

| The physical node descriptor for the switch, in the form:

| *ttttt.mmm.nnn.pp.sssssssssss*

| where:

| *ttttt*

| Type number of this device.

| *mmm*

| Model number of the device.

| *nnn*

| Manufacturer identification code.

| *pp* Plant of manufacture number.

| *ssssssssss*
 | Sequence number.

| *hardware components 0-7*
 | A list of one to eight switch hardware components that are common among the online paths. The names of the
 | hardware components are reported by the switch device (FICON director).

| **System action:** The system continues processing.

| **Operator response:** None.

| **System programmer response:** Adjust I/O setup to remove the single point of failure.

| **Source:** IOS

| **Module:** IOSVSPDF

| **IOSPF503I** All online paths on volumes *vvvvv1 (sddd1)* and *vvvvv2 (sddd2)* share common hardware components
 | on *snd*:
 | hardware component 0,
 | hardware component 1,
 | hardware component 2,
 | hardware component 3,
 | hardware component 4,
 | hardware component 5,
 | hardware component 6,
 | hardware component 7

| **Explanation:** The single point of failure service has detected that all online paths on the volumes (specified by
 | *vvvvv1* and *vvvvv2*) share the listed common hardware components. The devices that the volumes are associated with
 | (specified by *sddd1* and *sddd2*) are displayed. This message is preceded by message IOSPF253I and displayed if the
 | switch device (FICON director) has defined hardware components.

| In the message text:

| *vvvvv1*
 | The name of the first volume that shares the single point or points of failure with the second volume.

| *sddd1*
 | The subchannel set and device number of the first device that the first volume defined.

| *vvvvv2*
 | The name of the second volume that shares the single point or points of failure with the first volume.

| *sddd2*
 | The subchannel set and device number of the second device that the second volume defined.

| *snd*
 | The physical node descriptor for the switch, in the form:

| *ttttt.mmm.nnn.pp.sssssssss*
 | where:

| *ttttt*
 | Type number of this device.

| *mmm*
 | Model number of the device.

| *nnn*
 | Manufacturer identification code.

| *pp* Plant of manufacture number.

| *ssssssssss*
 | Sequence number.

| *hardware components 0-7*
 | A list of one to eight switch hardware components that are common among the online paths. The names of the
 | hardware components are reported by the switch device (FICON director).

IOSPF504I

- | **System action:** The system continues processing.
- | **Operator response:** None.
- | **System programmer response:** Adjust I/O setup to remove the single point of failure.
- | **Source:** IOS
- | **Module:** IOSVSPOF

| **IOSPF504I** All online paths on volume *vvvvv* (*sdddd*) with *dsn* share common hardware components on *snd*:
| hardware component 0,
| hardware component 1,
| hardware component 2,
| hardware component 3,
| hardware component 4,
| hardware component 5,
| hardware component 6,
| hardware component 7

| **Explanation:** The single point of failure service has detected that all online paths on the volume (specified by *vvvvv*) containing the dataset or the description of the dataset (specified by *dsn*) share the listed common hardware components. The device that the volume is associated with (specified by *sdddd*) are displayed. This message is preceded by message IOSPF304I and displayed if the switch device (FICON director) has defined hardware components.

| In the message text:

| *vvvvv*

| The name of the volume that has the single point of failure.

| *sdddd*

| The subchannel set and device number of the device that the volume defined.

| *dsn*

| The dataset name or dataset description that resides on the volume that has a single point of failure.

| *snd*

| The physical node descriptor for the switch, in the form:

| *ttttt.mmm.nnn.pp.ssssssssss*

| where:

| *ttttt*

| Type number of this device.

| *mmm*

| Model number of the device.

| *nnn*

| Manufacturer identification code.

| *pp*

| Plant of manufacture number.

| *sssssssssss*

| Sequence number.

| *hardware components 0-7*

| A list of one to eight switch hardware components that are common among the online paths. The names of the

| hardware components are reported by the switch device (FICON director).

| **System action:** The system continues processing.

| **Operator response:** None.

| **System programmer response:** Adjust I/O setup to remove the single point of failure.

| **Source:** IOS

| **Module:** IOSVSPOF

```
IOSPF505I  All online paths on volumes vvvvv1 (sddd1) with dsn1 and vvvvv2 (sddd2) with dsn2 share common
| hardware components on snd:
| hardware component 0,
| hardware component 1,
| hardware component 2,
| hardware component 3,
| hardware component 4,
| hardware component 5,
| hardware component 6,
| hardware component 7
```

```
| Explanation: The single point of failure service has detected that all online paths on the volumes (specified by
| vvvvv1 and vvvvv2) containing the datasets or the description of the datasets (specified by dsn1 and dsn2) share the
| listed common hardware components. The devices that the volumes are associated with (specified by sddd1 and
| sddd2) are displayed. This message is preceded by message IOSPF353I and displayed if the switch device (FICON
| director) has defined hardware components.
```

```
| In the message text:
```

```
| vvvvv1
| The name of the first volume that shares the single point or points of failure with the second volume.
| sddd1
| The subchannel set and device number of the first device that the first volume defined.
| dsn1
| The first dataset name or dataset description that resides on the first volume that has a single point of failure.
| vvvvv2
| The name of the second volume that shares the single point or points of failure with the first volume.
| sddd2
| The subchannel set and device number of the second device that the second volume defined.
| dsn2
| The second dataset name or dataset description that resides on the second volume that has a single point of
| failure.
| snd
| The physical node descriptor for the switch, in the form:
| ttttt.mmm.nnn.pp.sssssssssss
| where:
| ttttt
| Type number of this device.
| mmm
| Model number of the device.
| nnn
| Manufacturer identification code.
| pp Plant of manufacture number.
| ssssssssss
| Sequence number.
| hardware components 0-7
| A list of one to eight switch hardware components that are common among the online paths. The names of the
| hardware components are reported by the switch device (FICON director).
| System action: The system continues processing.
| Operator response: None.
| System programmer response: Adjust I/O setup to remove the single point of failure.
| Source: IOS
```

| **Module:** IOSVSPDF

Chapter 15. IOSHC messages

IOSHC099I CHECK(IBMIOS,IOS_DYNAMIC_ROUTING) cannot be processed because an unexpected error in module *modname*.
Diagnosis area:
diagnostic-data

Explanation: An unexpected error was encountered while processing the named health check report.
In the message text:
modname
The name of the module encountering the error.
diagnostic-data
Additional diagnostic information provided by the identified module.

System action: The system continues processing.

Operator response: Report the problem to the systems programmer.

System programmer response: Search the problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Problem determination: None.

Source: Input/Output Supervisor (IOS)

Module: IOSHC DYR

Routing code: None.

Descriptor code: None.

IOSHC100I Captured UCB protection is currently *state* and in the expected state.

Explanation: CHECK(IBMIOS,IOS_CAPTUCB_PROTECT) determined that captured UCB protection is in the expected state. When enabled, captured UCB protection obtains captured Unit Control Blocks in protected storage and prevents storage overlays.

CAPTUCB PROTECT=YES has been specified if enabled, or CAPTUCB PROTECT=NO has been specified if disabled.

The expected state of captured UCB Protection can be changed by supplying a check parameter of PROTECT(YES) or PROTECT(NO).

In the message text:

state
Captured UCB protection current state (enabled or disabled)

System action: The system continues processing.

Operator response: n/a

System programmer response: n/a

Problem determination: n/a

Source: Input/output Supervisor (IOS)

Module: IOSHCCHK

Routing code: n/a

Descriptor code: n/a

Automation: n/a

Reference Documentation: n/a

IOSHC101E Captured UCB overlay protection is expected to be *expect* but is actually *actual*.

Explanation: CHECK(IBMIOS,IOS_CAPTUCB_PROTECT) determined the current captured UCB protection is not in its expected state of *expect*. When enabled, captured UCB protection obtains captured Unit Control Blocks in protected storage and prevents storage overlays. However, there may be rare issues with software.

In the message text:

expect

Captured UCB protection desired state (enabled or disabled)

actual

Captured UCB protection current state (enabled or disabled)

System action: The system continues processing.

Operator response: Please report this problem to the system programmer.

System programmer response: If the state of captured UCB protection should be enabled, issue this command from the system console: SETIOS CAPTUCB,PROTECT=YES

Also, in the IECIOSxx member, if the following line exists then remove it: CAPTUCB PROTECT=NO

If the state of captured UCB protection should be disabled, issue this command from the system console: SETIOS CAPTUCB,PROTECT=NO

Also, in the IECIOSxx member replace: CAPTUCB PROTECT=YES with CAPTUCB PROTECT=NO.

Alternatively, update the expected captured UCB protection state to be consistent with the current captured UCB protection state by supplying a check parameter of PROTECT(YES) or PROTECT(NO). Then, rerun this Health Check.

Problem determination: n/a

Source: Input/output Supervisor (IOS)

Module: IOSHCCHK

Routing code: n/a

Descriptor code: n/a

Automation: n/a

IOSHC102I 31-bit IOS blocks are currently *state* and in the expected state.

Explanation: CHECK(IBMIOS,IOS_STORAGE_IOSBLKS) determined that 31-bit IOS blocks are currently in the expected state. When enabled, 31-bit IOS blocks can reduce storage constraints below 16 megabytes. However, there may be legacy software that scans the IOS blocks and require them to be below 16 megabytes.

STORAGE IOSBLKS=31 has been specified if enabled, or STORAGE IOSBLKS=24 has been specified if disabled.

The expected state of 31-bit IOS Blocks can be changed by supplying a check parameter of IOSBLKS(31) or IOSBLKS(24).

In the message text:

state

31-bit IOS Block current state (enabled or disabled)

System action: The system continues processing.

Operator response: n/a

System programmer response: n/a

Problem determination: n/a

Source: Input/output Supervisor (IOS)

Module: IOSHCCHK

Routing code: n/a

Descriptor code: n/a

Automation: n/a

Reference Documentation: n/a

IOSHC103E 31-bit IOS blocks are expected to be *expect* but are actually *actual*.

Explanation: CHECK(IBMIOS,IOS_STORAGE_IOSBLKS) determined that 31-bit IOS blocks are not in the expected state of *expect*. When enabled 31-bit IOS blocks can reduce storage constraints below 16 megabytes, but there may be legacy software tools that scan the IOS blocks and require them to be below 16 megabytes.

STORAGE IOSBLKS=31 has been specified if enabled, or STORAGE IOSBLKS=24 has been specified if disabled.

In the message text:

expect

31-bit IOS Block desired state (enabled or disabled)

actual

31-bit IOS Block current state (enabled or disabled)

System action: The system continues processing.

Operator response: Please report this problem to the system programmer.

System programmer response: For your software products, verify if there are any requirements for 24-bit OS Blocks. If the storage for IOS blocks should be 31-bit, issue this command from the system console: SETIOS STORAGE,IOSBLKS=31

Also, in the IECIOSxx member, if the following line exists, remove it: STORAGE,IOSBLKS=24

If the storage for IOS blocks should be 24-bit, issue this command from the system console: SETIOS STORAGE,IOSBLKS=24

Also, in the IECIOSxx member replace: STORAGE,IOSBLKS=31 with STORAGE,IOSBLKS=24

Alternatively, update the expected 31-bit IOS Block state to be consistent with the current 31-bit IOS Block state by supplying a check parameter of IOSBLKS(31) or IOSBLKS(24). Then, rerun this Health Check.

Problem determination: n/a

Source: Input/output Supervisor (IOS)

Module: IOSHCCHK

Routing code: n/a

Descriptor code: n/a

Automation: n/a

IOSHC104I The MIDAW facility is currently *state* and in the expected state.

Explanation: CHECK(IBMIOS,IOS_MIDAW) determined that the MIDAW facility is currently in the expected state. The MIDAW facility allows Modified Indirect Addressing Words to be used by the system. The MIDAW facility can improve I/O performance: MIDAW=YES has been specified if enabled, or MIDAW=NO has been specified if disabled.

The expected state of the MIDAW facility can be changed by supplying a check parameter of MIDAW(YES) or MIDAW(NO).

In the message text:

state

The MIDAW facility current state (enabled or disabled)

System action: The system continues processing.

Operator response: n/a

System programmer response: n/a

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Problem determination: n/a

Source: Input/output Supervisor (IOS)

Module: IOSHCCHK

Routing code: n/a

Descriptor code: n/a

Automation: n/a

Reference Documentation: n/a

IOSHC105E The MIDAW facility is expected to be *expect* but is actually *actual*.

Explanation: CHECK(IBMIOS,IOS_MIDAW) determined that the MIDAW facility is not in the expected state of *expect*. The MIDAW facility allows Modified Indirect Addressing Words to be used by the system. The MIDAW facility can improve I/O performance.

In the message text:

expect

The MIDAW facility current state (enabled or disabled)

System action: The system continues processing.

Operator response: Please report this problem to the system programmer.

System programmer response: If the MIDAW facility should be enabled, issue this command from the system console: SETIOS MIDAW=YES

Also, in the IECIOSxx member, if the following line exists, remove it: MIDAW=NO

If the MIDAW facility should be disabled, issue this command from the system console: SETIOS MIDAW=NO

Also, in the IECIOSxx member replace: MIDAW=YES with MIDAW=NO.

Alternatively, update the expected MIDAW facility state to be consistent with the current MIDAW facility state by supplying a check parameter of MIDAW=YES) or MIDAW(NO). Then, rerun this Health Check.

Problem determination: n/a

Source: Input/output Supervisor (IOS)

Module: IOSHCCHK

Routing code: n/a

Descriptor code: n/a

Automation: n/a

IOSHC106I The MIDAW facility is not available on this processor.

Explanation: The MIDAW facility is not available on this processor.

System action: The system continues processing.

Operator response: n/a

System programmer response: n/a

Problem determination: n/a

Source: Input/output Supervisor (IOS)

Module: IOSHCCHK

Routing code: n/a

Descriptor code: n/a

Automation: n/a

Reference Documentation: n/a

IOSHC110I No command response (CMR) time exceptions have been detected.

Explanation: CHECK(IBMIO,IOS_CMRTIME_MONITOR) did not find command response (CMR) time exceptions for any control unit.

Note:

- If this is the first time the check has run since being activated, this message will be issued because enough data had not yet been gathered to perform a valuable analysis.
- If parameters have recently been changed, these results may be based on a previous parameter set. New parameters will take effect the next time control unit data is gathered.

System action: The system continues processing.

Operator response: n/a

System programmer response: n/a

Problem determination: n/a

Source: n/a

Module: IOSHCSAN

Routing code: n/a

Descriptor code: n/a

Automation: n/a

Reference Documentation: n/a

IOSHC111I Check results may be based on previous parameter values. New parameters will take effect the next time control unit data is gathered.

Explanation: This message is issued when one of the following occurs for CHECK(IBMIO,IOS_CMRTIME_MONITOR):

- Health Checker has started or restarted and has added this check.
- An UPDATE request was issued to change the parameters for this check via the PARMs keyword.
- This check was previously INACTIVE and an ACTIVATE request was issued.
- This check was previously DISABLED and then became ENABLED.

For all of the above cases, the check is performed and will report an exception or success based on the previously defined parameter values. These values may be the default parameter values in certain cases. If an UPDATE request was issued, the new parameter values will be used the next time control unit data is gathered. Note: It may take up to a few minutes for check results to be determined based on new parameter values.

System action: CHECK(IBMIO,IOS_CMRTIME_Monitor) reports an exception or success using the previously defined parameter values. For an UPDATE request, the next time control unit data is gathered, check analysis will be done using the new parameter values.

Operator response: n/a

System programmer response: n/a

Problem determination: n/a

Source: n/a

Module: IOSHCSAN

Routing code: n/a

Descriptor code: n/a

Automation: n/a

Reference Documentation: n/a

IOSHC112E Analysis of command response (CMR) time detected one or more control units with an exception.

Explanation: CHECK(IBMIOS,IOS_CMRTIME_MONITOR) determined that one or more control units had inconsistent command response (CMR) time. Each of these control units had at least one channel path with an average CMR time that exceeded the THRESHOLD parameter value and that path was significantly higher (as defined by the RATIO parameter value) than the path with the lowest average CMR time for this control unit. That is, the average CMR time for this path was at least 'x' times the lowest average CMR time for this control unit (where 'x' is the RATIO value).

For example, with a THRESHOLD value of 3ms and a RATIO value of 5, this message will be issued when at least one control unit in the system had a path with an average CMR time that was the highest among the other paths to the control unit and met both the following conditions:

- The average CMR time for this path was greater than 3ms.
- The average CMR time for this path was at least 5 times greater than the path with the lowest average CMR time for this control unit.

This may happen when there is a problem somewhere in the fabric, such as, hardware errors, I/O mis-configurations, or congestion.

Note:

- If parameters have recently been changed, this result may be based on previously defined parameters. Newly updated parameter values will be used the next time control unit data is gathered.
- For more information on setting the THRESHOLD and RATIO parameters, see the section on 'IOS_CMRTIME_MONITOR' in IBM Health Checker for z/OS User's Guide.

System action: The system continues processing.

Operator response: Contact the System Programmer.

System programmer response: Refer to the corresponding reports for this Health Check to determine which control units and channel paths have delays. Use diagnostic tools (such as the Resource Monitoring Facility (RMF) or hardware diagnostics) to help determine the source of the problem.

Problem determination: n/a

Source: n/a

Module: IOSHCSAN

Routing code: n/a

Descriptor code: n/a

Automation: n/a

Reference Documentation: n/a

IOSHC113I Command Response Time Report

The following control units show inconsistent average command response (CMR) time based on these parameters:

THRESHOLD = *threshold*

RATIO = *x*

CMR TIME EXCEPTION DETECTED AT: *time*

CONTROL UNIT = *cu*

ND = *node*

ENTRY	EXIT	CU	I/O	AVG	
CHPID	LINK	LINK	INTF	RATE	CMR
chpid	el	dl	intf	ior	cmr
chpid	el	dl	intf	ior	cmr

Explanation: CHECK(IBMIOS,IOS_CMRTIME_MONITOR) determined that one or more control units had inconsistent command response (CMR) time. Each of the control units listed in this report had at least one channel path with an average CMR time that exceeded the THRESHOLD value and that path was significantly higher (as defined by the RATIO value) than the path with the lowest average CMR time for this control unit. That is, the

average CMR time for this path was at least 'x' times the lowest average CMR time for this control unit (where 'x' is the RATIO value).

For example, with a THRESHOLD value of 3ms and a RATIO value of 5, a control unit will be included in this report if it had a path with an average CMR time that was the highest among other paths to the control unit and met both the following conditions:

- The average CMR time for this path was greater than 3ms.
- The average CMR time for this path was at least 5 times greater than the path with the lowest average CMR time for this control unit.

This may happen when there is a problem somewhere in the fabric, such as, hardware errors, I/O mis-configurations, or congestion.

Note: If parameters have recently been changed, this result may be based on previously defined parameters. Newly updated parameter values will be used the next time control unit data is gathered.

In the message text:

threshold

The THRESHOLD value used by this instance of the check, in conjunction with the RATIO value, to determine which control units had an exception. Each of the control units listed in this report had at least one channel path with an average CMR time that exceeded this THRESHOLD value in addition to being significantly higher (as defined by the RATIO value) than the path with the lowest average CMR time for this control unit. See IBM Health Checker for z/OS User's Guide for more information on the THRESHOLD parameter.

x The RATIO value used by this instance of the check, in conjunction with the THRESHOLD value, to determine which control units had an exception. Each control unit listed in this report had a least one channel path with an average CMR time that exceeded the THRESHOLD value and was at least 'x' times the average CMR time for the path with the lowest average CMR time. See IBM Health Checker for z/OS User's Guide for more information on the RATIO parameter.

cu The control unit number of a control unit that encountered the exception. This is the control unit number associated with the first installed path. If '****' appears, z/OS was unable to determine the control unit for the path.

node

The node descriptor of the attached subsystem in the form *ttttt.mmm.nnn.pp.ssssssssss*, where:

ttttt Type number of this device.

mmm Model number of the device.

nnn Manufacturer identification code.

pp Plant of manufacture number.

ssssssssss

Sequence number.

chpid

A channel path (X'00' through X'FF) attached to the control unit.

el A one or two byte physical link address of the channel path to the entry switch. If the link address defined in the I/O configuration is one byte, it represents the entry port address. If the link address defined in the I/O configuration is two bytes, the first byte is the switch address (domain) and the second byte is the entry port address (area). If the channel is connected directly to the control unit (point to point configuration), a one byte link address is shown. '..' is shown if the link address could not be obtained for this control unit path.

dl A one or two byte address of a control unit that is used to access the I/O device associated with the specified channel path. If the link address defined in the I/O configuration is one byte, it represents the destination port address. If the link address defined in the I/O configuration is two bytes, the first byte is the switch address (domain) and the second byte is the destination port address (area). If the channel is connected directly to the control unit (point to point configuration), a one byte link address is shown. '..' is shown if the link address could not be obtained for this control unit path.

intf

A two byte physical identifier that represents the control unit interface that is connected to the channel path.

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iort

The number of I/Os started down this channel path per second.

cmr

The average command response (CMR) time for this channel path displayed in milliseconds. If the number of I/Os during this interval or the calculated average CMR time for this path was not significant enough for a meaningful analysis, '****' is displayed.

System action: The system continues processing.

Operator response: n/a

System programmer response: Refer to the corresponding reports for this Health Check to determine which control units and channel paths have delays. Use diagnostic tools (such as the Resource Monitoring Facility (RMF) or hardware diagnostics) to help determine the source of the problem.

Problem determination: n/a

Source: n/a

Module: IOSHCSAN

Routing code: n/a

Descriptor code: n/a

Automation: n/a

Reference Documentation: n/a

| **IOSHC117I** No fabric health exceptions have been detected.

| **Explanation:** CHECK(IBMIOS,IOS_FABRIC_MONITOR) did not find fabric health exceptions.

| **Note:**

| • If this is the first time the check has run since being activated, this message will be issued because not enough data has been gathered to perform a valuable analysis yet.

| **System action:** The system continues processing.

| **Operator response:** n/a

| **System programmer response:** n/a

| **Problem determination:** n/a

| **Source:** n/a

| **Module:** IOSHCFAB

| **Routing code:** n/a

| **Descriptor code:** n/a

| **Automation:** n/a

| **Reference Documentation:** n/a

| **IOSHC118I** New parameters are now in effect

| **Explanation:** This message is issued when one of the following occurs for CHECK(IBMIOS,IOS_FABRIC_MONITOR):

- | • Health Checker has started or restarted and has added this check.
- | • An UPDATE request was issued to change the parameters for this check via the PARM keyword.
- | • This check was previously INACTIVE and an ACTIVATE request was issued.
- | • This check was previously DISABLED and then became ENABLED.

| For all of the above cases, the check is performed and will report an exception or success based on the newly defined parameter values. These values may be the default parameter values in certain cases.

| CHECK(IBMIOS,IOS_FABRIC_MONITOR) reports an exception or success using the newly defined parameter values.
 | **System action:** The system continues processing.
 | **Operator response:** n/a
 | **System programmer response:** n/a
 | **Problem determination:** n/a
 | **Source:** n/a
 | **Module:** IOSHCFAB
 | **Routing code:** n/a
 | **Descriptor code:** n/a
 | **Automation:** n/a
 | **Reference Documentation:** n/a

| **IOSHC119E Fabric health issues have been detected**

| **Explanation:** CHECK(IBMIOS,IOS_FABRIC_MONITOR) determined that one or more paths has been indicated by a switch as experiencing a possible fabric health problem.
 | This may happen when there is a problem somewhere in the fabric, such as hardware errors, I/O mis-configurations, congestion, or command response time exceptions.
 | **System action:** The system continues processing.
 | **Operator response:** Contact the System Programmer.
 | **System programmer response:** Refer to the corresponding reports for this Health Check to determine which channel paths have been monitored for health. Use diagnostic tools (such as the Resource Monitoring Facility (RMF) or hardware diagnostics) to help determine the source of the problem.
 | **Problem determination:** n/a
 | **Source:** n/a
 | **Module:** IOSHCFAB
 | **Routing code:** n/a
 | **Descriptor code:** n/a
 | **Automation:** n/a
 | **Reference Documentation:** n/a

| **IOSHC120I Fabric Health Report**

| **The following fabric health issues have been detected:**
 | **Fabric health exception detected at:** *mm/dd/yyyy hh.mm.ss.mnn*
 | **CHPID=** *cc* **Entry link=***el* **Exit link=***dl* **Suspect port=***s-port*
 | **Source to destination routing information follows:**
 | **Switch Domain=***dd*, **Type=***director-type*
 | **Group**
 | **Port Type From To Agg Dyn Speed Misc**
 | **aa** **Entry Chan Chan nn nn xxxG Dynamic**
 | **Exit CU CU Static Alt=nn**
 | **ddaa ddaa**
 | **Agg-nn Agg-nn**
 | **Mult Dyn-nn**
 | **Health information follows:**
 | **Fabric Health=fabric-health-info**
 | **Switch Domain=dd, Health=switch-health-info**
 | **%Util %Delay Error Count Opt Signal**
 | **Port Health Trn/Rcv Trn/Rcv Trn/Recv Trn/Recv**

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aa health-info nnn/nnn nnn/nnn nnnnn/nnnnn ±nnnn/±nnnn

Explanation: CHECK(IBMIOS,IOS_FABRIC_MONITOR) detected fabric health issues. The information presented in this report may help diagnose the problems and their causes.

This may happen when there is a problem somewhere in the fabric, such as, hardware errors, I/O mis-configurations, or congestion.

In the message text:

cc A channel path (X'00' through X'FF) attached to the control unit. '**' is shown is the channel path could not be obtained.

el A two-byte physical link address of the channel path to the entry switch. The first byte is the switch address (domain) and the second byte is the entry port address (area).

dl A two-byte physical link address of a control unit that is used to access the I/O device associated with the specified channel path. The first byte is the switch address (domain) and the second byte is the destination port address (area).

s-port

A two-byte address of the port which is possibly the source of the error.

The routing information table displays the route through the switch fabric for each port experiencing health problems.

The health information table displays the detected health information provided by the switch for the fabric which is the cause for the health exception.

System action: The system continues processing.

Operator response: Contact the System Programmer.

System programmer response: Refer to the corresponding reports for this Health Check to determine which channel paths have been monitored for health. Use diagnostic tools (such as the Resource Monitoring Facility (RMF) or hardware diagnostics) to help determine the source of the problem.

Problem determination: n/a

Source: n/a

Module: IOSHCFAB

Routing code: n/a

Descriptor code: n/a

Automation: n/a

Reference Documentation: n/a

IOSHC130I No I/O rate exceptions have been detected

Explanation: CHECK(IBMIOS,IOS_IORATE_MONITOR) did not find I/O rate time exceptions for any control unit.

Note:

- If this is the first time the check has run since being activated, this message will be issued because not enough data had been gathered to perform a valuable analysis.
- If parameters have recently been changed, these results may be based on a previous parameter set. New parameters will take effect the next time control unit data is gathered.

System action: The system continues processing.

Operator response: n/a

System programmer response: n/a

Problem determination: n/a

Source: n/a

| **Module:** IOSHCIOR
 | **Routing code:** n/a
 | **Descriptor code:** n/a
 | **Automation:** n/a
 | **Reference Documentation:** n/a

| **IOSHC131I** Check results may be based on previous parameter values. New parameters will take effect the next time control unit data is gathered.

| **Explanation:** This message is issued when one of the following occurs for CHECK(IBMIOS,IOS_IORATE_MONITOR):

| Health Checker has started or restarted and has added this check. An UPDATE request was issued to change the parameters for this check via the PARMS keyword.

| This check was previously INACTIVE and an ACTIVATE request was issued.

| • This check was previously DISABLED and then became ENABLED.

| For all of the above cases, the check is performed and will report an exception or success based on the previously defined parameter values. These values may be the default parameter values in certain cases. If an UPDATE request was issued, the new parameter values will be used the next time control unit data is gathered. Note, it may take up to a few minutes for check results to be determined based on new parameter values.

| **System action:** CHECK(IBMIOS,IOS_IORATE_Monitor) reports an exception or success using the previously defined parameter values. For an UPDATE request, the next time control unit data is gathered, check analysis will be performed using the new parameter values.

| **Operator response:** n/a

| **System programmer response:** n/a

| **Problem determination:** n/a

| **Source:** n/a

| **Module:** IOSHCIOR

| **Routing code:** n/a

| **Descriptor code:** n/a

| **Automation:** n/a

| **Reference Documentation:** n/a

| **IOSHC132E** Analysis of I/O rates detected one or more control units with an exception.

| **Explanation:** CHECK(IBMIOS,IOS_IORATE_MONITOR) determined that one or more control units had inconsistent I/O rates across the paths of the subsystem.

| Typically, I/Os are distributed equally across all paths for a control unit. When the system determines that there is a performance problem with a path, it will direct I/Os away from that path. This action, taken by the system to correct the performance problem, results in inconsistent I/O rates across the paths.

| Each of the control units in the report had a total I/O rate across all channel paths that exceeded the THRESHOLD parameter value, and had at least one path whose I/O rate was significantly lower (as defined by the RATIO parameter value) than the rate for the path with the highest I/O rate. That is, the I/O rate for the path with the highest I/O rate was at least 'ratio' times higher than that of the lowest I/O rate for this control unit. This may happen when there is a problem somewhere in the fabric, such as, hardware errors, I/O mis-configurations, or congestion. Each of the paths identified with the lower I/O rates should be further examined to determine the source of the problem.

| For example, with a THRESHOLD value of 100 I/Os per second and a RATIO value of 2, this message will be issued when at least one control unit in the system had a total I/O rate for all of its channels exceeding 100 I/Os per second, and there was one or more paths with an I/O rate less than half that of the path with the highest I/O rate.

IOSHC133I

| **Note:**

- | • If parameters have recently been changed, this result may be based on previously defined parameters. Newly updated parameter values will be used the next time control unit data is gathered.
- | • For more information on setting the THRESHOLD and RATIO parameters, see the section on 'IOS_IORATE_MONITOR' in IBM Health Checker for z/OS User's Guide.

| **System action:** The system continues processing

| **Operator response:** Contact the System Programmer.

| **System programmer response:** Refer to the corresponding reports for this Health Check to determine which control units and channel paths have delays. Use diagnostic tools (such as the Resource Monitoring Facility (RMF), the D M=DEV,ROUTE= console command, or hardware diagnostics) to help determine the source of the problem.

| **Problem determination:** n/a

| **Source:** n/a

| **Module:** IOSHCIOR

| **Routing code:** See note 35.

| **Descriptor code:** 3 is the default set by this check. See note 1.

| **Automation:** n/a

| **Reference Documentation:** n/a

| **IOSHC133I I/O Rate Report**

| **The following control units show inconsistent I/O rates based on these parameters:**

| **THRESHOLD = *threshold***

| **RATIO = *ratio***

| **I/O RATE EXCEPTION DETECTED AT: *time***

| **CONTROL UNIT = *cu***

| **ND = *node***

| **ENTRY EXIT CU I/O AVG IOR**

| **CHPID LINK LINK INTF RATE CMR EXC**

| **chpid el dl intf iort cmr**

| **chpid el dl intf iort cmr exc**

| **Explanation:** CHECK(IBMIOS,IOS_IORATE_MONITOR) determined that one or more control units had inconsistent I/O rates across the paths of the subsystem.

| Typically, I/Os are distributed equally across all paths for a control unit. When the system determines that there is a performance problem with a path, it will direct I/Os away from that path. This action, taken by the system to correct the performance problem, results in inconsistent I/O rates across the paths.

| Each of the control units listed in this report had a total I/O rate across its channel paths, that exceeded the THRESHOLD value and there was at least one path for this control unit whose I/O rate was significantly lower (as defined by the RATIO value) than the rate for the path with the highest I/O rate. That is, the I/O rate for the path with the highest I/O rate for this control unit was at least 'ratio' times higher than the rate for the path with the lowest path. Each of the paths identified with the lower I/O rates should be further examined to determine the source of the problem.

| For example, with a THRESHOLD value of 100 I/Os per second and a RATIO value of 2, a control unit will be included in this report if the total I/O rate for all of its channel paths exceeded 100 I/Os per second, and at least one channel path had an I/O rate less than half the I/O rate of the channel path with the highest I/O rate among the paths to the control unit.

| **Note:** If parameters have recently been changed, this result may be based on previously defined parameters. Newly updated parameter values will be used the next time control unit data is gathered.
| In the message text:

| *threshold*

| The THRESHOLD value used by this instance of the check. This is used in conjunction with the RATIO value, to determine which control units had an exception. Each of the control units listed in this report had a total I/O rate that exceeded this THRESHOLD value. In addition there was at least one path for this control unit with an

I/O rate being significantly lower (as defined by the RATIO value) than that of the path with the highest I/O rate for this control unit. See *IBM Health Checker for z/OS User's Guide* for more information on the THRESHOLD parameter.

ratio
The RATIO value used by this instance of the check. This is used in conjunction with the THRESHOLD value, to determine which control units had an exception. Each control unit listed in this report had a total I/O rate that exceeded the THRESHOLD value and had at least one channel path that was at least a factor of 'ratio' less than that of the path with the highest I/O rate. See *IBM Health Checker for z/OS User's Guide* for more information on the RATIO parameter.

cu The control unit number of a control unit that encountered the exception. This is the control unit number associated with the first installed path. If '****' appears, z/OS was unable to determine the control unit for the path.

node
The node descriptor of the attached subsystem in the form ttttt.mmm.nnn.pp.sssssssssss where:

ttttt
Type number of this device

mmm
Model number of the device

nnn
Manufacturer identification code

pp Plant of manufacture number

ssssssssss
Sequence number

chpid
A channel path (X'00' through X'FF') attached to the control unit.

el A one or two byte physical link address of the channel path to the entry switch. If the link address defined in the I/O configuration is one byte, it represents the entry port address. If the link address defined in the I/O configuration is two bytes, the first byte is the switch address (domain) and the second byte is the entry port address (area). If the channel is connected directly to the control unit (point to point configuration), a one byte link address is shown. If the link address could not be obtained for this control unit path, '..' is shown.

dl A one or two byte address of a control unit that is used to access the I/O device associated with the specified channel path. If the link address defined in the I/O configuration is one byte, it represents the destination port address. If the link address defined in the I/O configuration is two bytes, the first byte is the switch address (domain) and the second byte is the destination port address (area). If the channel is connected directly to the control unit (point to point configuration), a one byte link address is shown. If the link address could not be obtained for this control unit path, '..' is shown.

intf
A two byte physical identifier that represents the control unit interface that is connected to the channel path.

iort
The number of I/Os started down this channel path per second. If the number of I/Os during this interval, for this path was not significant enough for a meaningful analysis, '***' is displayed. This would be the case if the path is offline.

cmr
The average command response (CMR) time for this channel path displayed in milliseconds. If the number of I/Os during this interval or the calculated average CMR time for this path was not significant enough for a meaningful analysis, '***' is displayed.

exc
The column will contain an indicator (asterisk) to indicate this channel path had an I/O rate lower than the path with the highest I/O rate, by a factor identified by the ratio parameter.

System action: The system continues processing

Operator response: n/a

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| **System programmer response:** Refer to the corresponding reports for this Health Check to determine which control units and channel paths have delays. Use diagnostic tools (such as the Resource Monitoring Facility (RMF) or hardware diagnostics) to help determine the source of the problem.

| **Problem determination:** n/a

| **Source:** n/a

| **Module:** IOSHCIOR

| **Routing code:** n/a

| **Descriptor code:** n/a

| **Automation:** n/a

| **Reference Documentation:** n/a

| IOSHC140I Dynamic routing is not enabled in the SAN

| **Explanation:** CHECK(IBMIOS,IOS_DYNAMIC_ROUTING) determined that dynamic routing is not enabled in the storage area network (SAN). No action is required. Note that you will also see this message when no switches have been defined and brought online to the operating system.

| **System action:** The system continues processing.

| **Operator response:** None.

| **System programmer response:** None.

| **Problem determination:** None.

| **Source:** Input/Output Supervisor (IOS)

| **Module:** IOSHCDYR

| **Routing code:** None.

| **Descriptor code:** None.

| IOSHC141I Dynamic routing is enabled in the SAN and no inconsistencies were detected

| **Explanation:** CHECK(IBMIOS,IOS_DYNAMIC_ROUTING) determined that dynamic routing is enabled in the storage area network (SAN), and the processor and attached controllers support dynamic routing, where needed. The dynamic routing support is complete and no additional action is required.

| **System action:** The system continues processing.

| **Operator response:** None.

| **System programmer response:** None.

| **Problem determination:** None.

| **Source:** Input/Output Supervisor (IOS)

| **Module:** IOSHCDYR

| **Routing code:** None.

| **Descriptor code:** None.

| IOSHC142E Dynamic routing inconsistencies were detected

| **Explanation:** CHECK(IBMIOS,IOS_DYNAMIC_ROUTING) determined that dynamic routing is not fully supported in the storage area network (SAN).

| Various routing methods can be used to route I/O requests through the fabric. When dynamic routing is in effect, each I/O can take a different path through the fabric, thereby improving workload balancing. Dynamic routing is a vendor-neutral name for this routing method and each switch vendor has its specific name and implementation.

| In order for dynamic routing to function properly, it must be supported on all endpoints within the SAN (that is, the

| processor and attached controllers); otherwise, an inconsistency can lead to I/O errors. The health check has determined that dynamic routing is enabled in the SAN; however, one or more of the endpoints do not support dynamic routing. The health check report contains additional messages indicating which endpoints are inconsistent. Message IOSHC143I indicates that the processor does not support dynamic routing. Message IOSHC144I lists the node descriptor for each controller identified as not supporting dynamic routing. If the node descriptor is not available, the control unit number will be listed.

| The processor and controller firmware need to be at a level that supports dynamic routing, or dynamic routing must be disabled. Refer to the switch vendor documentation to disable dynamic routing in the SAN.

| **System action:** The system continues processing.

| **Operator response:** Contact the systems programmer.

| **System programmer response:** Refer to the corresponding reports for this health check to determine which endpoints (that is, processors or controllers) do not support dynamic routing. Either upgrade the firmware on those entities or disable dynamic routing in the SAN.

| **Problem determination:** None.

| **Source:** Input/Output Supervisor (IOS)

| **Module:** IOSHCDYR

| **Routing code:** None.

| **Descriptor code:** None.

| IOSHC143I Dynamic routing is enabled in the SAN but not supported by the processor

| **Explanation:** CHECK(IBMIOS,IOS_DYNAMIC_ROUTING) determined that dynamic routing is enabled in the storage area network (SAN); however, the processor does not support dynamic routing.

| When dynamic routing is enabled in the SAN, the processor must support dynamic routing to ensure the correct processing of the I/O request.

| **System action:** The system continues processing.

| **Operator response:** None.

| **System programmer response:** Disable dynamic routing in the SAN. Refer to the switch vendor documentation to disable dynamic routing in the SAN.

| **Problem determination:** None.

| **Source:** Input/Output Supervisor (IOS)

| **Module:** IOSHCDYR

| **Routing code:** None.

| **Descriptor code:** None.

| IOSHC144I Dynamic routing is enabled in the SAN but not supported by the following controller(s):

| **Explanation:** CHECK(IBMIOS,IOS_DYNAMIC_ROUTING) determined that dynamic routing is enabled in the storage area network (SAN), but not all controllers connected in a switch configuration support dynamic routing.

| When dynamic routing is enabled in the SAN, all connected controllers must support dynamic routing to ensure the correct processing of the I/O request.

| **System action:** The system continues processing.

| **Operator response:** None.

| **System programmer response:** Upgrade the controllers to support dynamic routing, or disable dynamic routing in the SAN. Refer to the switch vendor documentation to disable dynamic routing in the SAN.

| **Problem determination:** None.

| **Source:** Input/Output Supervisor (IOS)

IOSHC145I

| **Module:** IOSHCDYR

| **Routing code:** None.

| **Descriptor code:** None.

| **IOSHC145I** The following do not support dynamic routing. This is allowed in the current environment, however it could result in I/O errors if dynamic routing were to be enabled in the SAN.

| **Explanation:** CHECK(IBMIOS,IOS_DYNAMIC_ROUTING) determined that if dynamic routing were to be enabled in the storage area network (SAN), I/O errors could occur because the processor or controllers identified in the message do not support dynamic routing.

| **System action:** The system continues processing.

| **Operator response:** None.

| **System programmer response:** If you are considering enabling dynamic routing in the SAN, the processor and identified controllers must first be upgraded to support dynamic routing.

| **Problem determination:** None.

| **Source:** Input/Output Supervisor (IOS)

| **Module:** IOSHCDYR

| **Routing code:** None.

| **Descriptor code:** None.

Chapter 16. IPD messages

IPD000 SYSTEM OR SYNTAX CHECKER FAILURE

Explanation: While scanning the last statement, the FORTRAN syntax checker encountered a condition that should not occur. It may be a hardware, syntax checker, or system error.

System programmer response: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL for the job.

Source: FORTRAN syntax checker

IPD002 UNRECOGNIZABLE STMT OR MISPELLED KEYWD

Explanation: One of the following errors occurred:

- The statement was not a recognizable FORTRAN statement type.
- A keyword of six or fewer characters was misspelled.
- An assignment statement with errors to the left of the '=' is unrecognizable.

Programmer response: Check and correct the statements for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD004 UNSIGNED INTEGER EXPECTED

Explanation: An incorrect form, such as an integer constant preceded by a plus or minus sign, was encountered in a FORTRAN statement where:

- An unsigned integer is the only valid form.
- An unsigned integer or unsigned variable is the only valid form.

Programmer response: Check and correct the statements for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD006 EXPRESSION EXPECTED

Explanation: An expression is either missing or incorrect in a FORTRAN statement where a valid one is expected. For example, each of these statements would receive this message:

- A=
- G (I,J) = C (I,)
- X= Y+2.0*(**2+6.28)

The source characters in error in the message would be: none for statement 1; ')' for statement 2; '**2+6.' for statement 3.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD008 POSSIBLY TOO MANY SUBSCRIPTS PRECEDE

Explanation: In a FORTRAN statement, a list of eight or more (four or more in FORTRAN E) names within parentheses has been found following a symbolic name on the left side of the equal sign in an assignment statement or statement function definition. If the statement is a statement function definition, the message should be ignored.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD010 TOO MANY SUBSCRIPTS

Explanation: In a FORTRAN statement, a list of eight or more (four or more in FORTRAN E) expressions within parentheses has been found following a symbolic name in a place where a subscripted variable reference would be valid.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD012) EXPECTED

Explanation: In a FORTRAN statement, either a required parenthesis was missing or there was no right parenthesis to match a left parenthesis.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD014 ARITH IF REQUIRES STATEMENT NUMBER LIST

Explanation: There was a missing or incorrect statement number in the list of statement numbers after an arithmetic IF statement (FORTRAN G and H statements only).

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD016 INVALID EXPRESSION IN IF STATEMENT

Explanation: The expression within parentheses after the IF keyword of a logical or arithmetic IF statement was not recognizable as either a valid logical or arithmetic expression (FORTRAN G and H statements only.)

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD018 UNRECOGNIZABLE STMNT AFTER LOGICAL IF

Explanation: The statement following the IF (logical expression) was not a recognizable FORTRAN statement type, or there was something other than blanks between the right parentheses at the end of the logical expression and the start of the statement. Some errors in arithmetic IF statements will cause this message to be issued (FORTRAN G and H statements only).

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD020 NON-ZERO INTEGER EXPECTED

Explanation: In a FORTRAN statement, the indicated numeric constant is zero, not an integer constant, or both.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD022 ILLEGAL STATEMENT AFTER LOGICAL IF

Explanation: The statement following the IF (logical expression) is not one of the FORTRAN statement types permitted after a logical IF. The statement cannot be a DO, another logical IF, any statement that the system cannot run, nor any of the DEBUG statements (FORTRAN G and H statements only).

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD026 DATA SET NUMBER EXPECTED

Explanation: A FORTRAN input/output statement had neither an unsigned nonzero integer nor a variable names in the correct position for the data set reference numbers.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD028 LENGTH SPECIFICATION INVALID

Explanation: In a type-statement, a length specification was missing or was incorrect for the type of statement specified for the variables or function (FORTRAN G and H statements only).

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD030 (EXPECTED

Explanation: In a FORTRAN statement, a required left parenthesis is missing. This message is not issued for statements where parentheses are optional (assignment statements, for example), but is issued where a pair of parentheses is mandatory (as in FUNCTION, EQUIVALENCE, WRITE, and so on).

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD032 NAME EXPECTED

Explanation: In a FORTRAN statement, a required name is missing or is preceded by characters that cannot begin a name. For example, the following statements will receive this message:

- FUNCTION (A,B,C)
- DIMENSION, X(20,30)
- DEFINE FILE 8(10,20,U,3X)

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD034 DUMMY ARGUMENT EXPECTED

Explanation: A FORTRAN SUBROUTINE or FUNCTION statement has an argument that is incorrect. It may be a constant or an expression. This also applies to the ENTRY statement in FORTRAN G and H.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD036 ARRAY DIMENSIONS EXPECTED

Explanation: A FORTRAN DIMENSION statement gave either partial or no dimension information for one of its array names, or incorrect characters were between the array name and the dimension information.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD038 / EXPECTED

Explanation: The first name in a FORTRAN NAMELIST statement was not preceded by a slash, or a name or list of data preceded by a slash was not followed by a slash, as required. This message affects the following FORTRAN G and H statements:

- COMMON
- SUBROUTINE

IPD040 • IPD048

- FUNCTION
- ENTRY
- NAMELIST
- DATA
- INTEGER
- REAL
- LOGICAL
- COMPLEX

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD040 INVALID DATA TYPE

Explanation: In a FORTRAN statement, one of the following was detected:

- The type of a datum in a type-statement did not agree with the type declared by the statement.
- The datum was missing.
- In an Implicit statement, the type specification was incorrect (for example, IMPLICIT REEL (D)).

Hexadecimal and both types of literal data are allowed in all type statements (FORTRAN G and H statements only).

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD042 STATEMENT NUMBER EXPECTED

Explanation: A FORMAT statement was not numbered or a form other than a statement number was encountered after the 'GO TO' in an unconditional GO TO statement. In addition, in FORTRAN G and H, the incorrect form could be in an ASSIGN or a CALL statement.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD044 'TO' EXPECTED

Explanation: A FORTRAN ASSIGN statement did not have 'TO' in the required place (FORTRAN G and H statements only).

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD046 ARGUMENT EXPECTED

Explanation: A FORTRAN CALL statement has an incorrect or missing argument in its argument list.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD048 DATA LIST EXPECTED

Explanation: A FORTRAN data statement contains no data list or the data list is separated from the variable list by incorrect characters (FORTRAN G and H statements only).

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD050 RELATIONAL OPERATOR EXPECTED

Explanation: In a logical expression, an arithmetic expression was not followed by a relational operator. (FORTRAN G and H only.)

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD052 , EXPECTED

Explanation: In a FORTRAN statement with a relatively rigid form, such as EQUIVALENCE or DEFINE FILE, a comma was absent or preceded by incorrect characters.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD054 OPERAND EXPECTED IN ARITH EXPRESSION

Explanation: In a FORTRAN statement, an arithmetic operator was not followed by a valid arithmetic operand, or two operators occur together (as in A * -B).

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD056 OPERAND EXPECTED IN LOGICAL EXPRESSION

Explanation: In a FORTRAN statement, a logical operator was not followed by a logical operand, or a logical operand was missing. An incorrect logical operator, such as '.NOT..NOT.', may also cause this message (FORTRAN G and H statements only).

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD058 I/O LIST ITEM EXPECTED

Explanation: A variable name did not follow a comma in the list of a FORTRAN READ or WRITE statement (or in FORTRAN G and H, a PUNCH or PRINT statement).

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD060 ' EXPECTED

Explanation: A FORTRAN FIND statement did not contain an apostrophe to separate the data set reference number from the expression describing the record to be found. This message is issued only if the omission of the apostrophe leaves a valid data set reference number.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD062 INCORRECT PARAMETER - MUST BE E, L, OR U

Explanation: The data set control character in a FORTRAN DEFINE FILE statement was not an E, L or U.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD064 DEBUG PARAMETER EXPECTED

Explanation: A valid parameter did not follow a comma after a valid parameter in a FORTRAN DEBUG statement (FORTRAN G only).

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD066 SUBSCRIPT EXPECTED

Explanation: In a FORTRAN statement, a subscript was missing, not in one of the valid forms, or separated from the preceding comma or left parenthesis by incorrect characters (FORTRAN E only).

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD068 TOO MANY LEVELS OF PARENTHESES

Explanation: In a FORTRAN FORMAT statement, group repeat specifications were too deeply nested. FORTRAN E does not allow a group repeat specification within a group repeat specification. FORTRAN G and H do allow this, but allow no further nesting of group repeat specifications.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD072 INTEGER EXPECTED

Explanation: In a FORTRAN statement, a numeric constant that was not an integer was found where an integer is required.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD074 COMPLEX NUMBER INVALID

Explanation: In a FORTRAN statement, the two parts of a complex constant did not agree in length, or one or both parts was not a real constant (FORTRAN G and H statements only).

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD076 DELIMITER MISSING OR INVALID FORMAT CODE

Explanation: In a FORMAT statement, either a format code was incorrect, a delimiter (such as the required comma or slashes between two literal format codes) was missing or the right parenthesis at the end of the FORMAT was missing.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD078 VARIABLE LIST EXPECTED

Explanation: In a FORTRAN DATA statement, a variable name (or list of variable names) did not occur:

- As the first item of the data statement
- After a comma following a list of constants enclosed in slashes

This message is also issued when there are incorrect characters between the DATA keyword or the comma and the list of variables (FORTRAN G and H statements only).

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD080 EXPECTED IN FORMAT CODE

Explanation: There was no period as required in the 'w.d' following the D, E, or F format code in a FORMAT statement.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD082 NAME TOO LONG

Explanation: In a FORTRAN statement, one of the following was detected:

- A symbolic name contains more than six characters.
- A keyword of seven or more letters at the beginning of a statement is misspelled.
- A misspelled keyword follows the IF (logical expression) part of a logical IF statement.

A missing delimiter may cause this message to be issued. Each of the following statements would produce this message:

```
38      CONTINUE
         SUBROUTINE X(ARG1 ARG2)
```

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD084 STATEMENT NUMBER INVALID

Explanation: In a FORTRAN statement, the statement number field (positions 1-5 of the initial line of a statement) was zero or contained at least one character that was neither a digit nor a blank. Within a statement, this message is issued if a statement number is zero or contains too many digits.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD086 H-LITERAL INCOMPLETE

Explanation: The number of characters in a FORTRAN statement after an 'H' was smaller than the count before the 'H' in the H-literal.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD088 FIELD WIDTH NOT IN RANGE 1-255

Explanation: In a FORTRAN statement, the field width specified in a format code was not in the required range.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD090 LITERAL EXCEEDS 255 CHARACTERS

Explanation: In a FORTRAN statement, the number of characters between the apostrophes of a literal exceeds 255. In determining the number of characters enclosed, two adjacent apostrophes within the outermost apostrophes are counted as one character.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD092 STATEMENT ANALYSIS EXCEEDS TABLE LIMITS

Explanation: A FORTRAN statement was so complicated that the syntax checker ran out of space in its table. The statement cannot be checked by the syntax checker.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD094 END REQUIRES BLANK LABEL & CONTIN FIELDS

Explanation: Positions 1-6 of a FORTRAN END statement must be blank, and an END statement cannot have continuation lines.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD096 INVALID OR EXCESS SOURCE CHARACTERS

Explanation: A FORTRAN statement being checked completely satisfies the definition for that type of statement at some point before the last nonblank character in the statement. This may occur if a delimiter has been left out between elements of a statement.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD098 INVALID RANGE IN IMPLICIT STATEMENT

Explanation: A FORTRAN IMPLICIT statement contains a range of characters in which the last character of the range alphabetically precedes the first character of the range. Note that 'S' follows 'Z' in the alphabet. A character that is not alphabetic will also cause this message to be issued (FORTRAN G and H statements only).

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD100 FIRST LINE IS A CONTINUATION

Explanation: In a FORTRAN program, the first line scanned did not have 'C' in position one, nor did it have a blank or zero in position six.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD102 COMMENT LINE WITHIN STATEMENT

Explanation: In a FORTRAN program, a comment line was found between an initial line and a continuation line or between two continuation lines.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD104 TOO MANY CONTINUATION LINES

Explanation: A FORTRAN statement consisted of an initial line followed by more than 19 continuation lines.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD106 TOO MANY DECIMAL PLACES FOR FIELD WIDTH

Explanation: In a D, E, F, or G format code, the fractional portion ('d' of 'w.d') exceeded the total field width ('w' of 'w.d') (G in FORTRAN G and H statements only).

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD108 DECIMAL PLACES MUST BE SPECIFIED

Explanation: In a D, E, or F format code in a FORTRAN statement, fractional portion ('d' of 'w.d') was missing or was separated from the decimal point by incorrect characters.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD110I) REQUIRED FOR IMPLIED DO

Explanation: In the input or output list of a FORTRAN I/O statement, a right parenthesis was not the first nonblank character after the parameters of an implied DO.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD112 DO VARIABLE CANNOT BE SUBSCRIPTED

Explanation: In an I/O list, a subscripted variable was used as the DO variable within an implied DO loop.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD114 DEBUG FACILITY NOT SUPPORTED

Explanation: One of the Debug Facility statements appeared in a FORTRAN H program. These statements are allowed only in FORTRAN G. They are diagnosed when FORTRAN H is being checked since FORTRAN G and H use the same syntax table. If FORTRAN E is being checked, these statements will be diagnosed as unrecognizable or as beginning with too long a name.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD116 EXPONENT MISSING OR INVALID

Explanation: In a FORTRAN statement, the characters after the 'D' or 'E' in a double precision or real constant do not constitute a valid exponent.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD118 REAL CONSTANT MUST HAVE AT LEAST 1 DIGIT

Explanation: In a FORTRAN statement, in a place where a numeric constant might be written, a decimal point was found followed by an E or D exponent, but there was no digit on either side of the decimal point.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD120 INTEGER TOO LARGE

Explanation: In a FORTRAN statement, the magnitude of an integer constant exceeds 2147483647.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD122 CLOSING ' EXPECTED

Explanation: The end of a FORTRAN statement was reached without finding the closing apostrophe for a literal constant or literal format code. The opening apostrophe of the literal is the source character identified in the error message. (Only the literal format code is allowed in FORTRAN E.)

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD124 DATA ILLEGAL FOR DUMMY ARRAY

Explanation: An array was dimensioned in a REAL, INTEGER, LOGICAL or COMPLEX type FORTRAN statement. One of the dimensions was a variable name, making the array a dummy array, but a slash, indicating the start of a list of data, was then encountered. Dummy arrays cannot be assigned initial data values.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD126 REAL NUMBER EXPECTED

Explanation: A numeric datum of a type other than real was written in a REAL type FORTRAN statement (FORTRAN G and H statements only).

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD128 INVALID CHARACTERS AFTER STOP OR PAUSE

Explanation: Characters other than digits, or too many digits, follow the STOP or PAUSE in a FORTRAN STOP or PAUSE statement. (In FORTRAN G and H, a literal is also permitted to follow PAUSE and will not receive this diagnostic.)

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD130 REAL NUMBER OUTSIDE OF ALLOWABLE RANGE

Explanation: In a FORTRAN statement, a real number's magnitude, taking the value of the exponent into account, is outside the range 1.0E-79 to 9. (any fraction) E+75.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD132 FORMAT STMT NO. OR ARRAY NAME EXPECTED

Explanation: In a FORTRAN PRINT, PUNCH, or READ statement, no reference is made to a FORMAT statement or to an array containing a FORMAT. (FORTRAN G and H only.)

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD134 MISPLACED LENGTH SPECIFICATION PRECEDES

Explanation: A FORTRAN FUNCTION statement in which the 'FUNCTION' is preceded by 'REAL', 'INTEGER', 'COMPLEX', or 'LOGICAL' has a length specification between the type and "FUNCTION". The length specification is incorrect in that position and must be moved to the end of the function name.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD138 ARITH EXP EXPECTED AFTER RELATIONAL OP

Explanation: In a FORTRAN statement, a relational operator in a logical expression was not followed by a valid arithmetic expression. (FORTRAN G and H only.)

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD140 INVALID COMMA IN DO

Explanation: An incorrect comma was found after the statement number in a FORTRAN DO statement.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD142 = EXPECTED

Explanation: In a FORTRAN DO statement, in which the statement number was followed by an incorrect comma, the equal sign expected after the DO variable was not found.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD144 LITERAL CONTAINS NO CHARACTERS

Explanation: The closing apostrophe of a literal constant or literal format code occurred immediately to the right of the opening apostrophe in a FORTRAN statement. (Only the literal format code is allowed in FORTRAN E.)

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD146 INVALID IF AFTER LOGICAL IF

Explanation: A FORTRAN statement after the IF (logical expression) part of a logical IF statement was recognized as an IF statement, but was not a valid arithmetic IF statement as required. (FORTRAN G and H only.)

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD158 TOO MANY SUBSCRIPTS PRECEDE

Explanation: A list of eight or more (four or more in FORTRAN E) expressions within parentheses has been found following a symbolic name on the left side of the equal sign in a FORTRAN assignment statement.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPD160 'END' TOO FAR ON LINE

Explanation: The FORTRAN free-form END statement contains more than 66 characters, not including trailing blanks. (This message will not appear if the statement contains other errors.)

System action: Processing continues.

Programmer response: Check and correct the statement for errors noted in the explanation. Run the job again.

Source: FORTRAN syntax checker

IPDnnn SYSTEM OR SYNTAX CHECKER FAILURE

Explanation: (*nnn* = an even number from 162 through 254)

While scanning the last FORTRAN statement, the syntax checker encountered a condition that should not occur. It may be a hardware, syntax checker, or system error.

In the message text:

nnn An even number between 162 and 254.

System programmer response: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the JCL and the assembly listing for the job.

Source: FORTRAN syntax checker

Chapter 17. IQP messages

IQP001I *PcieProc* IS ALREADY ACTIVE

Explanation: A request to start the z/OS PCIE address space was received. However, the z/OS PCIE address space is already active.

In the message text:

PcieProc

The name of the z/OS PCIE catalogued startup procedure used to start the z/OS PCIE address space.

System action: The system ignores the start request.

Source: PCI Express

Module: IQPINIT

Routing code: 2

Descriptor code: 4

IQP002I *PcieProc* INITIALIZATION COMPLETE

Explanation: The z/OS PCIE address space is now initialized. z/OS PCIE services are now available.

In the message text:

PcieProc

The name of the z/OS PCIE catalogued startup procedure used to start the z/OS PCIE address space.

System action: z/OS PCIE services are available.

Source: PCI Express

Module: IQPINIT

Routing code: 2

Descriptor code: 4

IQP006I UNEXPECTED RETURN CODE *retcode* FROM PARMLIB READ SERVICE WHILE PROCESSING PARMLIB MEMBER *member*

Explanation: During z/OS PCIE initialization or SET IQP command processing, an unexpected return code was passed back by the parmlib read service (IEEMB878) while reading records from the specified IQPPRMxx parmlib member.

In the message text:

retcode The decimal return code from the parmlib read service.

member The IQPPRMxx parmlib member that was being processed.

System action: The system ignores the parmlib member and continues processing other parmlib members, if specified.

System programmer response: Contact the IBM Support Center.

Source: PCI Express

Module: IQPIPRM

Routing code: 2, 10

Descriptor code: 4

IQP007I • IQP009I

IQP007I {ERROR | WARNING} MESSAGES ISSUED FOR PARMLIB MEMBER *member*

Explanation: During z/OS PCIE initialization or SET IQP command processing, the system issued either error or warning messages for the specified IQPPRMxx parmlib member. See the explanation of these error or warning messages for more information.

In the message text:

member The IQPPRMxx parmlib member that was being processed.

System action: The system continues processing the other parmlib members that were specified.

System programmer response: Correct the parmlib member and then re-IPL the system, or issue the SET IQP command to activate the changes.

Source: PCI Express

Module: IQPIPPRM

Routing code: 2, 10

Descriptor code: 4

IQP008I ERROR IN PARMLIB MEMBER *member* ON LINE *lineno*
POSITION *pos. errorsn*.
THE PARAMETER IS IGNORED.
DETECTING MODULE IS *modname*. INPUT LINE:
inputline.

Explanation: During z/OS PCIE initialization or SET IQP command processing, a syntax error was detected in an IQPPRMxx parmlib member.

In the message text:

member The IQPPRMxx parmlib member that was being processed.

lineno The line number within the parmlib member where the error was detected.

pos The position within the line where the error was detected.

errorsn The reason the error was detected, which can be one of the following:

INPUT PARAMETER VALUE IS NOT HEXADECIMAL

The specified parameter value contains non-hexadecimal characters.

INPUT PARAMETER VALUE IS INCORRECT

The specified parameter value is incorrect (for example, it may be too long).

modname

The name of the module that detected the error.

inputline

The contents of the line that was in error.

System action: The system ignores the erroneous parameter and continues checking the rest of the parmlib member to find any other errors.

System programmer response: Correct the error in the parmlib member before using it again.

Source: PCI Express

Module: IQPIPPRM

Descriptor code: 4

IQP009I ERROR IN PARMLIB MEMBER *member* ON LINE *lineno*,
POSITION *pos*. INPUT KEYWORD VALUE IS INCORRECT.
AN INPUT DATA LENGTH OF *minlen* TO *maxlen* CHARACTERS IS EXPECTED.
DETECTING MODULE IS *modname*. INPUT LINE:
inputline.

| **Explanation:** During z/OS PCIE initialization or SET IQP command processing, a syntax error was detected in an IQPPRMxx parmlib member because the length of a keyword value is incorrect.

| In the message text:

| *member* The IQPPRMxx parmlib member that was being processed.

| *lineno* The line number within the parmlib member where the error was detected.

| *pos* The position within the line where the error was detected.

| *minlen* The minimum length of the parameter.

| *maxlen* The maximum length of the parameter.

| *modname*

| The name of the module that detected the error.

| *inputline*

| The contents of the line that was in error.

| **System action:** The system ignores the erroneous parameter and continues checking the rest of the parmlib member to find any other errors.

| **System programmer response:** Correct the error in the parmlib member before using it again.

| **Source:** PCI Express

| **Module:** IQPIPRM

| **Descriptor code:** 4

| **IQP020I DISPLAY COMMAND DELIMITER ERROR, OR UNRECOGNIZED KEYWORD**

| **Explanation:** The system found an error in the DISPLAY PCIE command issued. The command either has a delimiter error or the system detected an unrecognizable keyword.

| This error is sometimes caused by entering an incorrect keyword, or keyword value, with longer than expected number of characters. It may indicate that a delimiter is missing or incorrectly placed. Valid delimiters include:

Character	Meaning
	Space
=	Equal sign
(Left parenthesis
)	Right parenthesis
'	Quotation mark

| **System action:** The system does not complete the command issued.

| **Operator response:** Verify the value entered for the identified keyword. Ensure its length is within bounds. If a value is expected to be enclosed in quotes or parentheses, verify that they are matched in a pair.

| **Source:** PCI Express

| **Module:** IQPODSP

| **Routing code:** -

| **Descriptor code:** 5

| **IQP021I INCORRECT VALUE SPECIFIED FOR KEYWORD *keyword*. THE ALLOWED RANGE IS *min-hexnum* TO *max-hexnum*.**

| **Explanation:** The system detected an incorrect value for the identified keyword in the DISPLAY PCIE command. The acceptable values for the keyword are listed in the message. The value must be entered in hexadecimal.

| In the message text:

IQP022I

- | *keyword* The name of the keyword with the incorrect value.
- | *min-hexnum*
| The low value of the allowed range (in hexadecimal).
- | *max-hexnum*
| The high value of the allowed range (in hexadecimal).
- | **System action:** The system ignores the input command.
- | **Operator response:** Enter an acceptable value for the identified keyword.
- | **Problem determination:** The incorrect value and the keyword are identified in the message.
- | **Source:** PCI Express
- | **Module:** IQPODSP
- | **Routing code:** -
- | **Descriptor code:** 5

| **IQP022I** *hh.mm.ss* **DISPLAY PCIE**
| *PcieProc PcieAsid status*
| *text*

| **Explanation:** Where *text* is:

PFID	DEVICE TYPE NAME	STATUS	ASID	JOBNAME	PCHID	VFN
<i>pfid</i>	<i>DevTypeName</i>	<i>a-stat</i>	<i>asid</i>	<i>jobname</i>	<i>pchid</i>	<i>vfn</i>

| This message is issued in response to the DISPLAY PCIE system command. This command displays all the z/OS PCIE functions and devices available to the configuration.

| The line beginning with *pfid* can appear one or more times. There is one line for each z/OS PCIE function (PFID) that is configured online or is available to be configured online.

| There is no specific ordering for the displayed z/OS PCIE functions. If there are no configurable z/OS PCIE functions, the message 'NO AVAILABLE PCIE DEVICES' is displayed.

| In the message text:

| *hh.mm.ss*

| The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY PCIE command.

| *PcieProc*

| The name of the z/OS PCIE cataloged procedure.

| *PcieAsid*

| The z/OS PCIE address space ID.

| *status* One of the following task status:

| **NOT ACTIVE**

| The z/OS PCIE address space was not started.

| **ACTIVE**

| The z/OS PCIE address space is currently active.

| **ENDED**

| The z/OS PCIE address space has ended.

| *pfid* The z/OS PCIE function ID of the device.

| *DevTypeName*

| The printable name of the device type for the listed *pfid*. If the device has not been given a name, the name is displayed as 'UNNAMED (*aaaa bbbb*)', where *aaaa* is the vendor ID and *bbbb* is the device ID.

| *a-stat* The status of the device. It can have one of the following values:

| **ALLC** The device is allocated or in use.

| **CNFG** The device is configured online.

| **STNBY**
| The device is in standby mode and ready to be configured online.

| **DP** The device is deallocate-pending and is waiting for a deallocate command from its owner in order
| to cleanup its resources.

| **PERR** The device is in permanent error. It must be deconfigured to recover from this condition.

| *asid* The address space ID that currently owns the z/OS PCIE device identified by the *pfid*. The *asid* is not
| displayed if the device is not currently owned.

| *jobname* The job name of the owning address space.

| *pchid* The physical channel identifier for the PCI function (PFID).

| *vfn* The virtual PCI function number.

| **System action:** The system continues processing.

| **Source:** PCI Express

| **Module:** IQPODSP

| **Routing code:** -

| **Descriptor code:** 5

| **IQP023I** *hh.mm.ss* **DISPLAY PCIE**
| *PcieProc PcieAsid status*
| *text*

| **Explanation:** Where *text* is:

DEV TYPE	DEVICE TYPE NAME
<i>DevType</i>	<i>DevTypeName</i>

| This message is issued in response to the DISPLAY PCIE,DD system command. This command displays the
| registered device drivers for the z/OS PCIE hardware devices.

| The line beginning with *DevType* can appear one or more times. There is one line for each registered z/OS PCIE
| device driver.

| There is no specific ordering for the displayed device drivers. If there are no registered z/OS PCIE device drivers, the
| message 'NO REGISTERED PCIE DEVICE DRIVERS' is displayed.

| In the message text:

| *hh.mm.ss*
| The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY PCIE command.

| *PcieProc*
| The name of the z/OS PCIE cataloged procedure.

| *PcieAsid*
| The z/OS PCIE address space ID.

| *status* One of the following task status:

| **NOT ACTIVE**
| The z/OS PCIE address space was not started.

| **ACTIVE**
| The z/OS PCIE address space is currently active.

| **ENDED**
| The z/OS PCIE address space has ended.

| *DevType*
| The device type (vendor ID and device ID) of the device.

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| *DevTypeName*
| The printable name of the device or function. If the device or function has not been given a name, the name
| is displayed as 'UNNAMED'.

| **System action:** The system continues processing.

| **Source:** PCI Express

| **Module:** IQPODSP

| **Routing code:** -

| **Descriptor code:** 5

| **IQP024I** *hh.mm.ss* **DISPLAY PCIE**
| *PcieProc PcieAsid status*
| *text*

| **Explanation:** Where *text* is:

PFID	DEVICE TYPE NAME	STATUS	ASID	JOBNAME	PCHID	VFN
<i>pfid</i>	<i>DevTypeName</i>	<i>a-stat</i>	<i>asid</i>	<i>jobname</i>	<i>pchid</i>	<i>vfn</i>

| CLIENT ASIDS: *asidlist*
| [*device-specific-information*]

| This message is issued in response to the DISPLAY PCIE,PFID=*xxxx* system command. This command shows the
| status of only one z/OS PCIE function or device if it is in the configuration.

| The line beginning with *pfid* appears only once for the requested PFID. The adapter-class name of the PFID, the
| device configuration status, and its owner asid (if in use) are displayed, followed by a list of client ASIDs *asidlist*. The
| client ASID list is a list of address spaces using the requested PFID.

| If the requested z/OS PCIE function is not in the configuration, the message 'PFID *xxxx* NOT AVAILABLE' is
| displayed

| In the message text:

| *hh.mm.ss*
| The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY PCIE command.

| *PcieProc*
| The name of the z/OS PCIE cataloged procedure.

| *PcieAsid*
| The z/OS PCIE address space ID.

| *status* One of the following task status:

| **NOT ACTIVE**
| The z/OS PCIE address space was not started.

| **ACTIVE**
| The z/OS PCIE address space is currently active.

| **ENDED**
| The z/OS PCIE address space has ended.

| *pfid* The z/OS PCIE function ID of the device.

| *DevTypeName*
| The printable name of the device type for the listed *pfid*. If the device has not been given a name, the name
| is displayed as 'UNNAMED (*aaaa bbbb*)', where *aaaa* is the vendor ID and *bbbb* is the device ID.

| *a-stat* The status of the device. It can have one of the following values:

| **ALLC** The device is allocated or in use.

| **CNFG** The device is configured online.

| **STNBY**
 | The device is in standby mode and ready to be configured online.

| **DP** The device is deallocate-pending and is waiting for a deallocate command from its owner in order
 | to cleanup its resources.

| **PERR** The device is in permanent error. It must be deconfigured to recover from this condition.

| *asid* The address space ID that currently owns the z/OS PCIE device identified by the *pfid*. The *asid* is not
 | displayed if the device is not currently owned.

| *jobname* The job name of the owning address space.

| *pchid* The physical channel identifier.

| *vfn* The virtual PCI function number.

| *asidlist* The list of client address space IDs for the specified PFID. If the device is not currently owned or if there are
 | no clients, the word 'NONE' is displayed.

| For hardware accelerator devices such as zEnterprise Data Compression (zEDC) Express, the device specific
 | information has the following format:

| Application Description: *appldesc*
 | Device State: *devicestate*
 | Adapter Info - Relid: *relid1* Arch Level: *alvl1*
 | Build Date: *builddate* Build Count: *bldcnt*
 | Application Info - Relid: *relid2* Arch Level: *alvl2*

| In the message text:

| *appldesc* A description of the application running on the hardware accelerator (for example, zEDC Express). If the
 | application type is not recognized, 'Unknown (*appltype*)' is displayed, where *appltype* is the hexadecimal
 | application type for the device.

| *devicestate*

| The state of the hardware accelerator device. It can be one of the following:

| **Unavailable**

| The device is unavailable for use. For example, the device is configured offline to the current logical
 | partition (PCIE status = STNBY), or it is in the permanent error state (PCIE status PERR).

| **Online** The device is configured online to the current logical partition, but has not been enabled to
 | determine the type of hardware accelerator (for example, zEDC Express).

| **Enabled**

| The device is enabled, but has not been allocated so that it can be used for work requests. The
 | enable process determines the type of hardware accelerator device and its attributes and is the first
 | step in making the device available for work requests.

| **Disable in Progress**

| A device that was previously enabled is in the process of being disabled (for example, the device
 | was configured offline or deleted).

| **Allocate in Progress**

| The device is in the process of being allocated so that it can be used for work requests. The
 | allocation process initializes the device so that it can accept work requests and access z/OS memory
 | and is the second step in making the device available for work requests.

| **Allocated**

| The device has been allocated, but is not ready to be used for work requests yet. After some
 | additional initialization, the device will be marked ready for use.

| **Ready** The device is ready for use with work requests.

| **Recovery in Progress**

| Recovery processing is being performed for this device. The device is not available for work
 | requests while in this state. If recovery is successful, the device will be made available for
 | application or system requests. This state is preceded by message FPG003I.

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Deallocate Pending

A device that was previously in the allocated or ready state has been configured offline, deleted, or entered some sort of error state. The device is waiting to be deallocated in order to clean up the device.

Deallocate in Progress

The device is in the process of being deallocated. If the device is still usable after deallocation is complete, the device will be re-enabled and re-allocated so that it is available for work requests.

Intervention Required

An error occurred while attempting to enable, allocate, or deallocate a device, or error recovery processing was performed for the device and all recovery actions were unsuccessful. The device must be configured offline and then online to make it available for use. If the device continues to encounter errors, contact the IBM Support Center. This state is preceded by message FPG002E.

relid1 The release identifier of the service layer code running on the hardware accelerator. The service layer code provides common services for all hardware accelerators.

alvl1 The architecture level of the service layer code.

builddate

The build date of the service layer code in mm/dd/yyyy format.

bldcnt The build count of the service layer count.

relid2 The release identifier of the application layer code (for example, zEDC) that is running on the hardware accelerator.

alvl2 The architecture level of the application layer code.

System action: The system continues processing.

Source: PCI Express

Module: IQPODSP

Routing code: -

Descriptor code: 5

IQP031I REQUESTED SERVICE IS UNSUPPORTED BY HARDWARE

Explanation: A request to initialize the z/OS PCI Express (PCIe) address space was received. However, it is an unsupported function for the current hardware. The PCI Express function can only be started on hardware with the appropriate facilities installed. One or more of the facilities are currently not installed on this machine.

System action: The system continues processing.

Operator response: Contact the system programmer.

System programmer response: Verify that the appropriate z/OS PCIE facilities are installed on the hardware.

Source: PCI Express

Module: IQPINIT

Routing code: -

Descriptor code: 4

IQP032I SYSTEM STORAGE IS UNAVAILABLE. UNABLE TO RETRIEVE A LIST OF PCIE FUNCTIONS.

Explanation: The system cannot retrieve a list of the z/OS PCIE functions with their status. There is insufficient system storage. As a result, the system cannot determine the current status of all the PCIE functions in the system.

System action: The system continues processing.

Operator response: There is insufficient system storage to obtain the status of all the z/OS PCIE functions. Contact the system programmer.

System programmer response: Make additional system storage available to the system.

| **Source:** PCI Express
 | **Module:** IQPPLPCI
 | **Routing code:** 2, 10
 | **Descriptor code:** 4

| **IQP033I** **PCIE FUNCTION** *pfid dev_status*.
 | **PCIE DEVICE TYPE = (xxxx yyyy).**

| **Explanation:** The status of a PCI function has been changed, possibly by external means. The current status is identified in the message. The z/OS PCIE function may now be online, offline, available for configuration, or not available for use. The PCI function is associated with the device type identified by the listed PCIE vendor identifier *xxxx* and device identifier *yyyy*.

| In the message text:

| *pfid* The z/OS PCIE function ID of the device.

| *dev_status*

| One of the following PFID device status:

| **ONLINE**

| The z/OS PCIE function is configured online and is ready to be used.

| **OFFLINE**

| The z/OS PCIE function has been deconfigured and has entered the standby state. It is still in the system configuration and can be re-configured online for use.

| **AVAILABLE FOR CONFIGURATION**

| The z/OS PCIE function is in the system configuration. It is in the standby state and may need to be configured online before it can be used.

| **NOT AVAILABLE FOR USE**

| The z/OS PCIE function is removed from the system configuration and is no longer available for use.

| *xxxx* The 4-digit PCIE vendor ID of the device type.

| *yyyy* The 4-digit PCIE device ID of the device type.

| **System action:** The system continues processing.

| **System programmer response:** If needed, issue the CF PFID(*xx*),ONLINE command to configure the z/OS PCIE function online. Or, issue the CF PFID(*xx*),OFFLINE command to configure the z/OS PCIE function offline.

| **Source:** PCI Express

| **Module:** IQPPLPCI

| **Routing code:** 2, 10

| **Descriptor code:** 4

| **IQP034I** **PCIE FUNCTION** *pfid dev_status*.
 | **PCIE DEVICE TYPE NAME = (DevTypeName).**

| **Explanation:** The status of a PCI function has been changed, possibly by external means. The current status is identified in the message. The z/OS PCIE function may now be online, offline, available for configuration, or not available for use. The PCI function is associated with the device type identified by the listed z/OS PCIE device type name.

| In the message text:

| *pfid* The z/OS PCIE function ID of the device.

| *dev_status*

| One of the following PFID device status:

IQP035I

ONLINE

The z/OS PCIE function is configured online and is ready to be used.

OFFLINE

The z/OS PCIE function has been deconfigured and has entered the standby state. It is still in the system configuration and can be re-configured online for use.

AVAILABLE FOR CONFIGURATION

The z/OS PCIE function is in the system configuration. It is in the standby state and may need to be configured online before it can be used.

NOT AVAILABLE FOR USE

The z/OS PCIE function is removed from the system configuration and is no longer available for use.

DevTypeName

The printable z/OS PCIE device type name.

System action: The system continues processing.

System programmer response: If needed, issue the CF PFID(*xx*),ONLINE command to configure the z/OS PCIE function online. Or, issue the CF PFID(*xx*),OFFLINE command to configure the z/OS PCIE function offline.

Source: PCI Express

Module: IQPPLPCI

Routing code: 2, 10

Descriptor code: 4

IQP035I MEMORY REGION CLEANUP IS INCOMPLETE FOR PCIE FUNCTION *pfid*.
PCIE DEVICE TYPE = (*xxxx yyyy*).
DMA VIRTUAL STORAGE IS BEING FRAGMENTED.
*zzzz*K BYTES ARE UNAVAILABLE FOR ADDRESSING BY DMA REQUESTS.

Explanation: An error condition was detected during the End of Memory clean up processing for the PCIE device *pfid*, which has the PCIE vendor identifier *xxxx* and device identifier *yyyy*. Some registered memory regions have not been de-registered by the time the system End of Memory resource manager runs. The memory regions that are still registered are not freed to avoid system integrity issues. As a result, the DMA page table entries for the registered memory regions are still marked as 'in use', and DMA virtual storage is fragmented. Some DMA virtual storage is now unavailable for addressing by DMA requests. The amount *zzzz* (shown in decimal format) is listed in kilobytes.

In the message text:

pfid The 4-digit PCIE function identifier of the device.

xxxx The 4-digit PCIE vendor ID of the device type.

yyyy The 4-digit PCIE device ID of the device type.

zzzz The amount of DMA virtual storage in kilobytes that is unavailable for addressing by DMA requests.

System action: The system continues processing.

System programmer response: There was an unusual End of Memory termination situation or a possible internal problem in the device driver. Search the problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: PCI Express

Module: IQPPRDMR

Routing code: 2, 10

Descriptor code: 4

IQP036I MEMORY REGION CLEANUP IS INCOMPLETE FOR PCIE FUNCTION *pfid*.
 PCIE DEVICE TYPE NAME = (*DevTypeName*).
 DMA VIRTUAL STORAGE IS BEING FRAGMENTED.
*zzzz*K BYTES ARE UNAVAILABLE FOR ADDRESSING BY DMA REQUESTS.

Explanation: An error condition was detected during the End of Memory clean up processing for the PCIE device *pfid*, which has the PCIE device type name *DevTypeName*. Some registered memory regions have not been de-registered by the time the system End of Memory resource manager runs. The memory regions that are still registered are not freed to avoid system integrity issues. As a result, the DMA page table entries for the registered memory regions are still marked as 'in use', and DMA virtual storage is fragmented. Some DMA virtual storage is now unavailable for addressing by DMA requests. The amount *zzzz* (shown in decimal format) is listed in kilobytes.

In the message text:

pfid The 4-digit PCIE function identifier of the device.

DevTypeName
 The 24-byte printable PCIE device type name.

zzzz The amount of DMA virtual storage in kilobytes that is unavailable for addressing by DMA requests.

System action: The system continues processing.

System programmer response: There was an unusual End of Memory termination situation or a possible internal problem in the device driver. Search the problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: PCI Express

Module: IQPPRDMR

Routing code: 2, 10

Descriptor code: 4

IQP037I NEW PCIE FUNCTION DETECTED. PCIE DEVICE TYPE = (*xxxx yyyy*). DEVICE DRIVER NOT FOUND.

Explanation: A PCI function has been detected on the system and is associated with the device type identified by the listed PCIE vendor identifier *xxxx* and device identifier *yyyy*. No device driver has been registered for this device type.

In the message text:

xxxx The 4-digit PCIE vendor ID of the device type.

yyyy The 4-digit PCIE device ID of the device type.

System action: The system continues processing.

System programmer response: The installed z/OS PCIE function may be unsupported. Verify that the identified z/OS PCIE function is installed as expected.

Source: PCI Express

Module: IQPPLPCI

Routing code: 2, 10

Descriptor code: 4

IQP038I PCIE INVOCATION OF *service_name* SERVICE FAILED. RC=*returncode*, RSN=*reasoncode*.

Explanation: The named service *service_name* failed with return code *returncode* and reason code *reasoncode*.

In the message text:

service_name
 The name of the system service that failed.

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| *returncode*

| The (hexadecimal) return code of the failed service.

| *reasoncode*

| The (hexadecimal) reason code of the failed service.

| **System action:** The requested operation failed. The system may issue additional error messages about the problem.

| **Operator response:** Refer to any accompanying error messages from the failed service. Retry the operator command and report the problem if it persists.

| **System programmer response:** Refer to the error messages or dumps from the failed service.

| **Source:** PCI Express

| **Module:** IQPODSP

| **Routing code:** 1, 2

| **Descriptor code:** 4

IQP039I PCIE SERVICES ARE NOT AVAILABLE

| **Explanation:** z/OS PCIE processing has ended as a result of a system problem.

| **System action:** The system continues processing, but z/OS PCIE services are not functional.

| **Operator response:** Contact your system programmer. After the system programmer fixes the problem, reIPL the system to regain z/OS PCIE services.

| **System programmer response:** Correct the conditions that caused the failure. If the problem cannot be resolved, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

| **Problem determination:** Refer to the error messages or dumps from the system failure.

| **Source:** PCI Express

| **Module:** IQPRRTRM

| **Routing code:** 2,10

| **Descriptor code:** 11

IQP040I UNRECOVERABLE ERROR DETECTED FOR PCIE FUNCTION *pfid*. PCIE EVENT CODE = *pec_code*.

| **Explanation:** The z/OS PCIE function *pfid* has encountered an unrecoverable hardware error. The error is identified by the z/OS PCIE event code *pec_code*. Depending on the error, the z/OS PCIE function may remain in the system configuration, but is no longer available for use.

| In the message text:

| *pfid* The z/OS PCIE function ID of the device experiencing the error.

| *pec_code*

| The z/OS PCIE event code that identifies the hardware error.

| **System action:** The system continues processing.

| **System programmer response:** Correct the conditions that caused the error. If the problem cannot be resolved, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

| **Source:** PCI Express

| **Module:** IQPPLPCI

| **Routing code:** 2, 10

| **Descriptor code:** 4

IQP041I PAGEFRAMESIZE=1MEG STORAGE UNAVAILABLE. REQUESTED PCIE FUNCTION CANNOT BE ALLOCATED.

Explanation: z/OS PCIE services cannot process a z/OS PCIE function allocation request. PageFrameSize=1MEG storage is unavailable. The large frame area (LFAREA) parameter may not be defined or the assigned storage to the LFAREA parameter has been exhausted.

System action: The system continues processing.

Operator response: There is insufficient LFAREA storage to process the z/OS PCIE function allocation request. Contact the system programmer.

System programmer response: Increase the size of the LFAREA (large frame area) parameter for the system. If the LFAREA PARMLIB is not specified, define it with sufficient storage for the needs of the z/OS PCIE configuration.

Source: PCI Express

Module: IQPPRALL

Routing code: 2, 10

Descriptor code: 4

IQP042I MEMORY REGION CLEANUP IS INCOMPLETE FOR PCIE DEVICE TYPE = (xxxx yyyy).
DMA VIRTUAL STORAGE IS BEING FRAGMENTED.
zzzzK BYTES ARE UNAVAILABLE FOR ADDRESSING BY DMA REQUESTS.

Explanation: An error condition was detected during the End of Memory clean up processing for the PCIE device class identified by PCIE vendor identifier *xxxx* and device identifier *yyyy*. Some registered memory regions have not been de-registered by the time the system End of Memory resource manager runs. The memory regions that are still registered are not freed to avoid system integrity issues. As a result, the DMA page table entries for the registered memory regions are still marked as 'in use', and DMA virtual storage is fragmented. Some DMA virtual storage is now unavailable for addressing by DMA requests. The amount *zzzz* (shown in decimal format) is listed in kilobytes.

In the message text:

xxxx The 4-digit PCIE vendor ID of the device type.

yyyy The 4-digit PCIE device ID of the device type.

zzzz The amount of DMA virtual storage in kilobytes that is unavailable for addressing by DMA requests.

System action: The system continues processing.

System programmer response: There was an unusual End of Memory termination situation or a possible internal problem in the device driver. Search the problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: PCI Express

Module: IQPPRDMR

Routing code: 2, 10

Descriptor code: 4

IQP043I MEMORY REGION CLEANUP IS INCOMPLETE FOR PCIE DEVICE TYPE NAME =
(DevTypeName).
DMA VIRTUAL STORAGE IS BEING FRAGMENTED.
zzzzK BYTES ARE UNAVAILABLE FOR ADDRESSING BY DMA REQUESTS.

Explanation: An error condition was detected during the End of Memory clean up processing for the PCIE device class identified by the PCIE device type name *DevTypeName*. Some registered memory regions have not been de-registered by the time the system End of Memory resource manager runs. The memory regions that are still registered are not freed to avoid system integrity issues. As a result, the DMA page table entries for the registered memory regions are still marked as 'in use', and DMA virtual storage is fragmented. Some DMA virtual storage is now unavailable for addressing by DMA requests. The amount *zzzz* (shown in decimal format) is listed in kilobytes.

In the message text:

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| *DevTypeName*
| The 24-byte printable PCIE device type name.

| *zzzz* The amount of DMA virtual storage in kilobytes that is unavailable for addressing by DMA requests.

| **System action:** The system continues processing.

| **System programmer response:** There was an unusual End of Memory termination situation or a possible internal problem in the device driver. Search the problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

| **Source:** PCI Express

| **Module:** IQPPRDMR

| **Routing code:** 2, 10

| **Descriptor code:** 4

IQP060I SET IQP PROCESSING HAS COMPLETED SUCCESSFULLY

| **Explanation:** A SET IQP=*xx* command has completed successfully. All of the requested changes have been made.

| **System action:** The system continues processing.

| **Source:** PCI Express

| **Module:** IQPOTPRM

| **Descriptor code:** 5

IQP061I SET IQP PROCESSING HAS COMPLETED WITH {ERROR | WARNING} MESSAGES

| **Explanation:** Error or warning messages were issued while processing one or more of the IQPPRM*xx* members specified on the SET IQP command (for example, a member did not exist or was unable to be read for some reason, or a member had a syntax error).

| **System action:** The system continues processing. If valid keywords were found in any of the members that were specified, the changes represented by those keywords have been made.

| **System programmer response:** Correct the specified IQPPRM*xx* parmlib members or the list of values specified on the SET IQP command, and reissue the SET IQP command.

| **Source:** PCI Express

| **Module:** IQPOTPRM

| **Descriptor code:** 5

IQP062I REQUEST REJECTED - *reasontext*

| **Explanation:** A DISPLAY PCIE, SET IQP or DISPLAY IQP command request was rejected.

| In the message text:

| *reasontext*

| The reason that the command was rejected can be one of the following:

| **NOT SUPPORTED BY THE HARDWARE**

| The z/PCI facility is not supported by the hardware. This command is only allowed when the hardware support is available.

| **FUNCTION NOT CURRENTLY AVAILABLE**

| The PCIE and FPGHWAM address spaces either have not completed their initialization or have terminated. Both of these address spaces must be active in order to process the command. These address spaces are started automatically when the system is IPLed.

| **System action:** The system continues processing.

| **Operator response:** If the reason text indicates that the function is not currently available, reissue the command after

| the address spaces have completed initialization. If any of the address spaces have terminated, an IPL is required to restart them.

| **Source:** PCI Express

| **Module:** IQPODPRM, IQPODSP, IQPOTPRM

| **Descriptor code:** 5

| **IQP066I** *hh.mm.ss* **DISPLAY IQP**
| *text*

| **Explanation:** Where *text* is:

| zEDC Information

| MAXSEGMENTS: *maxsegm* (*ssssM*)

| Previous MAXSEGMENTS: *pmaxsegm* (*ssssM*)

| Allocated segments: *allocsegm* (*ssssM*)

| Used segments: *usedsegm* (*ssssM*)

| MINREQSIZE: *minreqszK*

| Feature Enablement: *featenab*

| This message is issued in response to a DISPLAY IQP command.

| In the message text:

| *maxsegm*

| The maximum number of 16 MB segments that are currently allowed for problem state zEDC requests as specified by the MAXSEGMENTS keyword in the IQPPRMxx parmlib member. Note: If a SET IQP command is issued to change the MAXSEGMENTS value to a lower value, the original value remains in effect and is displayed because the maximum number of segments cannot be decreased dynamically. If a SET IQP command is issued to change the MAXSEGMENTS value to a higher value, this higher value is displayed.

| *pmaxsegm*

| The previous maximum number of segments that were allowed for problem state requests. Note: If a SET IQP command is issued to change the MAXSEGMENTS value to a lower value, it is ignored because the maximum number of segments cannot be decreased dynamically. If a SET IQP command is issued to change the MAXSEGMENTS value to a higher value, the previous value is displayed on this line.

| *allocsegm*

| The number of segments that have been allocated (page fixed) for problem state zEDC requests.

| *usedsegm*

| The number of segments that are in use by problem state zEDC requests.

| *minreqszK*

| The minimum request size in kilobytes that is eligible for zEDC compression and decompression as specified on the MINREQSIZE keyword in the IQPPRMxx parmlib member.

| *featenab* The status of the zEDC product feature. It can be one of the following:

| **Enabled**

| The zEDC product feature is enabled (STATE(ENABLED) was specified in IFAPRDxx). zEDC devices are allowed to be used.

| **Disabled**

| The zEDC product feature is disabled (STATE(DISABLED) was specified in IFAPRDxx). zEDC devices are not allowed to be used.

| **None** The zEDC product feature was not defined in IFAPRDxx. zEDC devices are not allowed to be used.

| *ssssM* The amount of storage in megabytes.

| **System action:** The system continues processing.

| **Source:** PCI Express

| **Module:** IQPODPRM

| **Descriptor code:** 5

Chapter 18. IRA messages

IRA100E SQA SHORTAGE

Explanation: The system detected a shortage of virtual system queue area (SQA) below the 16 MB line. The first of two thresholds was exceeded. If the shortage becomes critical, message IRA101E is issued.

System action: The system rejects LOGON, MOUNT, and START commands until the shortage is relieved.

Operator response: If the system programmer tells you to cancel jobs or address spaces that are using an excessive amount of SQA, enter the CANCEL command to cancel those jobs or address spaces.

System programmer response:

- Use Resource Measurement Facility (RMF) to display the amount of SQA/CSA held by particular jobs or address spaces.
- If one or more jobs or address spaces are using an excessive amount of SQA, tell the operator to cancel those jobs or address spaces.
- Obtain a dump of common storage. Determine if there has been storage growth beyond the previous normal range or if the allocation of SQA and/or CSA is inadequate. Analysis of the dump may be aided if storage tracking was active during the growth. It is activated by SQA(ON) and CSA(ON) in the DIAGxx parmlib member.
- If the above actions fail to resolve the problem, see *z/OS MVS Initialization and Tuning Reference* for additional information on storage threshold levels.

Source: System resources manager (SRM)

Module: IRARMST3

Routing code: 2

Descriptor code: 11

IRA101E CRITICAL SQA SHORTAGE

Explanation: The system detected a critical shortage of virtual system queue area (SQA) below the 16 MB line. The second of two thresholds was exceeded.

System action: The system rejects LOGON, MOUNT, and START commands until the shortage is relieved. The system cancels jobs that request more SQA than is available.

Operator response: If the system programmer tells you to cancel jobs or address spaces that are using an excessive amount of SQA, enter the CANCEL command to cancel those jobs or address spaces.

System programmer response:

- Use Resource Measurement Facility (RMF) to display the amount of SQA/CSA held by particular jobs or address spaces.
- If one or more jobs or address spaces are using an excessive amount of SQA, tell the operator to cancel those jobs or address spaces.
- Obtain a dump of common storage. Determine if there has been storage growth beyond the previous normal range or if the allocation of SQA and/or CSA is inadequate. Analysis of the dump may be aided if storage tracking was active during the growth. It is activated by SQA(ON) and CSA(ON) in the DIAGxx parmlib member.
- If the above actions fail to resolve the problem, see *z/OS MVS Initialization and Tuning Reference* for additional information on storage threshold levels.

Source: System resources manager (SRM)

Module: IRARMST3

Routing code: 2

Descriptor code: 11

IRA102I • IRA110E

IRA102I SQA SHORTAGE RELIEVED

Explanation: There is no longer a shortage of available system queue area (SQA).

System action: The system permits LOGON and START commands.

Source: System resources manager (SRM)

Module: IRARMST3

Routing code: 2

Descriptor code: 4

IRA103I SQA/ESQA HAS EXPANDED INTO CSA/ECSA BY *xxxxx* PAGES

Explanation: One of the following conditions occurred:

- The system allocated pages of virtual storage from the common service area (CSA) to satisfy a request for virtual storage for the system queue area (SQA)
- The system allocated pages of virtual storage from the extended CSA (ECSA) to satisfy a request for virtual storage for the extended system queue area (ESQA)

In the message text:

xxxxx The number of pages added.

System action: The system repeats the message at timed intervals during SQA conversion. That means the message will be repeated when a sufficient amount of change occurs between two intervals until the SQA conversion has ended.

System programmer response: Evaluate the system requirement for SQA and ESQA. The SQA system parameter specifies the maximum size of the virtual SQA and ESQA. If needed, increase the default size in the SQA system parameter during system initialization.

Source: System resources manager (SRM)

Module: IRARMST3

Routing code: 2

Descriptor code: 4

IRA104I SQA/ESQA EXPANSION INTO CSA/ECSA HAS BEEN RELIEVED

Explanation: One of the following conditions occurred:

- The system is no longer using virtual storage from the common service area (CSA) to satisfy requests for virtual storage for the system queue area (SQA)
- The system is no longer using virtual storage from the extended common service area (ECSA) to satisfy requests for virtual storage for the extended system queue area (ESQA)

System action: The system continues processing.

Source: System resources manager (SRM)

Module: IRARMST3

Routing code: 2

Descriptor code: 4

IRA110E HIGH SHARED VIRTUAL AREA SHORTAGE

Explanation: The system detected a critical shortage of high virtual shared area pages. This message is issued when 80% of all high shared area pages in the system are in use. If the shortage becomes critical, message IRA111E is issued.

System action: NONE. The system continues to honor allocation requests for the High Virtual Shared Area until the entire area is used.

Source: System resources manager (SRM)

Module: IRASTSHM

Routing code: 2

Descriptor code: 11

IRA111E CRITICAL HIGH SHARED VIRTUAL AREA SHORTAGE

Explanation: The system detected a critical shortage of high virtual shared area pages. This message is issued when 95% of all high shared area pages in the system are in use. The second of two thresholds was exceeded.

System action: NONE. The system continues to honor allocation requests for the High Virtual Shared Area until the entire area is used.

Source: System resources manager (SRM)

Module: IRASTSHM

Routing code: 2

Descriptor code: 11

IRA112I HIGH SHARED VIRTUAL AREA SHORTAGE RELIEVED

Explanation: There is no longer a shortage of the High Virtual Shared Area.

Source: System resources manager (SRM)

Module: IRASTSHM

Routing code: 2

Descriptor code: 4

IRA120E LARGE FRAME SHORTAGE

Explanation: The system detected a shortage of large frames. This message is issued, when 80% of all large frames in the system are in use. If the shortage becomes critical, message IRA121E is issued.

System action: The system continues to honor allocation requests for large frames until the entire area is used.

Source: System resources manager (SRM)

Module: IRASTLRG

Routing code: 2

Descriptor code: 11

IRA121E CRITICAL LARGE FRAME SHORTAGE

Explanation: The system detected a critical shortage of large frames. This message is issued, when 95% of all large frames in the system are in use. The second of the two thresholds was exceeded.

System action: The system continues to honor allocation requests for large frames until the entire area is used.

Source: System resources manager (SRM)

Module: IRASTLRG

Routing code: 2

Descriptor code: 11

IRA122I • IRA131E

IRA122I LARGE FRAME SHORTAGE RELIEVED

Explanation: There is no longer a large frame shortage.

System action: None.

Source: System resources manager (SRM)

Module: IRASTLRG

Routing code: 2

Descriptor code: 4

| IRA127I 100% OF THE LARGE FRAME AREA IS ALLOCATED

| **Explanation:** The system detected that all large frames in the Large Frame Area (LFAREA) are in use.

| **System action:** The system will not be able to satisfy any subsequent requests for large (1MB) frames. Additional requests for large (1MB) frames will be backed with 4KB frames.

| **Operator response:** Contact your system programmer.

| **System programmer response:** Refer to doc APAR OA34024 for guidance on how to size your LFAREA for optimal application performance.

| **Source:** System resources manager (SRM)

| **Module:** IRASTLRG

| **Routing code:** 2

| **Descriptor code:** 4

IRA130E HIGH COMMON STORAGE SHORTAGE

Explanation: The system detected a critical shortage of high common pages. This message is issued when 80% of all high common pages in the system is in use. If the shortage is critical, message IRA131E is issued.

System action: The system continues to honor allocation requests for the high common pages until the entire area are used.

System programmer response: None.

Source: System resources manager (SRM)

Module: IRASTCOM

Routing code: 2

Descriptor code: 11

IRA131E CRITICAL HIGH COMMON STORAGE SHORTAGE

Explanation: The system detected a critical shortage of high common pages. This message is issued when 95% of all high common pages in the system are in use. The second of two thresholds was exceeded.

System action: The system continues to honor allocation requests for the high common pages until the entire area is used.

System programmer response: None.

Source: System resources manager (SRM)

Module: IRASTCOM

Routing code: 2

Descriptor code: 11

IRA132I HIGH COMMON STORAGE SHORTAGE RELIEVED

Explanation: There is no longer a shortage of high common pages.

System action: None.

System programmer response: None.

Source: System resources manager (SRM)

Module: IRASTCOM

Routing code: 2

Descriptor code: 4

IRA200E AUXILIARY STORAGE SHORTAGE

Explanation: The system detected a shortage of available slots in the auxiliary storage paging space. This message is issued when at least 70% of all available auxiliary storage slots in paging data sets and storage-class memory in the system are in use.

System action: The system rejects LOGON, MOUNT, and START commands until the shortage is relieved. The system prevents initiators from selecting new jobs and users with rapidly increasing auxiliary storage requirements from running until the shortage is relieved. The system issues message IRA206I to identify address spaces with the largest amount of auxiliary storage and message IRA210E for address spaces that have the largest increase in the amount of allocated central plus auxiliary storage.

Operator response: Use the PAGEADD command to add auxiliary storage to the system.

System programmer response: Allocate additional auxiliary storage to the paging data sets during system initialization. Examine programs that use virtual I/O (VIO) and other jobs with large virtual storage requirements for possible looping or extraordinary virtual storage requirements.

Source: System resources manager (SRM)

Module: IRASTASM

Routing code: 2

Descriptor code: 11

IRA201E CRITICAL AUXILIARY STORAGE SHORTAGE

Explanation: The system detected a critical shortage of available slots in the auxiliary storage paging space. This message is issued when at least 85% of available auxiliary storage slots in paging data sets and storage-class memory in the system are in use.

System action: The system rejects LOGON, MOUNT, and START commands until the shortage is relieved. The system prevents initiators from selecting new jobs and address spaces with rapidly increasing auxiliary storage requirements from running until the shortage is relieved. The system issues message IRA220I to identify the users with the largest amount of auxiliary storage.

Operator response: Use the PAGEADD command to add auxiliary storage to the system.

System programmer response: Allocate additional auxiliary storage to the paging data sets during system initialization. Examine programs that use virtual I/O (VIO) and other jobs with large central plus auxiliary storage requirements for possible looping or extraordinary central plus auxiliary storage requirements.

Source: System resources manager (SRM)

Module: IRASTASM

Routing code: 2

Descriptor code: 11

IRA202I AUXILIARY STORAGE SHORTAGE RELIEVED

| **Explanation:** There is no longer a shortage of auxiliary storage slots in the auxiliary storage paging space (paging data sets and storage-class memory).

| **System action:** The system permits LOGON, START, and MOUNT commands. The system processes jobs delayed because of the shortage.

| **Source:** System resources manager (SRM)

| **Module:** IRARMCTL

| **Routing code:** 2

| **Descriptor code:** 4

| IRA203E *uuuuuuuu* ASID *aaaa* SWAPPED OUT FRAMES+SLOTS *vvvvvvvv* RATE *rrrrrr*

| **Explanation:** When an auxiliary shortage occurred, the system identified the address space with the largest increase in the amount of allocated central plus auxiliary storage. The system swaps out the address space.

| In the message text:

| *uuuuuuuu*

| Address space with a large increase in central plus auxiliary storage.

| *aaaa* Address space ID of the user.

| *vvvvvvvv*

| Number of central storage frames and auxiliary storage slots that are allocated to the address space.

| *rrrrrr* The approximate rate of increase in pages of central and auxiliary storage that is allocated to the address space between observation intervals of two to ten seconds.

| **System action:** The system swaps out the address space and does not process the address spaces until the shortage is relieved. When the address space is swapped in, the system issues message IRA501I.

| **Operator response:** To relieve the shortage, add additional page space to increase the number of auxiliary storage slots. If requested by the system programmer, cancel this address space or other address spaces to reduce the storage allocation.

| **System programmer response:** Examine the validity of the address space and determine whether it must continue. If the address space must not continue, request that the operator cancel the address space.

| **Source:** System resources manager (SRM)

| **Module:** IRASTASM

| **Routing code:** 2

| **Descriptor code:** 11

IRA205I *nn%* AUXILIARY STORAGE ALLOCATED

| **Explanation:** The system has allocated more than 50% of all available slots in the auxiliary storage paging space (paging data sets and storage-class memory). If the system stays above the warning level, the message gets reissued all two hours.

| In the message text:

| *nn%* The percentage of slots in the auxiliary storage paging space.

| **System action:** Processing continues.

| **System programmer response:** You should consider adding additional page data sets to your system. When utilization exceeds 30%, the slot allocation algorithms become less efficient, and may degrade I/O performance. See *z/OS MVS Initialization and Tuning Guide* for more information about Auxiliary Storage Management.

| When utilization exceeds 50% and AUXMGMT=YES is specified, either explicitly or via default on the CHNGDUMP command, SVC dumps are prohibited until utilization drops below 35%. See 'Setting the Dump Modes and Options'

| of the CHNGDUMP command in *z/OS MVS System Commands* for more information about AUXMGMT and SVC
| dump processing.

Source: System Resource Manager (SRM)

Module: IRASTASM

Routing code: 10

Descriptor code: 4

IRA206I *uuuuuuuu* ASID *aaaa* FRAMES *ffffffff* SLOTS *ssssssss* % OF AUX *nn.n*

| **Explanation:** The system detected a shortage of auxiliary storage slots in the auxiliary paging space (paging data
| sets and storage-class memory).

In the message text:

uuuuuuuu

Address space with the largest auxiliary slot allocation.

aaaa

Address space ID of the user.

ffffffff

Number of frames that are allocated by the user.

ssssssss

Number of auxiliary storage slots that are allocated by the user.

nn.n

The percentage of auxiliary storage that is allocated to *uuuuuuuu*.

System action: The system presents the top 5 address spaces that are using the most auxiliary storage. Address spaces with the largest increase in the amount of allocated central plus auxiliary storage are stopped and identified by message IRA210E.

The system deletes message IRA206I, when message IRA202I or IRA220I is issued.

Operator response: If requested by the system programmer, cancel one or more of these address spaces, address spaces shown in message IRA210E, or other address spaces to reduce the auxiliary storage allocation.

System programmer response: Examine the validity of the address spaces and determine whether they must continue. If the address space must not continue, request that the operator cancel the address space(s).

Source: System Resource Manager (SRM)

Module: IRASTASM

Routing code: 2

Descriptor code: 11

IRA210E *uuuuuuuu* ASID *aaaa* SET NON DISPATCHABLE Frames+Slots *vvvvvvvvvv* RATE *rrrrrr*

Explanation: When an auxiliary shortage occurred, the system identified the address space with the largest increase in the amount of allocated central plus auxiliary storage. The address space is set non-dispatchable.

In the message text:

uuuuuuuu

Address space with a large increase in central plus auxiliary storage.

aaaa

Address space ID of the user.

vvvvvvvvvv

Number of central storage frames and auxiliary storage slots that are allocated to the address space.

rrrrrr

The approximate rate of increase in pages of central and auxiliary storage that is allocated to the address space between observation intervals of two to ten seconds.

System action: The system sets the address space non-dispatchable and does not process the address spaces until the shortage is relieved. When the address space is set dispatchable, the system issues message IRA211I.

Operator response: To relieve the shortage, add additional page space to increase the number of auxiliary storage

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slots. If requested by the system programmer, cancel this address space or other address spaces to reduce the storage allocation.

System programmer response: Examine the validity of the address space and determine whether it must continue. If the address space must not continue, request that the operator cancel the address space.

Source: System Resource Manager (SRM) Detecting

Module: IRASTASM

Routing code: 2

Descriptor code: 11

IRA211I *uuuuuuuu* ASID *aaaa* SET DISPATCHABLE

Explanation: The system previously issued IRA210E, indicating that the address space was set non-dispatchable, to prevent further increase in the allocation of auxiliary storage slots and central storage frames by this address space.

In the message text:

uuuuuuuu

The name of the address.

aaaa

Address space ID.

System action: The system sets the address space dispatchable.

Source: System Resource Manager (SRM)

Module: IRASTASM

Routing code: 2

Descriptor code: 4

IRA220I CRITICAL AUXILIARY SHORTAGE*text*

Explanation: The *text* is:

```
! ## ! USER      ! ASID ! PAGES      ! SLOTS      !
+---+-----+-----+-----+-----+
! ii ! uuuuuuuu ! aaaa ! xxxxxxxxxx ! zzzzzzzzzz !
! ii ! uuuuuuuu ! aaaaS! xxxxxxxxxx ! zzzzzzzzzz !
! ii ! uuuuuuuu ! aaaaN! xxxxxxxxxx ! zzzzzzzzzz !
```

At the time of a critical auxiliary shortage, the system identifies twenty address spaces with the largest auxiliary storage slot allocation in the system. The address spaces with the largest slot allocation are displayed. If the OPT parameter STORAGEWTOR is set to YES or AUTO, message IRA221D is presented to ensure that the operator can cancel a presented address space or display more address spaces.

In the message text:

ii Number of the line for the cancel.

uuuuuuuu

The name of the address space.

aaaa

Address space ID of the user.

N

A non-cancelable address space.

S

A system address space.

xxxxxxx

Number of the real frames that are allocated to the address space.

zzzzzzzz

Number of the auxiliary storage slots that are allocated to the address space.

System action: If the OPT parameter STORAGEWTOR is set to YES or AUTO, Message IRA221D is issued to ensure

that the operator can cancel an address space identified in the message, or display additional address spaces.

Operator response: Add additional page space to increase the number of auxiliary storage slots, so the auxiliary shortage is relieved. If requested by the system programmer, cancel this address space or other address spaces to reduce the slot allocation.

System programmer response: Examine the validity of the address space and determine whether it should continue. If the address space should continue, request the operator to cancel the address space.

Note: If the OPT parameter STORAGEWTOR is set to AUTO, this message lists up to twenty address spaces.

Source: System Resource Manager (SRM)

Module: IRARMWT2

Routing code: 2

Descriptor code: 11

IRA221D REPLY M for MORE, E TO END, ## TO CANCEL A USER

Explanation: When a critical auxiliary storage shortage is detected, the system identifies twenty address spaces (IRA220I) with the largest auxiliary storage slot allocation. Five of these address spaces are displayed; the operator might cancel one of these address spaces by replying 1 to 5, or show the next five address spaces by replying M.

This WTOR only occurs on systems, which have set the OPT parameter STORAGEWTOR to YES or AUTO.

Possible reply to the message:

1 to 5 Cancel one of the five address spaces.

M Show the next five address spaces; wrap to the first set of address spaces as required.

E End the display of the address spaces.

System action: The system displays a message that enables the operator to react on message IRA220I. With a reply of `&osq;1&csq;` to `&osq;5&csq;`, the operator can cancel one of the address spaces displayed in IRA220I. With a reply of `&osq;M&csq;`, the operator can display the next five address spaces. The reply `&osq;E&csq;` ends the display of address spaces.

Operator response: If requested by the system programmer, reply with `&osq;1&csq;` to `&osq;5&csq;` to cancel one of the five address spaces. Reply `&osq;M&csq;` to display the next five address spaces. The address spaces in the list can be repeated by replying `&osq;M&csq;` several times.

System programmer response: Examine the validity of the address spaces and determine whether they should continue. If the address space should not continue, request the operator to reply with `&osq;1&csq;` to `&osq;5&csq;` to cancel the address space; otherwise, request the operator to reply with `&osq;M&csq;` to display the next five address spaces.

Note: If the OPT parameter STORAGEWTOR is set to AUTO, message IRA220I lists up to twenty address spaces. In this case, it is possible to reply with `&osq;1&csq;` to `&osq;20&csq;` to cancel the identified address space.

Source: System Resource Manager (SRM)

Module: IRARMWT2

Routing code: 2

Descriptor code: 7

IRA222I *uuuuuuuu* ASID *aaaa text*

Explanation: The system cannot cancel the address space that is specified on the reply of WTOR IRA221D. See *text* for the specific reason.

In the message text:

```
uuuuuuuu
    Address space that was not canceled.
```

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aaaa Address space ID of the user.

text is one of the following:

NO LONGER ACTIVE

The address space already ended.

IS NON-CANCELABLE

The address space is a system address space or non-cancelable.

WRONG REPLY

The reply is not valid.

NOT CANCELED - RSN *rr*

An error occurs during the cancel process. The RSN value explains the internal reason.

System action: If the system is still in a critical auxiliary shortage, the system continues and reissues the message IRA220I and WTOR IRA221D.

Source: System Resource Manager (SRM)

Module: IRARMWT2

Routing code: 2

Descriptor code: 4

IRA222I *uuuuuuuu ASID aaaa text*

Explanation: The system cannot cancel the address space that is specified on the reply of WTOR IRA221D. See *text* for the specific reason.

In the message text:

uuuuuuuuu

Address space that was not canceled.

aaaa Address space ID of the user.

text is one of the following:

NO LONGER ACTIVE

The address space already ended.

IS NON-CANCELABLE

The address space is a system address space or non-cancelable.

WRONG REPLY

The reply is not valid.

NOT CANCELED - RSN *rr*

An error occurs during the cancel process. The RSN value explains the internal reason.

System action: If the system is still in a critical auxiliary shortage, the system continues and reissues the message IRA220I and WTOR IRA221D.

Source: System Resource Manager (SRM)

Module: IRARMWT2

Routing code: 2

Descriptor code: 4

IRA250I *nn% OF STORAGE-CLASS MEMORY IS ALLOCATED*

Explanation: The system detected high usage of the available slots in storage-class memory (SCM). This message is issued when at least 80% of all available SCM slots in the system are in use.

In the message text:

nn The percentage of SCM slots that are currently allocated.

System action: The system continues processing.

System programmer response: Consider using the CONFIG SCM(xxxM|G|T),ONLINE command to increase the amount of storage-class memory (SCM) available to the system.

Source: System resources manager (SRM)

Module: IRASTSCM

Routing code: 2

Descriptor code: 3

IRA252I STORAGE-CLASS MEMORY ALLOCATION IS NOW BELOW *nn*%

Explanation: There is no longer a high usage of available slots in storage-class memory (SCM). This message is issued when less than 75% of all available SCM slots in the system are in use.

In the message text:

nn The percentage of SCM slots that are currently allocated.

System action: The system continues processing.

System programmer response: None.

Source: System resources manager (SRM)

Module: IRASTSCM

Routing code: 2

Descriptor code: 4

IRA303I OPT MEMBER IEAOPT xx *text*

Explanation: *text* is one of the following:

- VALUE NEAR COLUMN *nn* NOT WITHIN LIMITS. TEXT FOLLOWS: *text*
- NEAR COLUMN *nn* FIRST VALUE EXCEEDS SECOND. TEXT FOLLOWS: *text*
- EXPLICIT VALUE REQUIRED NEAR COLUMN *nn*. TEXT FOLLOWS: *text*

The system found an incorrect OPT parameter in the IEAOPT xx parmlib member.

In the message text:

IEAOPT xx

The parmlib member, where *xx* is the suffix of the member.

VALUE NEAR COLUMN *nn* NOT WITHIN LIMITS. TEXT FOLLOWS: *text*

The value specified for one of the parameters is outside the allowable range.

In the message text:

nn The column number.

text The text containing the error.

NEAR COLUMN *nn* FIRST VALUE EXCEEDS SECOND. TEXT FOLLOWS: *text*

The first value of a parameter with a pair of values must be less than or equal to the second value of the pair. The first value is the low threshold and the second value is the high threshold.

In the message text:

nn The column number.

text The text containing the error.

EXPLICIT VALUE REQUIRED NEAR COLUMN *nn*. TEXT FOLLOWS: *text*

A parameter that requires a pair of values must include both values.

In the message text:

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nn The column number.

text The text containing the error.

System action: The system rejects the OPT parameter and continues syntax checking. If a parameter with multiple subparameters is in error, an error message may appear for each subparameter. Syntax checking continues and may produce additional error messages. The system continues processing using the existing OPT parameter values.

System programmer response: Correct the error in the IEAOPTxx parmlib member.

Source: System resources manager (SRM)

Module: IRARMOPT

Routing code: Note 13

Descriptor code: -

IRA400E *return-code*, PAGEABLE STORAGE SHORTAGE

Explanation: The system detected a shortage of pageable central storage frames.

In the message text:

return-code

The *return-code* indicates the type of the detected shortage. The order in the list below indicates how severe the shortage is. The most severe type is at the top of the list. The possible values for *return-code* are as follows:

- 03 Pageable frames below 16 megabytes shortage
- 04 Pageable frames between 16 megabytes and 2 gigabytes shortage
- 02 Pageable frames in real storage shortage
- 01 Pageable to auxiliary (PTA) frames in processor storage shortage because of too many DREF and fixed frames.

System action: The system rejects LOGON, MOUNT, and START command and prevents initiators selecting new jobs from running until the shortage is relieved. The system swaps out the current in-storage address space with the greatest number of fixed frames. The address space remains swapped out until the shortage is relieved.

The system writes message IRA403E to identify the heavy fixed page users.

The system writes message IRA404I to identify the five heaviest fixed page users in the shortage area.

System programmer response: Examine users of V=R storage and other jobs that have heavy page fix requirements for possible looping, or for extraordinary page fix needs. Correct any errors.

Source: System resources manager (SRM)

Module: IRASTFXS

Routing code: 2

Descriptor code: 11

IRA401E *return-code*, CRITICAL PAGEABLE STORAGE SHORTAGE

Explanation: The system detected a critical shortage of pageable processor storage frames.

In the message text:

return-code

The *return-code* indicates the type of the detected shortage. The order in the list below indicates how severe the shortage is. The most severe type is at the top of the list. The possible values for *return-code* are as follows:

- 03 Pageable frames below 16 megabytes shortage
- 04 Pageable frames between 16 megabytes and 2 gigabyte shortage
- 02 Pageable frames in real storage shortage

- 01 Pageable to auxiliary (PTA) frames in processor storage shortage because of too many DREF and fixed frames.

System action: The system rejects LOGON, MOUNT, and START commands. and keeps initiators selecting new jobs from running until the shortage is relieved. The system swaps out the current in-storage address space with the greatest number of fixed frames. The address space remains swapped out until the shortage is relieved.

The system writes message IRA403E to identify the heavy fixed page user.

System programmer response: Examine users of V=R storage and other jobs that have heavy page fix requirements for possible looping or for extraordinary page fix needs. Correct any errors.

Source: System resources manager (SRM)

Module: IRASTFXS

Routing code: 2

Descriptor code: 11

IRA402I PAGEABLE STORAGE SHORTAGE RELIEVED

Explanation: There is no longer a shortage of pageable processor storage frames.

System action: The system permits LOGON, MOUNT, and START commands. The system processes jobs delayed because of the shortage. The system does not process heavy users of fixed frames that were swapped or made nondispatchable until there are sufficient frames to satisfy their requirements.

Source: System resources manager (SRM)

Module: IRASTFXS

Routing code: 2

Descriptor code: 4

IRA403E *uuu* SWAPPED TO RECLAIM PROCESSOR STORAGE; *xxxxx* PAGES *yyyyy* FIXED

Explanation: At the time of a pageable storage shortage, the system identified an address space as the largest swappable user of fixed frames. The amount of fixed frames includes the address space's local system queue area (LSQA).

In the message text:

uuu The largest swappable address space of fixed frames.

xxxxx The number of frames.

yyyyy The number of fixed frames.

System action: The system swaps out the address space. The system does not process the address space until the shortage is relieved and there are sufficient frames available to satisfy the address space's current requirements. When the address space is swapped in again, the system writes message IRA501I.

Operator response: If requested by the system programmer, quiesce system activity and swap in the address space. Once swapped in, either allow the address space to run to completion or cancel it.

System programmer response: Examine the validity of the address space and determine whether it should continue. If the address space should continue, request the operator to quiesce other system activity and swap in the address space.

Source: System resources manager (SRM)

Module: IRASTFXS

Routing code: 2

Descriptor code: 11

IRA404I • IRA405I

IRA404I *uuuuuuuu* ASID *aaaa* OWNS *xxxxxxxxxx* PAGES, *yyyyyyyyyy* FIXED, *zzzzzzzzzz* FIXED IN SHORTAGE AREA

Explanation: After message IRA400E has been issued, the message IRA404I lists the five largest users of pageable central storage frames in the shortage area.

In the message text:

uuuuuuuu

One of the five largest users of pageable storage frames in the shortage area.

aaaa Address space ID of the user.

xxxxxxxxxx

Number of frames the user owns.

yyyyyyyyyy

Number of fixed frames the user owns.

zzzzzzzzzz

Number of fixed frames in the shortage area the user owns.

Note: If IRA400E detected a shortage of type 1, *zzzzzzzzzz* can be bigger than *yyyyyyyyyy* because of the included DREF pages.

System action: The system removes IRA404I messages from the recallable queue when an IRA402I message is issued.

System programmer response: Examine the validity of the address space and determine whether it should continue. Examine the address space for possible looping or for extraordinary page fix needs. Correct any errors.

Source: System resources manager (SRM)

Module: IRASTFXS

Routing code: 2

Descriptor code: 11

IRA405I *return code, nn%* OF THE REAL STORAGE FRAMES ARE FIXED

Explanation: A high amount of frames is fixed in the system. If the system stays above the warning level, the message gets reissued every two hours.

In the message text:

return-code

The *return-code* indicates the type of the detected shortage. The order in the list below indicates how severe the shortage is. The most severe type is on the top of the following list. The possible values for *return-code* are:

- 01 Pageable to auxiliary (PTA) frames in processor storage shortage because of too many DREF and fixed frames.
- 02 Pageable frames in real storage shortage.
- 03 Pageable frames below 16 megabytes shortage.
- 04 Pageable frames between 16 megabytes and 2 gigabytes shortage.

nn% The percentage of fixed frames in the shortage area.

System action: The system continues processing.

System programmer response: Verify if the warning level is set correct. The percentage can be adjusted with the IRA405I keyword in the IEAOPTxx member. If the percentage is correct, analyze what fixed the most storage so that the system does not run into a pageable storage shortage.

Source: System resources manager (SRM)

Module: IRASTFXS

Routing code: 10

Descriptor code: 4

IRA410E **JOB** *uuuuuuuu* **ASID** *aaaa* **SET NON DISPATCHABLE**

Explanation: At the time of a pageable storage shortage, the system identified a non-swappable address space with the largest fixed frame increase. The address space is set non dispatchable so that the address space cannot further increase the amount of fixed frames.

In the message text:

uuuuuuuu

Non-swappable address space name of the space with a high fixed frame increase.

aaaa Address space ID of the user.

System action: The system sets the address space non-dispatchable and no longer processes the address spaces, until the shortage is relieved. When the address space gets dispatchable, the system writes message IRA411I.

Operator response: If requested by the system programmer, quiesce system activity. If the address space gets dispatchable, either allow the address space to run or cancel it.

System programmer response: Examine the validity of the address space and determine whether it should continue. If the address space should continue, request the operator to cancel other activity in the system.

Source: System resources manager (SRM)

Module: IRASTFXS

Routing code: 2

Descriptor code: 11

IRA411I **JOB** *uuuuuuuu* **ASID** *aaaa* **SET DISPATCHABLE**

Explanation: The system previously issued IRA410E indicating that the address space was set non-dispatchable, in order not to further increase the amount of fixed frames.

In the message text:

uuuuuuuu

Non-swappable address space name of the space with the high fixed frame increase.

aaaa Address space ID of the user.

System action: The system sets the address space dispatchable.

Operator response: None.

System programmer response: None.

Source: System resources manager (SRM)

Module: IRASTFXS

Routing code: 2

Descriptor code: 4

IRA420I **CRITICAL STORAGE SHORTAGE** *return-code text*

Explanation: The *text* is:

```
! ## ! USER      ! ASID ! PAGES      ! O/W FIXED !
+---+-----+-----+-----+-----+
! ii ! uuuuuuuu ! aaaa ! xxxxxxxxxx ! zzzzzzzzzz !
! ii ! uuuuuuuu ! aaaaS! xxxxxxxxxx ! zzzzzzzzzz !
! ii ! uuuuuuuu ! aaaaN! xxxxxxxxxx ! zzzzzzzzzz !
```

IRA421D

At the time of a critical pageable storage shortage, the system identifies 20 address spaces with the largest fixed frame allocation in the system. These address spaces get displayed and the operator is able to cancel one of these address spaces using the outstanding WTOR message IRA421D.

In the message text:

return-code

The *return-code* indicates the type of the detected shortage. The order in the list below indicates how severe the shortage is. The most severe type is at the top of the list. The possible values for *return-code* are as follows:

- 3 Pageable frames below 16 megabytes shortage
- 4 Pageable frames between 16 megabytes and 2 gigabytes shortage
- 2 Pageable frames in real storage shortage
- 1 Pageable to auxiliary (PTA) frames in processor storage shortage because of too many DREF and fixed frames.

ii Number of the line for the cancel

uuuuuuuu

Non-swappable address space name of the space with the high fixed frame increase.

aaaa Address space ID of the user.

N A non-cancelable address space.

S A system address space.

xxxxxxxx

Number of frames the user owns.

zzzzzzzz

Number of frames in the shortage area the user owns.

System action: The system display shows a list of address spaces, with the highest fixed frame allocation in the shortage area. With a reply '1' to '5' at WTOR IRA421D the operator can cancel one of these address spaces.

Operator response: If requested by the system programmer, reply the WTOR IRA421D with '1' to '5' to cancel one of the five address spaces. Or reply with 'M' to display the next five address spaces, which you then can cancel.

System programmer response: Examine the validity of the address spaces and determine whether it should continue. If one of the address space should not continue, request the operator to reply with '1' to '5'; otherwise, request to reply with 'M' to display the next five address spaces.

Source: System resources manager (SRM)

Module: IRARMWT1

Routing code: 2

Descriptor code: 11

IRA421D REPLY M FOR MORE, E TO END, ## TO CANCEL A USER

Explanation: At the time of a critical pageable storage shortage, the system identified 20 address spaces (IRA420I) with the largest fixed frame allocation in the system. These address spaces get displayed and the operator is able to cancel these address spaces with the reply.

1 to 5 Cancels one of the 5 address spaces.

M Shows the next 5 address spaces.

E Ends the cancel processing.

System action: The system displays a WTOR message, which allows the operator to react on message IRA420I. With a reply '1' to '5', the operator can cancel one of the address spaces displayed in IRA420I. With the reply 'M', the operator can display the next 5 address spaces. With a reply 'E', the operator can end displaying address spaces.

Operator response: If requested by the system programmer, reply the WTOR with '1' to '5' to cancel one of the five

address spaces. Or reply with 'M' to display the next five address spaces that you can cancel afterward.

System programmer response: Examine the validity of the address spaces and determine whether it should continue. If one of the address space should not continue, request the operator to reply with '1' to '5'; otherwise, request the operator to reply with 'M' to display the next five address spaces.

Source: System resources manager (SRM)

Module: IRARMWT1

Routing code: 2

Descriptor code: 7

IRA422I **IRA422I** *uuuuuuuu ASID aaaa text*

Explanation: The system cannot cancel the address space that is specified on the reply of WTOR IRA421D. Refer to *text* for the specific reason.

In the message text:

uuuuuuuu

Address space that was not canceled.

aaaa

Address space ID of the user.

text

is one of the following:

NO LONGER ACTIVE

The address space already ended.

IS NON-CANCELABLE

The address space is a system address space or non-cancelable.

WRONG REPLY

The reply is not valid.

NOT CANCELED - RSN *rr*

An error occurs during the cancel process. The RSN value explains the internal reason.

System action: The system continues and will reissue the message IRA420I and WTOR IRA421D, if the system is still in a critical storage shortage.

Operator response: None.

System programmer response: None.

Source: System Resource Manager (SRM)

Module: IRARMWT1

Routing code: 2

Descriptor code: 4

IRA500E **SWAP IN FAILED DUE TO STORAGE REQUIRED FOR USER** *uuu - xxxxx* **PAGES** *yyyyy* **FIXED**

Explanation: One of the following occurred:

- The system determined that a shortage of processor storage would occur if an address space is swapped in.
- The system could not swap in an address space because it was unable to allocate enough central storage to contain the number of pages in the swap-in working set.

In the message text:

uuu

The address space that owns the fixed pages.

xxxxx

The number of pages in the swap-in working set

yyyyy

The number of local system queue area (LSQA) and fixed pages that the address space owns and that are on auxiliary storage and need to be swapped in to central storage.

IRA501I • IRA600I

System action: The system leaves the address space swapped out and checks periodically to see if it can be swapped in.

The system considers the address space for swap in when either of the following exist:

- The percentage of central storage that is fixed decreases enough to swap in the address space without causing a shortage of pageable central storage
- The number of available frames of central storage rises enough to accommodate the address space's swap-in working set

If another attempt to swap in the address space is unsuccessful, the system writes this message again. If the attempt is successful, the system writes message IRA501I. If no action is taken, the system continues to check periodically to determine if the address space can be swapped in.

Operator response: If requested by the system programmer, quiesce system activity and swap in the address space. Once swapped in, either allow the address space to run to completion or cancel it.

System programmer response: Examine the validity of the address space and determine whether it should continue. If the address space should continue, request the operator to quiesce other system activity and swap in the address space. If the address space should not continue, request the operator to cancel the address space.

Source: System resources manager (SRM)

Module: IRARMEVT

Routing code: 2

Descriptor code: 11

IRA501I USER *uuu* NOW SWAPPED IN

Explanation: One of the following occurred:

- The system previously issued message IRA500I indicating that an address space could not be swapped in.
- The system previously issued message IRA403I indicating that an address space was swapped out in an attempt to relieve a pageable frame shortage.
- The system previously issued message IRA203E indicating that an address space was swapped out in an attempt to relieve an auxiliary storage shortage.

The system attempted to swap in the address space again and completed the swap successfully.

In the message text:

uuu The user.

System action: The system swaps in the address space.

System programmer response: If the system issues messages IRA203E, IRA403I or IRA500I and IRA501I frequently for this address space, check the storage required for this and other address spaces.

Source: System resources manager (SRM)

Module: IRARMEVT

Routing code: 2

Descriptor code: 4

IRA600I SRM CHANNEL DATA NOW AVAILABLE FOR [I/O SERVICE|ALL SRM FUNCTIONS]

Explanation: The channel measurement facility is now measuring device connect times intervals (DCTI).

System action: If the message reads ALL SRM FUNCTIONS, the system resources manager (SRM) device selection and I/O load-balancing functions use the data in the channel measurement block (CMB).

Source: System resources manager (SRM)

Module: IRARMCHM

Routing code: 2,10

Descriptor code: 4

IRA601I SRM CHANNEL DATA NO LONGER AVAILABLE FOR I/O SERVICE

Explanation: The channel measurement facility is not measuring device connection times (DCTIs) because of a failure in a channel or processor.

System action: The system resources manager (SRM) uses execute channel program (EXCP) counts from address space control blocks (ASCBs) to calculate I/O activity. The system writes message IRA602I to report the specific failure condition.

Operator response: None

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: System resources manager (SRM)

Module: IRARMCHM

Routing code: 2,10

Descriptor code: 4

IRA602I *reason-code*, **SRM CHANNEL MEASUREMENTS TERMINATED**

Explanation: The system resources manager (SRM) stopped the collection of channel measurement data in the channel measurement block (CMB) because of an error condition.

In the message text:

reason-code

The reason code in hexadecimal, as follows:

- 01 Time of day (TOD) clocks are out of synchronization.
- 02 Channel timers are out of synchronization.
- 03 A storage check occurred on channel access to CMB.
- 04 An uncorrectable program error occurred while SRM was processing measurement data.
- 20 There is not enough virtual storage for the required measurement data areas.
- 21 A unit control block (UCB) contained a zero measurement block index. block (UCB)
- 22 A protection or addressing exception occurred on channel access to the CMB.

System action: The SRM functions, device selection and I/O load balancing, use algorithms that do not make use of CMB data. If device connection times were being collected, the system writes message IRA601I. The system abnormally ends the current task with abend code X'65F'.

System programmer response: See the system programmer response for abend code X'65F'.

Source: System resources manager (SRM)

Module: IRARMCHM

Routing code: 10

Descriptor code: 4

IRA603I *reason-code*, **SERVICE PROCESSOR DATA NO LONGER BEING USED FOR CHANNEL UTILIZATION**

Explanation: The system could not obtain channel utilization data from the service processor.

In the message text:

IRA604I • IRA650I

reason-code

The reason code in hexadecimal, as follows:

- 08 A write error occurred.
- 12 Hardware is not operational.

System action: SRM uses an alternate sampling method to obtain channel utilization data.

Source: System resources manager (SRM)

Module: IRARMCHM

Routing code: 10

Descriptor code: 4

IRA604I CHANNEL PATH MEASUREMENT FACILITY DATA NO LONGER AVAILABLE

Explanation: The system has determined that the channel path measurement facility (CPMF) was not operating and cannot be restarted. CPMF restart will be attempted during the next system IPL.

System action: The system continues to process without the CPMF data.

Operator response: None.

System programmer response: Use this message to correlate disruptions in CPMF data collection to system events. See further documentation regarding CPMF under IRACPMB in *z/OS MVS Data Areas* in the z/OS Internet library (<http://www.ibm.com/systems/z/os/zos/bkserv/>).

Source: System resource manager (SRM)

Routing code: 10

Descriptor code: M4

IRA605I CHANNEL PATH MEASUREMENT FACILITY RESTART IN PROGRESS

Explanation: The system determined that the channel path measurement facility (CPMF) has either stopped or entered a restartable error state. If this message appears during IPL both in BASIC mode and ETR resynchronization, then there is no error. The system is restarting the CPMF.

System action: The system continues processing.

Operator response: None.

System programmer response: Use this message to correlate disruptions in CPMF data collection to system events. See further documentation regarding CPMF under IRACPMB in *z/OS MVS Data Areas* in the z/OS Internet library (<http://www.ibm.com/systems/z/os/zos/bkserv/>). Ignore this message if it appears during IPL in basic (non-LPAR) mode.

Source: System resource manager (SRM)

Module: IRARMCHS

Routing code: 10

Descriptor code: 4

IRA650I SMF 99 PROCESSING NO LONGER AVAILABLE

Explanation: The system disabled the SMF 99 processing after SRM did not complete SMF 99 recording. This internal error is caused when the systems detects an imminent field-overflow condition and abends further SMF 99 processing.

System action: The system continues processing. The system collects recent SMF type 99 records in WLM private storage

Operator response: None.

System programmer response: Access recent SMF type 99 records by taking a dump of the WLM address space or

by specifying SDATA=(WLM). Have this data available and contact your IBM service representative

Source: System resource manager (SRM)

Module: IRAPASMD

IRA700I *jobname* **WAITING FOR AVAILABILITY OF VF**

Explanation: The system swaps out a job because it requires a vector facility (VF), and there are none currently online.

In the message text:

jobname The job name.

System action: The system leaves the job swapped out. When a VF is brought back online, the job resumes processing.

Operator response: Attempt one of the following:

- Use the CONFIG command to try to bring a VF or a central processor with an attached VF online
- If a VF will be available shortly, leave the job alone. When the VF is brought back online, the job will resume processing
- If a VF cannot be brought online or one will not soon be available, either cancel the job or hold, reset, and cancel the job so that it can be run it later.

Source: System resources manager (SRM)

Module: IRARMEVT

Routing code: 2

Descriptor code: 6

IRA701I **RESET KEYWORD** *keyword* **NOT VALID IN GOAL MODE**

Explanation: A keyword in the RESET command is not valid in workload management (WLM) goal mode.

In the message text:

keyword

The keyword that is not valid in the RESET command.

System action: The system does not process the RESET command.

Operator response: Make sure that the keywords you specify in the RESET command are valid in WLM goal mode. The PERFORM=*nmn* keyword is not valid in goal mode. The SRVCLASS=*classname*, RESUME, and QUIESCE keywords are valid in goal mode.

Source: System resources manager (SRM)

Module: IEEDISPD, IEEMB810, IEEMB812, IEE8603D

Routing code: 2

Descriptor code: 5

IRA702I **RESET IS NOT VALID FOR** *address-space*. **IT IS A SYSTEM-CONTROLLED ADDRESS SPACE**

Explanation: You have issued the RESET command for an address space that is controlled by the system, but RESET is not valid for system-controlled address spaces. System-controlled address spaces include the privileged and system component address spaces. For detailed guidance on removing the privileged attribute, see the RESET command of *z/OS MVS System Commands*. For a complete description of privileged and system component address spaces, see *z/OS MVS Initialization and Tuning Guide*.

Note: With APAR OA12625 installed, privileged address spaces can be reset, and this message only occurs for system component address spaces.

In the message text:

IRA703I • IRA861I

address-space

The address space identifier.

System action: The system does not process the RESET command.

System programmer response: If you want to control the address space, put it in a service class other than the subsystem default service class by creating a rule in your service definition classification rules.

You cannot reset privileged work. For details on restrictions that apply to resetting privileged work, see the RESET command of *z/OS MVS System Commands*.

Source: System resources manager (SRM)

Module: IEEMB810

Routing code: 2

Descriptor code: 5

IRA703I *address-space* IS NOT ELIGIBLE FOR RESET INTO SERVICE CLASS *srvclass*

Explanation: You issued a RESET SRVCLASS= command to associate the address space with the named service class, but the address space did not have the attributes necessary to run in the target service class.

If the target service class name is SYSTEM, the address space must have been created with the high dispatching priority attribute.

In the message text:

address-space

The address space specified on the reset command.

srvclass The target service class.

System action: The system does not process the RESET command.

Operator response: None.

Source: System resources manager (SRM)

Module: IRAOPREF

Routing code: 2

Descriptor code: 5

IRA860I HIPERDISPATCH MODE IS NOW ACTIVE

Explanation: HIPERDISPATCH=YES was specified or defaulted on the IEAOPTxx parmlib member and the system has switched into the HiperDispatch mode.

System action: The system continues in HiperDispatch mode.

Operator response: None.

Source: System resources manager (SRM)

Module: IRABAINI

IRA861I HIPERDISPATCH MODE IS NOW INACTIVE

Explanation: The system is not running in HiperDispatch mode. HiperDispatch mode can be set in the IEAOPTxx parmlib member.

System action: The system continues in the regular dispatching mode.

Operator response: None.

Source: System resources manager (SRM)

Module: IRABAINI

IRA863E HIPERDISPATCH MODE ALGORITHM DETECTED AN ERROR. RC=XXXXXXXXXXXXXXXXXX

Explanation: The system is running in HiperDispatch algorithm mode and detected an internal error. RC=XXXXXXXXXXXXXXXXXX provides information to help IBM support to further diagnose the problem.

System action: The system continues and attempts to switch the dispatch algorithm back to regular dispatching mode. If successful, message IRA861I is issued on the console.

Operator response: Notify the system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: System resources manager (SRM)

Module: IRABAERR

IRA864I SWITCHING TO HIPERDISPATCH=YES|NO IN PROGRESS

Explanation: HIPERDISPATCH=YES or NO was requested and the switch is still in progress. The information contained in the subtype 13 record is for IBM internal use only.

System action: Processing continues and message IRA864I is issued until the switch is complete. This can take several minutes.

Operator response: None.

System programmer response: None.

Source: System resources manager (SRM)

Module: IRABAINI

IRA865I HIPERDISPATCH=YES FORCED DUE TO GREATER THAN 64 LPS DEFINED

Explanation: HIPERDISPATCH=YES is forced because more than 64 logical CPUs are defined for this LPAR.

System action: The system attempts to switch to the HiperDispatch mode or continues to run in HiperDispatch mode.

Operator response: None.

System programmer response: None.

Source: System resources manager (SRM)

Module: IRABAINI

IRA866I HIPERDISPATCH=YES FORCED DUE TO PROCVIEW=CORE

Explanation: HIPERDISPATCH=YES is forced because PROCVIEW=CORE was specified in the load parameter member (LOADxx) on hardware capable of supporting MT mode greater than 1.

System action: The system attempts to switch to the HiperDispatch mode or continues to run in HiperDispatch mode.

Operator response: None.

System programmer response: None.

Source: System resources manager (SRM)

Module: IRABAINI

IRA903I WLM COMPATIBILITY MODE IS NOT SUPPORTED

Explanation: Since z/OS Version 1 Release 3, all systems IPL in workload management (WLM) goal mode. The IEAIPSxx and IEAICSxx parmlib members are no longer used. If the IEASYSxx member in SYS1.PARMLIB indicates an IPS, this message is displayed.

The MODIFY WLM command is no longer valid because users cannot switch to WLM compatibility mode.

System action: Continue the IPL in WLM goal mode, or ignore the command and continue operating in WLM goal mode.

Operator response: None.

System programmer response: Specify IPS=, in the IEASYSxx member, and manage the system using a service definition.

Source: System resources manager (SRM)

Module: IEAVNP10, IWMP2TRN

Chapter 19. IRD messages

IRD000E *dev.mmmmmmm-nnn* LEVEL=*l* [FRU(S)= *fru1*{...*fru4*} LIC=*vv.rr*] [SPARE PORT(S) AVAILABLE]

Explanation: The Enterprise Systems Connectivity Director (ESCD), also known as the dynamic switch, has reported an internal hardware error. This message immediately follows message IOS000I. The sense data in message IOS000I describes the errors in detail. Message IRD000E summarizes the failing component(s) and the status of the switch.

In the message text:

dev The device number of the dynamic switch.

mmmmmm-nnn
 The machine type number and model number of the dynamic switch.

l The operational level of the dynamic switch. The values are:

- 0** Dynamic switch is fully operational
- 1** A component failed, but redundant hardware makes the dynamic switch fully operational.
- 2** Dynamic switch is operational; a minor failure has occurred.
- 3** Dynamic switch is operational; a major failure has occurred.
- 4** Dynamic switch is not operational, and is not available to any system.
- 5** Dynamic switch's operational level is indeterminate.

vv.rr The version and release level of the microcode for the switch.

fru1 - fru4
 The field replaceable unit(s) (*fru*).

Note that model-dependent fru identifiers other than those shown below may appear.

CLK Clock

CON Operator/service console

CTP Control processor

FCSP Laser FCS port

DVP LED port

DVP2 Laser port

FAN Fan

FP Front panel

INT Console adapter

MXC/MXS
 Matrix controller/Matrix switch

MXC2 Matrix controller

MXS Matrix switch

PLANAR
 Switch planar assembly

PWR Power[®] supply

PWR2 Power supply

TKRG Token ring adapter

IRD001E

UNKNOWN

Unknown

CP Control Processor

PORT LED port

PORT2 Laser port

SDVP LED 4 port spare

SDV2 LED 2 port/laser 2 port spare

LBA Backplane

ec# The engineering change level of the switch.

SPARE PORTS AVAILABLE

The Enhanced Availability Feature is installed and at least one spare port is currently unused.

System action: Processing continues. I/O operations to some devices connected through the dynamic switch might fail.

Operator response: Contact hardware support. Save the message data if contacting IBM service personnel is necessary.

Source: ESCON Director Device Support (EDDS)

Routing code: 7,10

Descriptor code: 3

IRD001E *devn.mmmmmm-nnn* **INVALID CONFIGURATION DETECTED, PORT=*port-number* (PORT ADDRESS=*port-addr*)**

Explanation: The dynamic switch has detected that the link connected to a port is the cause of an incorrect attachment. This error occurs when a cable is incorrectly connected to a switch port. An example of this error, for ESCON links, is when a port on one switch is cabled to a port on the same or another switch and there is no dedicated connection established.

Another example of this error is when a wrap plug is installed in a port and the port is not blocked or is not in test mode.

In the message text:

devn

The device number of the dynamic switch.

mmmmm-nnn

The machine type number and model number of the dynamic switch.

port-number

The port number that physically identifies this switch port.

port-addr

The port address currently in use for the port identified with *port-number*.

System action: The system does not allow any channel path defined to use this port to come online.

Operator response: If the port is currently being repaired, ensure that the port is offline or in test mode. If the port is supposed to be operational, either a dedicated connection involving this port has not been established or a link has been incorrectly cabled to this port. Check for another occurrence of this message involving another port, for the same or a different switch, to isolate the problem.

Source: ESCON Director Device Support (EDDS)

Routing code: 10

Descriptor code: 3

IRD002I **SENSE-ID DATA NOT VALID FOR THE DEVICE - *sense_id_data***

Explanation: A VARY command was issued for a switch device. The device support code attempted to validate that the correct control unit model and type are indicated in the data returned by the SENSE-ID command.

In the message text:

sense_id_data

The sense-ID data returned from the device.

System action: The VARY command fails. If VARY ddd,ONLINE was issued, the devices remain offline. If VARY PATH(dddd,cc),ONLINE was issued, the device path remains offline.

Operator response: Make sure that the operating system and channel subsystem are using the correct I/O configuration definition. DISPLAY IOS,CONFIG displays the currently active IODF (I/O definition file) and currently active I/O configuration for the channel subsystem. The MVS ACTIVATE command can be used to dynamically switch to the correct I/O configuration definition. Then the VARY command should be retried.

System programmer response: Correct the configuration error and retry the VARY command. Configuration errors can be corrected dynamically by updating the I/O configuration definition with the HCD (hardware configuration definition) and issuing the MVS ACTIVATE command.

Source: ESCON Director Device Support (EDDS)

Module: IRDVDSE

IRD003I *switch_type* **DEVICE REQUIRES COMPATIBLE CHANNEL PATH BUT TYPE *cc* FOUND**
 [TYPE=*channel_path_type*]

Explanation: A VARY command was issued for a switch device. The device support code attempted to validate that the channel path type was compatible with the switch type.

In the message text:

switch_type

The type of switch; for example, ESCON, FICON.

cc The channel path type found for the switch device. Descriptions of all the supported channel path types can be displayed by using the D M=CHP command.

channel_path_type

If provided, the channel path type found.

System action: The VARY command fails. If VARY ddd,ONLINE was issued, the devices remain offline. If VARY PATH(dddd,cc),ONLINE was issued, the device path remains offline.

Operator response: Make sure that the operating system and channel subsystem are using the correct I/O configuration definition. DISPLAY IOS,CONFIG displays the currently active IODF (I/O definition file) and currently active I/O configuration for the channel subsystem. The MVS ACTIVATE command can be used to dynamically switch to the correct I/O configuration definition. Then the VARY command should be retried.

System programmer response: Correct the configuration error and retry the VARY command. Configuration errors can be corrected dynamically by updating the I/O configuration definition with the HCD (hardware configuration definition) and issuing the MVS ACTIVATE command.

Source: ESCON Director Device Support (EDDS)

Module: IRDVDSE

Chapter 20. ISG messages

ISG001D **GRS SYSTEM PARAMETER NOT VALID. REPLY STAR, TRYJOIN, JOIN, START, OR NONE.**

Explanation: The specification on the GRS=system parameter is not valid. The only valid parameters are STAR, TRYJOIN, JOIN, START, and NONE.

System action: The system waits for the operator to reply to this message.

Operator response: Choose one of the following replies:

TRYJOIN

To have this system do one of the following:

- Join an existing global resource serialization ring complex, if one is found
- Start a global resource serialization ring complex as the first system if no existing active complex is found

JOIN

To have this system join an existing global resource serialization ring complex

START

To have this system start a global resource serialization ring complex because no complex exists

STAR

To have this system be part of a global resource serialization star complex

NONE

If this system should not be part of a global resource serialization complex

System programmer response: If the GRS= parameter was specified in an IEASYSxx parmlib member, correct the member.

Source: Global resource serialization

Module: ISGNCBIM

Routing code: 1,10

Descriptor code: 2

ISG002I **GRS INITIALIZATION DELAYED - WAITING FOR INITIALIZATION PROCESSING TO COMPLETE ON *sysname* OR NONE**

Explanation: The system is attempting to obtain sysplex-wide serialization in order to join the GRS Star complex, but the serialization is held by another system in the sysplex.

In the message text:

sysname

The name of the system that is currently holding the sysplex-wide serialization for initialization.

System action: The system continues to try to obtain sysplex-wide serialization to join the GRS Star complex.

Operator response: Check if system *sysname* has failed. If so, partition it from the sysplex. If not, contact the system programmer.

System programmer response: If system *sysname* has not failed, take a SDUMP of the GRS address space and contact the IBM support center. Partitioning system *sysname* from the sysplex will release the sysplex-wide serialization.

Source: Global resource serialization

Module: ISGNST

Routing code: 2

Descriptor code: 12

ISG003I SYSTEM *sysname* [NOT] ASSISTING IN GRS JOIN PROCESSING

Explanation: This system is trying to join the global resource serialization complex and ring.

In the message text:

sysname

The system that might or might not be assisting this system to join the global resource serialization complex.

NOT ASSISTING IN GRS JOIN PROCESSING

System *sysname* is not helping to bring this system into the global resource serialization complex and ring. Another system active in the complex will help this system to join instead.

ASSISTING IN GRS JOIN PROCESSING

System *sysname* is helping to bring this system into the global resource serialization complex and ring.

System action: If **ASSISTING IN GRS JOIN PROCESSING** appears in the message text, requests for global resources are suspended on this system and on *sysname* until this system has joined the global resource initialization complex and ring. When the process is complete, the system issues message ISG004I. If `sysplex=complex`, the system issues message ISG004I on this system and issues message ISG188I to the system log (SYSLOG). If the complex is mixed, message ISG004I appears on all the systems in the ring. If this system does not successfully join the global resource serialization complex and ring, the system tries again repeatedly, picking different systems to assist. The system issues messages ISG007I and ISG003I for each unsuccessful attempt.

Source: Global resource serialization

Module: ISNGRSP

Routing code: 2

Descriptor code: 12

ISG004I GRS COMPLEX *text*

Explanation: *text* is one of the following:

STARTED

JOINED BY SYSTEM *sysname*

The global resource serialization complex is either started or a system has joined it.

In the message text:

STARTED

This system successfully completed processing the `GRS=START` system parameter and is the only member of the newly-created global resource serialization complex and ring.

JOINED BY SYSTEM *sysname*

System *sysname* joined the global resource serialization complex and ring. Both *sysname* and this system are members of the global resource serialization complex and ring.

System action: Processing continues.

Source: Global resource serialization

Module: ISNGRSP

Routing code: *,2

Descriptor code: 12

ISG005I GRS START OPTION INVALID – *text*

Explanation: *text* is one of the following:

MULTIPLE GRS COMPLEXES EXIST

SYSTEM *sysname* ALREADY A GRS SYSTEM

MORE THAN 31 SYSTEMS KNOWN BY THIS SYSTEM

SYSTEM *sysname* EXISTS IN A GRS COMPLEX

The GRS=START system parameter is incorrect for one of the following reasons:

MULTIPLE GRS COMPLEXES EXIST

This system has channel-to-channel (CTC) devices to one or more systems in two or more global resource serialization complexes. For example, this system has links to system SYS01 and system SYS03, but system SYS01 belongs to one global resource serialization complex and system SYS03 belongs to another.

SYSTEM *sysname* ALREADY A GRS SYSTEM

One of the following is true:

- This system has CTC links to a system that:
 - Has the same system name as this system
 - Specified the GRS=START or GRS=JOIN system parameter
 - Has not finished processing the GRS= system parameter
- This system has the same name as a system that is already part of the global resource serialization complex. The system name is still known by systems in the global resource serialization complex. This can occur when you reIPL this system if the following occurred during a previous IPL:
 - This system was an active global resource serialization system.
 - This system failed, disrupting the global resource serialization ring.
 - This system was unable to become an active global resource serialization system because another global resource serialization system entered a VARY GRS(ALL), RESTART command.

MORE THAN 31 SYSTEMS KNOWN BY THIS SYSTEM

This system knows of more than 31 systems. Each of these systems is in one of the following categories:

- The system is in the global resource serialization complex.
- The system specified the GRS=START or GRS=JOIN system parameter, but the system has not yet finished processing that parameter.

SYSTEM *sysname* EXISTS IN A GRS COMPLEX

A global resource serialization complex already exists, and *sysname* is part of that complex.

System action: This system issues message ISG009D and waits for the operator to reply.

Operator response: Consult this system programmer, and see the operator response for message ISG009D, or do one of the following:

MULTIPLE GRS COMPLEXES EXIST

If you want this system to join one of the existing global resource serialization complexes, physically disable the system's CTC links to all other systems except the following:

- Systems that are in the global resource serialization complex that this system is to join
- Systems that are not in, and will not be in, any global resource serialization complex

Reply **JOIN** to message ISG009D.

SYSTEM *sysname* ALREADY A GRS SYSTEM

If this message appears because this system has the same system name as another system, reIPL this system with a different system name. Before using a different system name, be sure there is a GRSDDEF statement for that system name in the appropriate GRSCNFxx parmlib member.

If this message appears because this system was part of the global resource serialization complex during a previous IPL, have the operator of an active global resource serialization system enter the VARY GRS(*sysname*),PURGE command. Then reply **JOIN** to message ISG009D.

MORE THAN 31 SYSTEMS KNOWN BY THIS SYSTEM

Modify this system's CTC links so that this system has connections to a maximum of 31 other systems. If one or more of those systems belong to an existing global resource serialization complex, and you want this system to join that complex reply **JOIN** to message ISG009D. If none of those systems are part of a global resource serialization complex, and you want this system to start one, reply **START** to message ISG009D.

SYSTEM *sysname* EXISTS IN A GRS COMPLEX

Do one of the following:

ISG006I

- If you want this system to join the global resource serialization complex that *sysname* is part of, reply **JOIN** to message ISG009D.
- If you want this system to start a separate global resource serialization complex, reconfigure this system so that it does not have CTC links to any of the systems in the existing global resource serialization complex and is not sharing resources with any of those systems. Then reply **START** to message ISG009D.

System programmer response: If **SYSTEM *sysname* EXISTS IN A GRS COMPLEX** often appears when you IPL this system, change this system's GRS= system parameter to JOIN.

Source: Global resource serialization

Module: ISNGRSP

Routing code: 2,10

Descriptor code: 12

ISG006I GRS {JOIN|TRYJOIN } OPTION INVALID - *text*

Explanation: *text* is one of the following:

MULTIPLE GRS COMPLEXES EXIST

SYSTEM *sysname* ALREADY A GRS SYSTEM

MORE THAN 31 SYSTEMS KNOWN BY THIS SYSTEM

SYSTEM *sysname* BELONGS TO A FULL GRS COMPLEX

NO ACTIVE GRS SYSTEM

GRS DISRUPTION MAY BE IN PROGRESS

This system tried to join a global resource serialization complex, but the system parameter GRS=JOIN or GRS=TRYJOIN is incorrect for one of the following reasons:

MULTIPLE GRS COMPLEXES EXIST

This system has channel-to-channel (CTC) links to systems in two or more global resource serialization complexes. For example, this system might have connections to system SYS01 and system SYS03, but system SYS01 belongs to one global resource serialization complex and system SYS03 belongs to another. This system can join only one of the global resource serialization complexes and cannot have links to systems in other global resource serialization complexes.

SYSTEM *sysname* ALREADY A GRS SYSTEM

System *sysname* is already defined to the global resource serialization complex. One of the following is true:

- This system has CTC links to a system that has the same system name as this system.
- This system has the same name as a system that is already part of the global resource serialization complex. This can occur when you reIPL this system if this system was an active global resource serialization system during a previous IPL and was never purged from the complex.

MORE THAN 31 SYSTEMS KNOWN BY THIS SYSTEM

This system knows of more than 31 systems in the global resource serialization complex. Each of these systems is in one of the following categories:

- The system is in the global resource serialization complex.
- The system specified the GRS=START or GRS=JOIN system parameter, but the system has not yet finished processing the JOIN or START parameter.

SYSTEM *sysname* BELONGS TO A FULL GRS COMPLEX

System *sysname* belongs to a global resource serialization complex that already includes the maximum possible number of systems.

NO ACTIVE GRS SYSTEM

No systems were found in the global resource serialization complex. Either no other global resource serialization system exists or this system does not have a functional CTC link to an active global resource serialization system.

GRS DISRUPTION MAY BE IN PROGRESS

Global resource serialization systems exist, but all the systems that can communicate with this one are either inactive or quiesced. One of the following is true:

- The complex is in a disrupted state.
- A previously IPLed system has not started the global resource serialization ring yet.
- There is no functional CTC link between this system and an active global resource serialization system.

System action: One of the following:

- If **MORE THAN 31 SYSTEMS KNOWN BY THIS SYSTEM** or **SYSTEM *sysname* BELONGS TO A FULL GRS COMPLEX** appears in the message text and this system is running in a multisystem sysplex environment, the system issues message ISG167W. The system enters wait state X'0A3' with reason code X'04'.
- In all other cases, the system issues message ISG009D and processing stops until the operator enters a valid reply.

Operator response: Notify the system programmer. See the operator response for message ISG009D or do one of the following:

MULTIPLE GRS COMPLEXES EXIST

If you want this system to join one of the existing global resource serialization complexes, physically disable this system's CTC links to all systems except the following:

- Systems that are in the global resource serialization complex that this system is trying to join
- Systems that are not in (and will not be in) any global resource serialization complex

Reply **JOIN** to message ISG009D.

SYSTEM *sysname* ALREADY A GRS SYSTEM

If this message appears because this system has the same system name as another system, reIPL this system with a different system name. Before using a different system name, be sure there is a GRSDDEF statement for that system name in the appropriate GRSCNFxx parmlib member.

If this message appears because this system was part of the global resource serialization complex during a previous IPL, have the operator of an active global resource serialization system enter the VARY GRS(*sysname*),PURGE command. Then reply **JOIN** to message ISG009D.

NO ACTIVE GRS SYSTEM

Do one of the following:

- If no global resource serialization complex exists, but another system is starting one, wait until that system completes its initialization. Then reply **JOIN** to message ISG009D.
- If no global resource serialization complex exists, and you want this system to start one, reply **START** to message ISG009D.
- If there is an active global resource serialization system but this system does not have a functional CTC link to that active system, establish a CTC link to that system. Then reply **JOIN** to message ISG009D.

GRS DISRUPTION MAY BE IN PROGRESS

Do one of the following:

- If there is a global resource serialization complex but the ring has been disrupted or all of the systems in the complex are quiesced, wait until the global resource serialization ring is rebuilt. Enter a VARY GRS(ALL),RESTART command on one of the systems in the complex if necessary. Then reply **JOIN** or **TRYJOIN** to message ISG009D.
- If another system is IPLing but is not active yet, wait until that system is active and has issued message ISG004I. Then reply **JOIN** or **TRYJOIN** to message ISG009D.
- If there is an active global resource serialization system but this system does not have a functional CTC link to that active system, establish a CTC link to the system. Contact the system programmer for assistance if necessary. Then reply **JOIN** or **TRYJOIN** to message ISG009D.

System programmer response: If this system regularly issues message ISG006I with **NO ACTIVE GRS COMPLEX** appearing in the message text, see *z/OS MVS Planning: Global Resource Serialization* for information about the valid specifications of GRS parameters.

If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Global resource serialization

ISG007I

Module: ISGNRSP

Routing code: 2,10

Descriptor code: 12

ISG007I *fc-rc* ERROR PROCESSING GRS {START|JOIN|TRYJOIN|NONE} OPTION.

Explanation: This system encountered an error while processing the GRS system parameter.

In the message text:

fc-rc A function and reason code that identifies the error.

The function and reason codes are:

<i>fc</i>	<i>rc</i>	Explanation
80	08	The inclusion resource name list defined for this system is not the same as the one the global resource serialization complex is using.
80	0C	The exclusion resource name list defined for this system is not the same as the one the global resource serialization complex is using.
80	10	The RESERVE conversion resource name list defined for this system is not the same as the one the global resource serialization complex is using.
92		An error occurred while this system was trying to join the global resource serialization complex.
92	04	The join failed because the joining system could not communicate with the assisting system. This is probably because either no signalling paths were available or all available paths were busy.
92	08	The join failed probably because of either a ring disruption or the failure of the global resource serialization system helping this one to join the ring.
92	0C	A timeout occurred while this system was waiting for the assisting system to respond to the JOIN request. This is probably because of either a global resource serialization ring disruption, an error on the assisting system, or a very low failure detection interval for global resource serialization.
92	0F	The assisting system canceled the command. This is probably because it is already involved in another command to change the ring configuration.
A8		An error occurred while this system was trying to broadcast a message to other active global resource serialization systems.
A8	0C	The global resource serialization ring was disrupted before this system could finish broadcasting a message to other systems.
A8	10	This system is no longer an active global resource serialization system.
AE		An error occurred while a system was trying to add this system to the global resource serialization ring.
AE	0C	Either the system attempting to add this system is no longer an active global resource serialization system or the CTC between the two systems is no longer functional.
AE	24	Another system in the global resource serialization complex has the same system name as this system.
AE	48	Communication with the active system failed.
AE	4C	No working link could be found to the active system.
B4		An error occurred while this system was attempting to obtain the status of the other systems in the global resource serialization complex.
B8		An error occurred while this system was processing the GRS=START parameter.
Others		Diagnostic information that IBM might request.

System action: One of the following:

- If this system is part of a multisystem sysplex, the system issues message ISG167W and enters wait state X'0A3' with reason code X'004'.
- If the system is running in cross-system coupling facility (XCF) XCF-local mode or in a single system sysplex, this system issues message ISG009D to prompt the operator for a reply.

- If the global resource serialization ring was disrupted, global resource serialization issues messages ISG022E or ISG023E on the systems in the ring or issues messages ISG0177E or ISG178E to their system logs (SYSLOG).

This system writes a logrec data set error record and an SVC dump.

Operator response: Look at the function and reason code for an explanation of the problem. Make sure this system still has communication links to systems in the global resource serialization complex.

If the system issues message ISG009D, see the operator response for that message.

If the error occurred while the global resource serialization ring was disrupted, wait until one of the systems in the complex processes an submits a VARY GRS RESTART command. When the ring is rebuilt, reply **JOIN** to message ISG009D.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the logrec data set error record, the SVC dump, and the function and reason codes.

Source: Global resource serialization

Module: ISGNRSP

Routing code: 2,10

Descriptor code: 12

ISG008E SYNTAX ERROR IN GRSCNFxx - RECORD *nnnnnn text*

Explanation: *text* is one of the following:

TOLINT KEYWORD VALUE INVALID, TOLINT KEYWORD IGNORED

ACCELSYS KEYWORD VALUE INVALID

REJOIN(YES) NOT ALLOWED WITH RESTART(NO), REJOIN(YES) IGNORED

SYNCHRES KEYWORD VALUE INVALID, SYNCHRES KEYWORD IGNORED

GRSQ KEYWORD VALUE INVALID, GRSQ KEYWORD IGNORED

ENQMAXA KEYWORD VALUE NOT VALID, ENQMAXA KEYWORD IGNORED

ENQMAXU KEYWORD VALUE NOT VALID, ENQMAXU KEYWORD IGNORED

| MONITOR KEYWORD VALUE NOT VALID, MONITOR KEYWORD IGNORED

During initialization, global resource serialization found a syntax error in parmlib member GRSCNFxx.

In the message text:

xx The suffix of the GRSCNFxx parmlib member.

nnnnnn

The number of the record containing the syntax error.

TOLINT KEYWORD INVALID, TOLINT KEYWORD IGNORED

The value specified for the TOLINT keyword is incorrect. The TOLINT value, specified in seconds, must be greater than 0 and less than 86000 (24 hours).

ACCELSYS KEYWORD VALUE INVALID

The value specified for the ACCELSYS keyword is incorrect. The ACCELSYS value must be greater than 1 and less than 100.

REJOIN(YES) NOT ALLOWED WITH RESTART(NO), REJOIN(YES) IGNORED

REJOIN(YES) and RESTART(NO) are mutually incompatible and cannot be used in the same GRSCNFxx parmlib member.

GRSQ KEYWORD VALUE INVALID, GRSQ KEYWORD IGNORED

GRSQ must be CONTENTION, LOCAL, or ALL. The default of ALL will be used.

ENQMAXA KEYWORD VALUE NOT VALID, ENQMAXA KEYWORD IGNORED

ENQMAXA must be in the range of 250000 to 99999999.

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ENQMAXU KEYWORD VALUE NOT VALID, ENQMAXU KEYWORD IGNORED

ENQMAXU must be in the range of 16384 to 99999999.

AUTHQLVL KEYWORD VALUE NOT VALID, AUTHQLVL KEYWORD IGNORED

AUTHQLVL must be a decimal value of 1 or 2.

MONITOR KEYWORD VALUE NOT VALID, MONITOR KEYWORD IGNORED

MONITOR must be YES or NO.

System action: The system rejects the incorrect keyword or specification and initialization continues.

If the TOLINT keyword is incorrect, the system uses the default values set by either the system or the installation. It may take the system longer to detect an overdue ring-processing system authority (RSA) message.

If the ACCELSYS keyword is incorrect, the system issues messages ISG044I, ISG007I, and ISG009D.

System programmer response: Do the following:

- If the TOLINT keyword is incorrect, do one of the following:
 - Correct the error in GRSCNFxx and reIPL the system.
 - Remove the TOLINT keyword from GRSCNFxx if it is not needed and then reIPL the system.
- If the ACCELSYS keyword is incorrect, do one of the following:
 - Correct the error in GRSCNFxx and reIPL the system.
 - ReIPL the system using a different parmlib member.
 - Remove the ACCELSYS keyword from the GRSCNFxx parmlib member if you want the system to use the default value. Then reIPL the system.
- If you do not want to reIPL the system, have the operator reply **NONE** to message ISG009D.

Source: Global resource serialization

Module: ISGNCFP

Routing code: 2,10

Descriptor code: 4

ISG009D RELOAD SYSTEM OR REPLY *text*

Explanation: *text* is one of the following:

NONE

JOIN, OR START

JOIN, START, OR NONE

An error prevented this system from processing the GRS system parameter. See preceding message ISG005I, ISG006I, or ISG007I for information about the error.

System action: Processing stops until the operator replies to the message.

Operator response: ReIPL this system if that will correct the problem. For example, if an incorrect parmlib member was specified in reply to message IEA906A prompting for a GRS parmlib member, reIPLing the system will solve the problem.

See the operator response for accompanying message ISG005I, ISG006I, or ISG007I. Choose one of the following replies:

JOIN

To have this system try to join the global resource serialization complex without any dedicated global resource serialization channel-to-channel (CTC) devices.

START

To start an additional global resource serialization complex. However, you must first physically disable the CTCs between this system and any other system belonging to another global resource serialization complex. Make sure that this system does not share any resources with these systems.

NONE

To keep this system from participating in global resource serialization or to gain time to correct the error.

Before you reply **NONE**, reconfigure devices shared between this system and any others so that resources that were protected by global resource serialization are now protected by the configuration.

Source: Global resource serialization

Module: ISGNCBIM

Routing code: 1,10

Descriptor code: 2

ISG010E GLOBAL RESOURCE SERIALIZATION INOPERATIVE – ONLY LOCAL RESOURCE REQUESTS CAN BE PROCESSED

Explanation: If this message appears during system initialization, an error occurred while this system was processing the GRS system parameter. If the parameter was GRS=START, the error prevented this system from starting a global resource serialization complex. If the parameter was GRS=JOIN, the error prevented this system from joining the global resource serialization complex.

If this message appears after system initialization, an unrecoverable error occurred during global resource serialization processing.

System action: This system processes requests for local resources, but does not process requests for global resources. Tasks that request global resources wait indefinitely.

The system writes messages in the system logs of all active global resource serialization systems and of any systems that are restarting or joining the global resource serialization complex.

The system writes an SVC dump and a logrec data set error record.

System programmer response: If you want this system to continue processing using only local resources, no response is required. If you want this system to process global resource serialization requests, ask the operator to reIPL this system.

If the error recurs and the program is not in error, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the logrec data set error record and the SVC dump.

Source: Global resource serialization

Module: ISGBTC, ISGNAR

Routing code: 1,10

Descriptor code: 11

ISG011I SYSTEM *sysname* – text

Explanation: *text* is one of the following

RESTARTING GLOBAL RESOURCE SERIALIZATION

QUIESCING GLOBAL RESOURCE SERIALIZATION

BEING PURGED FROM GRS COMPLEX

JOINING GRS COMPLEX

System *sysname* is doing one of the following:

RESTARTING GLOBAL RESOURCE SERIALIZATION

System *sysname* is restarting global resource serialization processing in response to a VARY GRS(ALL),RESTART or VARY GRS(*sysname*),RESTART command on a global resource serialization system.

QUIESCING GLOBAL RESOURCE SERIALIZATION

System *sysname* is suspending global resource serialization in response to a VARY GRS(*sysname*),QUIESCE command entered on this system or another active system in the global resource serialization complex.

BEING PURGED FROM GRS COMPLEX

This system is removing system *sysname* from the global resource serialization complex in response to a VARY GRS(*sysname*),PURGE command on this system.

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JOINING GRS COMPLEX

This system is helping to bring system *sysname* into the global resource serialization complex and ring.

System action: The system continues processing the VARY command.

Source: Global resource serialization

Module: ISGCAJS

Routing code: *,2,10

Descriptor code: 4

ISG012I {RESTART|QUIESCE} REQUEST PASSED TO SYSTEM *sysname*

Explanation: An operator on a global resource serialization system entered the VARY GRS command with the RESTART or QUIESCE parameter. Another global resource serialization system must do part of the VARY command processing.

In the message text:

RESTART

The VARY command included the RESTART parameter.

QUIESCE

The VARY command included the QUIESCE parameter.

sysname

The name of the system that will do part of the VARY command processing.

System action: Processing continues.

Source: Global resource serialization

Module: ISGCQSC

Routing code: *,2,10

Descriptor code: 5

ISG013I SYSTEM *sysname* – *text*

Explanation: *text* is one of the following:

RESTARTED GLOBAL RESOURCE SERIALIZATION

QUIESCED GLOBAL RESOURCE SERIALIZATION

PURGED FROM GRS COMPLEX

The status of system *sysname* in the global resource serialization complex changed because system *sysname* did one of the following:

RESTARTED GLOBAL RESOURCE SERIALIZATION

System *sysname* resumed processing global resource requests and is now a member of the global resource serialization ring.

QUIESCED GLOBAL RESOURCE SERIALIZATION

System *sysname* suspended the processing of global resource requests and is no longer a member of the global resource serialization ring.

PURGED FROM GRS COMPLEX

System *sysname* is no longer a member of the global resource serialization complex.

System action: Processing continues.

Source: Global resource serialization

Module: ISGBTC

Routing code: *,2,10

Descriptor code: 4

ISG014I {JOIN | *command*} REQUEST [FOR | FROM SYSTEM *sysname*] REJECTED -*text*

Explanation: *text* is one of the following:

AN ACTIVE GRS SYSTEM EXISTS

COULD CAUSE RESOURCE INTEGRITY LOSS

DUPLICATE SYSTEM NAME

GLOBAL RESOURCE QUEUES WERE DAMAGED

GLOBAL RESOURCE SERIALIZATION INOPERATIVE

GLOBAL RESOURCE SERIALIZATION COMMAND PROCESSOR INOPERATIVE

MULTIPLE GRS COMPLEXES EXIST

NO LINK AVAILABLE

NO RESTARTABLE INACTIVE GRS SYSTEMS

ONLY ACTIVE GRS SYSTEM

REQUEST CANCELLED BY OPERATOR

SYSTEM ALREADY AN ACTIVE GRS SYSTEM

SYSTEM JOINING GRS COMPLEX

SYSTEM NOT AN ACTIVE GRS SYSTEM

SYSTEM NOT RESPONDING

SYSTEM REQUIRED IN GRS COMPLEX

SYSTEM RESTARTING GLOBAL RESOURCE SERIALIZATION

SYSTEM STILL AN ACTIVE GRS SYSTEM

SYSTEM UNKNOWN TO GLOBAL RESOURCE SERIALIZATION

THIS SYSTEM NOT AN ACTIVE GRS SYSTEM

One of the following occurred:

- The operator entered a VARY GRS command either on this system or on a system with a channel-to-channel (CTC) link to this system.
- Another system tried to join the global resource serialization complex to which this system belongs.

In the message text:

JOIN

A system tried to join the global resource serialization complex.

command

The command entered and rejected is one of the following:

- VARY
- VARY RESTART
- VARY QUIESCE
- VARY PURGE

{FROM|FOR} SYSTEM *sysname*

System *sysname* tried either to join the global resource serialization complex or process a VARY command.

AN ACTIVE GRS SYSTEM EXISTS

The VARY GRS(ALL),RESTART command is rejected because the complex already has one or more active global resource serialization systems.

ISG014I

COULD CAUSE RESOURCE INTEGRITY LOSS

This system's global resource queues are obsolete. Global resource serialization does not allow this system to restart global resource serialization on other systems or assist other systems in joining the global resource serialization complex.

DUPLICATE SYSTEM NAME

System *sysname* tried to join the global resource serialization complex or to restart global resource serialization processing, but *sysname* has the same name as a system that is already part of the complex.

GLOBAL RESOURCE QUEUES WERE DAMAGED

This system's global resource queues have been damaged, so global resource serialization does not allow this system to restart GRS processing on other systems or to assist other systems in joining the global resource serialization complex.

GLOBAL RESOURCE SERIALIZATION INOPERATIVE

This system specified the GRS=NONE system parameter, so it cannot process the VARY GRS command.

GLOBAL RESOURCE SERIALIZATION COMMAND PROCESSOR INOPERATIVE

An error prevents global resource serialization from processing the VARY GRS command.

MULTIPLE GRS COMPLEXES EXIST

System *sysname* has channel-to-channel (CTC) devices to one or more systems in two or more global resource serialization complexes. For example, *sysname* has CTC links to systems SYS01 and SYS03, but system SYS01 belongs to one global resource serialization complex and SYS03 belongs to another.

NO LINK AVAILABLE

Either this system was helping *sysname* join the global resource serialization complex, or *sysname* tried to restart GRS processing without a functional CTC link between this system and *sysname*.

NO RESTARTABLE INACTIVE GRS SYSTEMS

The VARY GRS(ALL),RESTART command cannot be processed because there are no inactive global resource serialization systems to be restarted by this system.

ONLY ACTIVE GRS SYSTEM

The operator entered the VARY GRS QUIESCE command. The command is rejected because this system is the only active global resource serialization system in the complex.

REQUEST CANCELLED BY OPERATOR

An operator cancelled the VARY GRS(*sysname*),PURGE command in response to messages ISG016I and ISG017D because *sysname* owns or is waiting for global resources.

SYSTEM ALREADY AN ACTIVE GRS SYSTEM

Either this system was helping *sysname* join the global resource serialization complex or *sysname* tried to restart GRS processing. However, *sysname* is already an active global resource serialization system.

SYSTEM JOINING GRS COMPLEX

The VARY GRS(*sysname*),RESTART command or the VARY GRS(*sysname*),PURGE command is rejected because system *sysname* is in the process of joining the global resource serialization complex.

SYSTEM NOT AN ACTIVE GRS SYSTEM

The VARY GRS QUIESCE command is rejected because the specified system is not an active global resource serialization system.

SYSTEM NOT RESPONDING

If **JOIN** also appears in the message text, this system was helping another system join the global resource serialization complex, but can no longer communicate with that system.

If **command FOR SYSTEM *sysname* REJECTED** also appears in the message text, the operator on this system entered the VARY GRS RESTART command, but this system cannot communicate with system *sysname*.

If **command FROM SYSTEM *sysname* REJECTED** also appears in the message text, *sysname* entered the VARY GRS RESTART command, and then this system lost communication with *sysname*.

SYSTEM REQUIRED IN GRS COMPLEX

The VARY GRS(*sysname*),QUIESCE command is rejected for *sysname*. The global resource serialization complex requires system *sysname* to maintain full connectivity; not every system has a CTC link to every other system. If *sysname* were quiesced, the remaining active global resource serialization systems could not form a global resource serialization ring because they do not have the necessary CTC links.

SYSTEM RESTARTING GLOBAL RESOURCE SERIALIZATION

The VARY GRS(*sysname*),PURGE command is rejected because *sysname* is in the process of restarting GRS.

SYSTEM STILL AN ACTIVE GRS SYSTEM

The VARY GRS(*sysname*),PURGE command is rejected because *sysname* is an active global resource serialization system.

SYSTEM UNKNOWN TO GLOBAL RESOURCE SERIALIZATION

If **JOIN** appear in the message text, this system received a request to help another system join the global resource serialization complex. However, this system does not recognize the system name.

If **VARY** appears in the message text, the system specified in the VARY command is not a global resource serialization system.

THIS SYSTEM NOT AN ACTIVE GRS SYSTEM

This system's status in the global resource serialization system complex changed from active to quiesced or inactive while this system was either:

- Helping another system join the global resource serialization complex
- Processing the VARY GRS command

System action: Global resource serialization rejects either the VARY command or a system's attempt to join the global resource serialization complex.

The system issues messages to the system logs (SYSLOG) of all active global resource serialization systems and of any systems that are restarting or joining the global resource serialization complex. The system writes a logrec data set error record.

Operator response: Do one of the following, depending on the message text:

GLOBAL RESOURCE QUEUES WERE DAMAGED

You must reIPL this system before it can perform restart processing after a disruption or assist another system into the ring.

SYSTEM UNKNOWN TO GLOBAL RESOURCE SERIALIZATION

If this message text appeared in response to a VARY GRS RESTART command and the specified system was previously removed from the complex by a VARY GRS PURGE command, reIPL the system with the GRS=JOIN parameter.

GLOBAL RESOURCE SERIALIZATION COMMAND PROCESSOR INOPERATIVE

If *sysname* is this system, you must reIPL this system before it can rejoin the ring.

If *sysname* is the name of another system, processing continues normally. However, if there was a ring disruption or if you want system *sysname* to bring another system into the ring, you must reIPL it.

Other

Enter the DISPLAY GRS command to confirm the information in this message text. If the information is correct and you can correct the problem, do so. Then reenter the VARY GRS RESTART command.

If the information in this message text is not consistent with the global resource serialization display or if you cannot correct the problem, notify the system programmer. If the system programmer requests it, obtain a stand-alone dump.

System programmer response: Find and correct the error. If the text of this message is not consistent with the global resource serialization display, determine which system is reporting incorrect information.

Do not enter global resource serialization commands on the system in error. Have the operator reIPL that system as soon as possible.

If the problem persists, leave the system in error out of the global resource serialization complex or reIPL each system in the global resource serialization complex.

If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, ask the operator to obtain a stand-alone dump. Contact the IBM Support Center providing the stand-alone dump and the logrec data set error record.

Source: Global resource serialization

Module: ISGCMDI

Routing code: *

ISG015I

Descriptor code: 5

ISG015I *fc-rc* ERROR DURING *option* [OF SYSTEM *sysname*]

Explanation: This system encountered an error while processing the VARY GRS command.

In the message text:

fc-rc The function and reason code

option The VARY GRS option being processed when the error occurred. *option* is one of the following:

- QUIESCE
- RESTART
- PURGE

OF SYSTEM *sysname*

The operator specified system *sysname* on the VARY GRS command or entered the VARY GRS(ALL),RESTART command.

The function codes and reason codes identify the error:

System action: Global resource serialization rejects the VARY GRS command.

This system writes a logrec data set error record and an SVC dump.

System programmer response: Look at the explanation for the function and reason codes in the message text. If you can, correct the error. Then ask the operator to reenter the command.

Otherwise, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the logrec data set error record and the SVC dump.

Source: Global resource serialization

<i>fc</i>	<i>rc</i>	Explanation
48		One of the resource name lists (RNLs) for this system is not identical to the RNL that the active global resource serialization systems are using.
48	08	This systems inclusion RNL is not the same as the one the global resource serialization complex is using.
48	0C	This systems exclusion RNL is not the same as the one the global resource serialization complex is using.
48	10	This systems RESERVE conversion RNL is not the same as the one the global resource serialization complex is using.
94		An error occurred while this system was attempting to bring another system into the global resource serialization ring.
94	14	A ring containing the target system could not be built.
A0		The error occurred while this system was trying to add another system to the global resource serialization ring.
A0	0C	This system could not communicate with the system it was trying to add to the global resource serialization ring.
A0	10	This system is no longer an active global resource serialization system.
A0	14	This system could not build a global resource serialization ring that includes the system to be restarted. A CTC link between the system to be restarted and another system in the complex might not be working.
A0	1C	The system being added has the same name as a system in the global resource serialization complex.
A0	48	Communication with the target system failed.
A0	4C	The link designated by the target system for this command could not be used. The target system's command has most likely failed.
A2		An error occurred while this system was trying to receive a buffer of information from an active global resource serialization system.
A2	0C	Either the system sending the data is no longer an active global resource serialization system, or the CTC link between the two systems is no longer working.
A2	10	This system is no longer an active global resource serialization system.
A2	14	The target system did not send the data within the established time limit.
A2	4C	The CTC link between this system and the system sending the data is no longer working.
A2	54	The target system did not send the data within the established time limit.
A4		An error occurred while this system was trying to send a buffer of data to some other global resource serialization system.

<i>fc</i>	<i>rc</i>	Explanation
A4	0C	Either the system receiving the data is no longer an active global resource serialization system, or the CTC link between the two systems is not working.
A4	10	This system is no longer an active global resource serialization system.
A4	14	The system receiving the data did not indicate that it received the data within the established time limit.
A4	4C	The CTC link between this system and the system receiving the data is no longer working.
A4	54	The system receiving the data did not indicate that it received the data within the established time limit.
A6		An error occurred while this system was attempting to remove a system from the global resource serialization complex.
A6	0C	The system being removed is no longer a global resource serialization system.
A6	10	This system is no longer an active global resource serialization system.
A6	1C	This system tried to remove a system that was still an active global serialization system.
A8		An error occurred while this system was trying to broadcast a message to other active global resource serialization systems.
A8	0C	The global resource serialization ring was disrupted before the broadcast was complete.
A8	10	This system is no longer an active global resource serialization system.
A8	14	This system broadcasted the message but received no response within the established time limit.
A8	54	This system broadcasted the message but received no response within the established time limit.
AA		An error occurred while this system was trying to send a command to an active global resource serialization system.
AA	0C	Either the system to which the command was sent is no longer an active global resource serialization system or the CTC link between the two systems is no longer working.
AA	10	This system is no longer an active global resource serialization system.
AA	14	This system sent the command but received no response within the established time limit.
AA	4C	The CTC link between this system and the system receiving the command is no longer working.
AA	54	This system sent the command but received no response within the established time limit.
AC		An error occurred while a system was trying to remove this system from the global resource serialization ring.
AC	0C	Either the system trying to remove this system is no longer an active global resource serialization system or the CTC link between the two systems is no longer working.
AC	10	This system is no longer an active global resource serialization system.
AC	14	This system sent the command but received no response within the established time limit.
AC	4C	The CTC link between this system and the system trying to remove this system is no longer working.
AC	54	This system sent the command but received no response within the established time limit.
AE		An error occurred while a system was trying to add this system to the global resource serialization ring.
AE	0C	Either the system attempting to add this system is no longer an active global resource serialization system, or the CTC link between the two system is no longer working.
AE	14	This system sent the command but received no response within the established time limit.
AE	20	An active global resource serialization system encountered an error while trying to add this system to the ring.
AE	24	Another system in the global resource serialization complex has the same system name as this system.
AE	28	The command requested that this system be added to the ring, but this system is already in the ring.
AE	48	Communication with the active system failed.
AE	4C	No working link could be found to the active system.
AE	54	This system sent the command but received no response within the established time limit.
AE	70	An active global resource serialization system encountered an error while trying to add this system to the ring. A second active global resource serialization system was chosen, and the second system also encountered an error while trying to add this system to the ring.
AE	78	This command was cancelled to allow a command from another system to be processed.
B0		An error occurred while this system was trying to restart an inactive or quiesced global resource serialization system.
B0	0C	The CTC link between the two systems is no longer working.
B0	10	This system is no longer an active global resource serialization system.
B0	14	This system sent the command but received no response within the established time limit.
B0	24	Another system in the global resource serialization complex has the same system name as the system being restarted.
B0	48	Communication with the inactive or quiesced system failed.
B0	4C	No working link could be found to the inactive or quiesced system.
B0	54	This system sent the command but received no response within the established time limit.
B8	10	This system cannot communicate with other global resource serialization systems.
B9	10	This system cannot communicate with other global resource serialization systems.

ISG016I • ISG017D

<i>fc</i>	<i>rc</i>	Explanation
BA		An error occurred while this system was trying to remove a system from the global resource serialization ring.
BA	0C	Either the system being removed is no longer an active global resource serialization system or the CTC link between the two systems is no longer working.
BA	10	This system is no longer an active global resource serialization system.
BA	14	This system attempted to remove a system that is required in the global resource serialization ring. The active global resource serialization systems that would remain do not have the CTC links needed to build a global resource serialization ring.
BA	18	This system attempted to remove itself from the global resource serialization ring.
BA	4C	The CTC link between this system and the system being removed is no longer working.
Others		Information that IBM might request for diagnosis.

Module: ISGCPRG, ISGCQSC, ISGCRST, ISGCXPG, ISGCMDR, ISGCQMRG

Routing code: *,2,10

Descriptor code: 4,5

ISG016I SYSTEM *sysname* OWNS OR IS WAITING FOR GLOBAL RESOURCES

Explanation: The operator entered a VARY GRS(*sysname*),PURGE command, but *sysname* owns or is waiting for global resources and cannot be purged.

System action: The system issues message ISG017D.

Operator response: See the operator response for message ISG017D.

Source: Global resource serialization

Module: ISGCPRG

Routing code: *

Descriptor code: 5

ISG017D CONFIRM PURGE REQUEST FOR SYSTEM *sysname* – REPLY NO OR YES

Explanation: The operator entered a VARY GRS(*sysname*),PURGE command. The system cannot process the command because system *sysname* owns or is waiting for global resources. This message prompts the operator to confirm that *sysname* should be purged.

System action: The system waits for the operator to reply.

Operator response: Choose one of the following replies:

NO To cancel the VARY GRS(*sysname*),PURGE command if any programs on system *sysname* are using any global resources.

YES

To confirm that system *sysname* be purged from the global resource serialization complex. Reply **YES** if no requestors from *sysname* are using global resource serialization.

If you reply **YES** when requestors from *sysname* are using global resources, resource integrity loss can occur because when *sysname* is purged, the global resources that it owns are made available to other systems in the global resource serialization complex.

Source: Global resource serialization

Module: ISGCPRG

Routing code: *

Descriptor code: 2

ISG018I **REQUESTORS FROM SYSTEM *sysname* HAVE BEEN PURGED FROM RESOURCE NAMED *qname,rname***

Explanation: The operator entered a VARY GRS(*sysname*),PURGE command. Global resource serialization identified the tasks on *sysname* that were enqueued on a global resource and has dequeued those tasks from the resource.

In the message text:

qname The major name of the resource.

rname The first 24 bytes of the minor name of the resource. Because the *rname* field includes only the first 24 bytes of the resource minor name, the message text might identify a group of resources.

System action: Processing continues.

System programmer response: Determine whether any integrity loss occurred on resource *qname,rname*, and correct it if necessary. The resource may be damaged if one of the following occurred:

- When the operator entered the VARY GRS(*sysname*),PURGE command, *sysname* owned or was waiting for global resources.
- This system issued messages ISG016I and ISG017D.
- The operator replied **YES** to message ISG017D while requestors from *sysname* were still using global resources. This reply allowed *sysname* to be purged from the global resource serialization complex.
- As part of purge processing, global resources that *sysname* owned and was still using were made available to other global resource serialization systems.
- A requestor on another global resource serialization system began using resources that *sysname* was still using.

Source: Global resource serialization

Module: ISGCPRG

Routing code: 10

Descriptor code: 4

ISG021I *fc-rc* **ERROR IN GLOBAL RESOURCE SERIALIZATION FUNCTION**

Explanation: An error occurred during global resource serialization processing. The function and reason codes, *fc-rc*, identify the error.

fc-rc is one of the following:

<i>fc</i>	<i>rc</i>	Explanation
00	<i>xx</i>	This system encountered an error that caused a global resource serialization ring disruption.
00	08	Incorrect data was detected in the received RSA message. This error might come from a data transmission error between global resource serialization systems or from a software error on any one of the systems in the global resource serialization complex. The global resource serialization ring will be disrupted. The request that was received in error will be resent by The originating system. If the request is still not valid (that is, if the error was not due to transmission failure), the abend may recur. A recurring abend indicates that one of the systems in the complex is seriously damaged.
01	<i>xx</i>	An error occurred while global resource serialization was processing a VARY <i>dev</i> ,OFFLINE or VARY <i>dev</i> ,ONLINE command. <i>dev</i> is the device number for a global resource serialization channel-to-channel (CTC) device.
02	<i>xx</i>	This system encountered an error that caused a global resource serialization ring disruption.
09	09	An error condition was detected in the received RSA message. The data received does not correspond to the data previously sent from the output RSA message. The global resource serialization ring will be disrupted and the RSA data for the detecting system will be resent by the originating system. If the data being sent is changed unexpectedly in transit through the ring, the abend will recur. A recurring abend indicates that one of the systems in the complex is seriously damaged.
Others		Diagnostic information that IBM might request.

System action: The system writes a logrec data set error record and an SVC dump.

The system may issue message ISG022E or ISG177E. The global resource serialization ring may be disrupted.

If the function and reason code is 01-*xx*, the VARY command processing should complete normally, but the status of

ISG022E

the global resource serialization control blocks describing this CTC device is uncertain.

The system may try again to process the VARY command.

System programmer response: Look at the function and reason code for an explanation of the problem.

If you cannot solve the problem, or if the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the function and reason code in the message text, the SVC dump, and the logrec data set error record.

Source: Global resource serialization

Module: ISGBTC

Routing code: 2,10

Descriptor code: 4

ISG022E **SYSTEM** *sysname* **DISRUPTED GLOBAL RESOURCE SERIALIZATION DUE TO {COMMUNICATION | SOFTWARE} FAILURE - GLOBAL RESOURCE REQUESTORS WILL BE SUSPENDED**

Explanation: An error caused this system to disrupt the global resource serialization ring. All active global resource serialization systems, including this system, become inactive global resource serialization systems.

In the message text:

sysname

The name system that disrupted the global resource serialization ring.

COMMUNICATION FAILURE

A channel-to-channel (CTC) device failed. Preceding message ISG046E identifies the CTC.

SOFTWARE FAILURE

There is a logic problem in this system's global resource serialization processing. Preceding message ISG021I or ISG046E identifies the error.

System action: Message ISG022E or ISG023E appears on each of the systems that became inactive global resource serialization systems as a result of this error. An inactive global resource serialization system suspends any task that attempts to obtain or release global resources.

The system writes an SVC dump and a logrec data set error record.

Operator response: Consult the system programmer and the operators on the other global resource serialization systems **before** taking any recovery action. See the operator response to message ISG023E.

If **COMMUNICATION FAILURE** appears in the message text, find the device associated with the problem by doing one of the following:

- Look for preceding message ISG046E to identify the failing CTC.
- Enter the DISPLAY U command for the device associated with the problem. If you have not identified the failing device, enter the DISPLAY U command for a number of devices. Pick the starting device number for the command from the device numbers in the configuration path chart.

System programmer response: Help the operators on global resource serialization systems decide how to rebuild the global resource serialization ring. See the explanation for message ISG023E.

If this system does not become an active global resource serialization system when the global resource serialization ring is rebuilt, ask the operator on one of the active global resource serialization systems to purge this system by entering the VARY GRS(*sysname*),PURGE command, where *sysname* is the name of this system. Then correct the error and reIPL this system.

If the program is not in error, and the error recurs, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Global resource serialization

Module: ISGBTC

Routing code: 1,10

Descriptor code: 11

ISG023E GLOBAL RESOURCE SERIALIZATION DISRUPTED – GLOBAL RESOURCE REQUESTORS WILL BE SUSPENDED

Explanation: The global resource serialization ring was disrupted. Possible causes include:

- A channel-to-channel link (CTC) between two global resource serialization systems failed.
- A software error in global resource serialization processing on one of the global resource serialization systems.
- The operator on one of the active global resource serialization systems stopped the system without first entering the VARY GRS QUIESCE command.

System action: All active global resource serialization systems, including this one, become inactive global resource serialization systems. An inactive global resource serialization system suspends any task that attempts to obtain or release global resources.

The system issues message ISG022E if a CTC failed or a software error occurred on one of the global resource serialization systems.

Each system in the ring that specified RESTART=YES in its GRSDDEF statement automatically enters the VARY GRS(ALL),RESTART command. However, only one of those systems actually performs the restart. The first system to receive permission to rebuild the ring from more than half the systems that were in the ring is the system that does the restart.

When that system has received permission from more than half the systems that were in the ring, it becomes an active global resource serialization system, issues message ISG024I, and attempts to rebuild the ring.

The system writes a logrec data set error record and an SVC dump.

Operator response: If one of the systems is automatically rebuilding the global resource serialization ring and issues message ISG024I, allow automatic restart processing to complete. If any of the systems that were in the ring do not become active global resource serialization system, notify the system programmer.

If none of the systems issues message ISG24I to indicate that it is rebuilding the ring, do the following:

- Before beginning recovery procedures, consult the system programmer and the operators on the other global resource serialization systems to coordinate recovery actions. Failure to coordinate recovery can cause resource damage.
- Enter the DISPLAY GRS command on as many systems as necessary to find out which global resource serialization systems can communicate with other global resource serialization systems. If a system in the display has **NO** in the **COMM** column, that system cannot communicate with the system where the command was entered.
- Ask the system programmer to help choose which system to rebuild the ring from using the VARY GRS(ALL),RESTART command. Consider the following:
 - Do not enter the command on a system that is unable to communicate with other global resource serialization systems unless you are rebuilding a ring with only two systems.
 - Wait until command processing completes before you enter the command again.
 - Wait until command processing completes on one system before entering the command on another system.

System programmer response: If none of the systems that were in the global resource serialization ring start rebuilding the ring, help the operator choose the system to restart the ring from. Consider the following:

- Choose the same system you would select if you could have only one active global resource serialization system. Then, if the RESTART is only partially successful and only the one system becomes active, that system could use both the global resources it owned at the time of the error and the ones not owned by any system.
- Choose the system that can communicate with the greatest number of other global resource serialization systems.

If the global resource serialization ring is rebuilt successfully, but one or more global resource serialization systems do not become active global resource serialization systems, do the following for each of those systems:

1. Make sure that the CTCs, including the alternate CTCs, the system was using for global resource serialization processing are enabled.
2. Identify an active global resource serialization system that can communicate with the system that did not become active. Ask the operator of the active system to enter the VARY GRS(*sysname*),RESTART command, where *sysname* is the name of the active or quiesced system.

ISG024I • ISG025E

If the system's global resource serialization status is quiesced, you can also use the VARY GRS(*),RESTART command.

If the system becomes an active global resource serialization system when the VARY GRS RESTART command is processed, no further action is needed.

3. If the system still does not become an active global resource serialization system, ask the operator on one of the active global resource serialization systems to enter the VARY GRS(*sysname*),PURGE command for the system. Then correct the problem and reIPL it.

Source: Global resource serialization

Module: ISGBTC

Routing code: 1,10

Descriptor code: 11

ISG024I SYSTEM *sysname* INITIATED AUTO RESTART PROCESSING

Explanation: The global resource serialization ring was disrupted and system *sysname* is automatically rebuilding the global resource serialization ring.

System action: Processing continues.

Source: Global resource serialization

Module: ISGCRST

Routing code: *,2,10

Descriptor code: 4

ISG025E SYSTEM *sysname1* UNABLE TO INITIATE AUTO RESTART PROCESSING - *text*

Explanation: *text* is one of the following:

THIS SYSTEM IS NOT AUTHORIZED

PERMISSION GRANTED TO SYSTEM *sysname2*

AN ACTIVE GRS SYSTEM EXISTS

NOT ENOUGH RESPONDING GRS SYSTEMS

SYSTEM ERROR

The global resource serialization ring has been disrupted. This system, *sysname1*, is unable to automatically rebuild the disrupted ring. The reason *sysname1* cannot rebuild the ring is shown in the message text:

THIS SYSTEM IS NOT AUTHORIZED

This system's GRSDEF statement in the GRSCNFxx parmlib member specifies RESTART=NO.

PERMISSION GRANTED TO SYSTEM *sysname2*

This system gave permission to *sysname2* to automatically rebuild the ring.

AN ACTIVE GRS SYSTEM EXISTS

At least one of the systems that was in the disrupted ring is already active and is rebuilding the ring.

NOT ENOUGH RESPONDING GRS SYSTEMS

This system cannot communicate with at least half of the systems that belong to the disrupted global resource serialization ring.

SYSTEM ERROR

A system error occurred. Other messages appearing before or after this message describe the error.

System action: This system, *sysname1*, continues to be an inactive global resource serialization system. If *sysname1* has a working channel to channel (CTC) link to other systems that were in the ring and one of those systems becomes active, *sysname1* then becomes a quiesced global resource serialization system.

sysname suspends any task that attempts to obtain global resources.

Operator response: If AN ACTIVE GRS SYSTEM EXISTS appears in the message text, or if message ISG024I

appears on any of the systems in the disrupted global resource serialization ring, another system is already rebuilding the ring. Let the restart processing complete. Restart processing is complete when the system rebuilding the ring issues message ISG013I or ISG015I for each of the systems that were in the ring.

If none of the other systems is rebuilding the ring, either you or the operator on one of the other global resource serialization systems must enter the VARY GRS(ALL),RESTART command. See the operator response for message ISG023E.

System programmer response: See the system programmer response for message ISG023E.

Source: Global resource serialization

Module: ISGBRF

Routing code: *,1,10

Descriptor code: 11

ISG026I **SYSTEM *sysname* MAY CREATE A SPLIT RING IF ANY OTHER GRS SYSTEM IS ACTIVE. VERIFY THAT NO GRS SYSTEM IS ACTIVE BEFORE CONFIRMING RESTART.**

Explanation: The operator entered the VARY GRS(*sysname*),RESTART command to restart a global resource serialization ring. Global resource serialization processing determined that *sysname* will restart as a ring of one because the current global resource serialization complex is in one of the following states:

1. There are no other active or restarting systems in the complex, and restarting system *sysname* is safe.
2. There is another active or restarting system in the complex, but system *sysname* cannot communicate with it and does not know about it. This split-ring condition may cause a resource integrity exposure requiring you to reIPL the system.

System action: The system issues message ISG027D and waits for the operator to reply.

Operator response: See the operator response for message ISG027D.

Source: Global resource serialization

Module: ISGCRST

Routing code: *

Descriptor code: 5

ISG027D **CONFIRM RESTART-RING FOR SYSTEM *sysname* - REPLY NO OR YES**

Explanation: The operator entered the VARY GRS(*sysname*),RESTART command to restart the global resource serialization ring. The system issued message ISG026I to inform the operator that *sysname* will restart as a ring of one. This message asks the operator to confirm that *sysname* should be restarted.

System action: The system waits for the operator to reply.

Operator response: Consult with the system programmer to determine the condition of the global resource serialization complex and decide on a reply.

Choose one of the following replies:

YES

If no other systems are active or restarting to allow *sysname* to restart as a ring of one. Then, restart the other inactive global resource serialization systems according to your installation's guidelines.

NO To cancel the VARY GRS(*sysname*),RESTART command if there are other systems in the complex that have restarted and become active or are in the process of restarting. This avoids a split-ring condition. Then make sure that the channel-to-channel (CTC) devices are functional to an active system. Try restarting *sysname* again by entering the command on either the active system or on *sysname*.

System programmer response: Consult with the operator to determine the condition of the global resource serialization complex.

Source: Global resource serialization

Module: ISGCRST

Routing code: *

Descriptor code: 2

ISG028E SYSTEM *sysname* UNABLE TO INITIATE AUTO REJOIN PROCESSING - GRS DISRUPTION IN PROGRESS

Explanation: This system was trying to rejoin the global resource ring through the auto-rejoin processing, but the attempt failed. The active ring that this system is trying to join is disrupted.

System action: The auto-rejoin failed. The system becomes quiesced.

Operator response: Either enter the VARY GRS(ALL),RESTART command to rebuild the ring.

Source: Global resource serialization

Module: ISGCRST

Routing code: 1,10

Descriptor code: 11

ISG030E ENQ/DEQ CONTROL BLOCKS WERE DAMAGED, GLOBAL REQUESTS LOST

Explanation: The ENQ/DEQ control blocks contained incorrect data. ENQ or DEQ requests for global resources might have been lost. These requests did not complete, and any tasks waiting for these requests will not be posted.

System action: The system repairs the resource queues and in the process might delete one or more control blocks. The system writes a logrec data set error record. The system continues to process subsequent requests

Operator response: Contact your System Programmer.

System programmer response: Lost ENQ/DEQ requests can cause hangs in critical tasks, which might require you to recycle the affected tasks or subsystems, or IPL the affected system.

Source: Global resource serialization

Module: ISGBFRCV

Routing code: 1,10

Descriptor code: 11

ISG031E ENQ/DEQ CONTROL BLOCKS WERE DAMAGED, RESTORATION ATTEMPTED

Explanation: The ENQ/DEQ control blocks on the resource queues contained incorrect data. The current ENQ or DEQ request did not complete correctly.

If the system is running in a GRS ring, other systems that try to IPL into the ring may fail with ISG014I JOIN REQUEST FROM SYSTEM *sysname* REJECTED - GLOBAL RESOURCE QUEUES WERE DAMAGED. Systems that try to restart after a global resource serialization ring disruption may fail with a wait state X'0A3' reason code X'70'.

System action: The system repairs the resource queues and might, in the process, delete one or more control blocks.

If the task that encountered the error was processing an ENQ request, the system ends the task with abend code X'738'. If the task was processing a DEQ request, the system ends the task with abend code X'730'.

Any subsequent tasks that issue ENQ requests for resources associated with the damaged control blocks will end with abend code X'838'.

The system processes subsequent DEQ requests.

The system writes a logrec data set error record.

Operator response: See the operator response for abend code X'730', X'738', or X'838'.

System programmer response: See the system programmer response for abend code X'730', X'738', or X'838'.

Source: Global resource serialization

Module: ISGCMDR, ISGGADMN, ISGRVER

Routing code: 1,10

Descriptor code: 11

ISG032E RESOURCE NAMED *qname,rname* MAY BE DAMAGED

Explanation: An error described in preceding message ISG033E or ISG034I may have damaged a resource. This message appears for each resource over which the failed task has exclusive control.

In the message text:

qname The 8 byte major name of the resource.

rname The first 24 bytes of the minor name of the resource. Because the *rname* field includes only the first 24 bytes of the resource minor name, the message text might identify a group of resources.

System action: The system issues a DEQ macro to remove resource *qname,rname* from control of the failed task and resets the step-must-complete status. Other processing continues.

System programmer response: Determine whether resource *qname,rname* was damaged and correct if necessary.

Source: Global resource serialization

Module: ISGCMDR

Routing code: 1,10

Descriptor code: 3

ISG033E {*jjj sss* | UNIDENTIFIED TASK} {JS | ST} FAILED WHILE IN MUST COMPLETE STATUS

Explanation: A jobstep task or subtask failed while operating in step-must-complete status.

In the message text:

jjj
The name of the job associated with the failing job step task or subtask.

sss
The name of the step associated with the failing job step task or subtask.

UNIDENTIFIED TASK

The system cannot identify the job or step name associated with the failing job step task or subtask.

JS The failing task was a job step task.

ST The failing task was a subtask.

System action: The system issues message ISG032E to identify each resource over which the failed task had exclusive control. The system resets the step-must-complete status.

The system writes an ABEND dump.

Operator response: Notify the system programmer that a step-must-complete task failed.

System programmer response: Locate the task that failed while operating in step-must-complete status. Correct the error and run the job again.

If the error recurs and the program is not in error, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the ABEND dump.

Source: Global resource serialization

Module: ISGCMDR

Routing code: 1,10

Descriptor code: 11

ISG034I {JS|ST} FAILED WHILE IN 'STEP MUST COMPLETE' STATUS DUE TO {ucde|scde}

Explanation: Either a job step task or a subtask failed while operating in step-must-complete status.

In the message text:

JS The failing task was a job step task

ST The failing task was a subtask

ucde

The user completion code identifies the error

scde

The abend code identifies the error

System action: The system issues message ISG032E to identify each resource over which the failed task had exclusive control. The system resets the must-complete status.

The system issues an ABEND dump.

System programmer response: Locate the task that failed while operating in step-must-complete status to determine the cause of the failure. Correct the error and run the job again.

See the system programmer response for the abend code.

If the error recurs and the program is not in error, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the ABEND dump and the program listing for the job.

Source: Global resource serialization

Module: ISGCMDR

Routing code: 11

Descriptor code: 4

ISG035E FAILURE REQUIRES DUMP OF ASID *asid1,asid2* AND *asid3*

Explanation: A task in address space *asid1* failed while holding resources being used by a task in address space *asid2*. The task in *asid2* continued to use the resource despite the failure. *asid3* is the global resource serialization address space.

System action: The system continues processing.

Operator response: If requested by the system programmer, obtain a stand-alone dump. Make sure to dump address spaces *asid1*, *asid2*, and *asid3d*. *asid1* may have been dumped already. All three address spaces named in the message should be dumped because they may have data needed to determine why the task in *asid2* continues to use the resources. Notify the system programmer.

System programmer response: If the error recurs and the program is not in error, search problem reporting databases for a fix for the problem. If no fix exists, ask the operator to obtain a stand-alone dump. Contact the IBM Support Center. Provide the stand-alone dump.

Source: Global resource serialization

Module: ISGCMDR

Routing code: 1,10

Descriptor code: 3

ISG036I RSA NOT RECEIVED FROM SYSTEM *sysname* WITHIN EXPECTED TIME LIMIT. LAST RSA RECEIVED WAS #nnnnnnnn.

Explanation: This system did not receive a ring system authority (RSA) from system *sysname* within the expected time interval. Therefore, all global resource serialization systems that are active (including the system that received this message) become inactive.

In the message text:

sysname

The name of the system that was to send the RSA.

nnnnnnnn

The sequence number of the last RSA received by the system that received this message.

System action: Message ISG023E appears on each system that became inactive. An inactive global resource serialization system suspends tasks that attempt to obtain or release global resources.

Operator response: Consult the system programmer and operators on other global resource serialization systems before taking any recovery action. See the operator response for message ISG023E.

System programmer response: Help operators on global resource serialization systems decide how to rebuild the global resource serialization ring. See the explanation for message ISG023E.

If no problem is found on either system *sysname* or any other active system in the global resource serialization complex, and if this problem recurs, increase the amount of time that global resource serialization waits for the RSA. Global resource serialization uses the lower of the following values to determine how long to wait for an RSA:

- The value specified on the TOLINT keyword in the GRSCNFxx parmlib member. To change TOLINT, change the value in GRSCNFxx and then reIPL.
- The sysplex failure detection interval. To change the sysplex failure detection interval, either use the SETXCF COUPLE command or change the value in parmlib and then reIPL.

Source: Global resource serialization

Module: ISGXSTAX

ISG043I GRSCNFxx CANNOT BE READ.

Explanation: An I/O error prevented the system from reading the GRSCNFxx parmlib member.

In the message text:

xx The suffix of parmlib member GRSCNFxx.

System action: The system stops processing GRSCNFxx. The system does one of the following:

- Issues message ISG166W and enters wait state X'0A3' with reason code X'0C'
- Issues messages ISG007I and ISG009D to prompt the operator for a reply

Operator response: If this system should be part of the global resource serialization complex, reIPL this system after the system programmer corrects the I/O error or reIPL with a different GRSCNFxx parmlib member.

See the operator response for message ISG009D, if issued.

System programmer response: Help the operator respond to message ISG009D. Correct the problem causing the I/O error.

If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Global resource serialization

Module: ISGNCNFP

Routing code: 2,10

Descriptor code: 12

ISG044I SYNTAX ERROR IN GRSCNFxx - RECORD *nnnnnn*

Explanation: The system was reading a record from the GRSCNFxx parmlib member when it recognized a syntax error.

In the message text:

xx The suffix of the GRSCNFxx parmlib member.

RECORD *nnnnnn*

Identifies the record relative to the beginning of the GRSCNFxx parmlib member.

ISG045I

If **RECORD** *nnnnnn* is one greater than the number of records in GRSCNFxx, either there is no usable GRSDEF statement for this system or the last GRSDEF statement is missing a required keyword.

If **RECORD** *nnnnnn* identifies a valid record containing the GRSDEF keyword, the previous GRSDEF statement is missing a required keyword.

System action: The system stops processing parmlib member GRSCNFxx. If the system is running in a sysplex, global resource serialization issues message ISG166W and enters wait state X'0A3' with reason code X'0C'. Otherwise, the system issues message ISG009D and waits for the operator to respond.

Operator response: If this system should be part of the global resource serialization complex, reIPL this system after you correct the error in the GRSCNFxx parmlib member or reIPL with a different GRSCNFxx parmlib member.

See the operator response for message ISG009D, if issued.

System programmer response: Correct the syntax error.

Source: Global resource serialization

Module: ISGNCNFP

Routing code: 2,10

Descriptor code: 12

ISG045I ERROR IN GRSCNFxx, DEVICE dev {NOT A CTC|NOT A SUPPORTED CTC|ALREADY IN USE}

Explanation: Global resource serialization found an error in the GRSCNFxx parmlib member.

In the message text:

GRSCNFxx

The parmlib member with an error. *xx* is the suffix for the parmlib member.

dev The device number specified incorrectly in the GRSCNFxx parmlib member.

d1 NOT A CTC

d1 GRSCNFxx specified channel-to-channel (CTC) device *dev*, but the device is not defined as a CTC device.

d1 NOT A SUPPORTED CTC

d1 GRSCNFxx specified channel-to-channel (CTC) device *dev*, but the device is not a CTC device supported by d1 GRS.

ALREADY IN USE

Either GRSCNFxx specifies a CTC device that some other subsystem is already using, or GRSCNFxx specifies the same CTC device more than once on a single GRSDEF statement.

System action: Depending on the message text, the system does the following:

d1 NOT A CTC

d1 The system issues message ISG089D and waits for an operator response.

d1 NOT A SUPPORTED CTC

d1 The system issues message ISG089D and waits for an operator response.

ALREADY IN USE

If this system is part of a sysplex, the system issues message ISG087D.

If the system is not part of a sysplex, the system issues message ISG007I and ISG009D.

Operator response: If this system issued message ISG009D and should be part of the global resource serialization complex, reIPL this system after correcting the error in GRSCNFxx or reIPL using a different GRSCNFxx parmlib member.

If the system issues message ISG087D, follow the operator response for that message.

If the system issued message ISG009D, and you want this system to continue without global resource serialization, reconfigure any shared devices so that resources that would be protected by global resource serialization are protected by the configuration instead. Reply **NONE** in response to message ISG009D.

Source: Global resource serialization

Module: ISGBTC, ISGNCNFP

Routing code: 2,10

Descriptor code: 12

ISG046E CTC *dev* DISABLED DUE TO {HARDWARE|SOFTWARE} ERROR CODE=*rc*

Explanation: This system tried to use a channel-to-channel (CTC) device for global resource serialization, but the CTC was disabled.

In the message text:

dev

The device number for the disabled CTC.

HARDWARE

There was a hardware problem in CTC *dev*.

SOFTWARE

A software problem damaged the global resource serialization control blocks that control CTC *dev*.

CODE=*rc*

The reason code identifies the error.

The reason code is one of the following:

Reason Code

Explanation

01	A software error has occurred. This code is provided for IBM diagnostic purposes only.
02	A software error has occurred. This code is provided for IBM diagnostic purposes only.
03	A software error has occurred. This code is provided for IBM diagnostic purposes only.
05	CTC write error.
06	A software error has occurred. This code is provided for IBM diagnostic purposes only.
07	CTC read error.
08	A software error has occurred. This code is provided for IBM diagnostic purposes only.
09	A software error has occurred. This code is provided for IBM diagnostic purposes only.
d1 10	Paths were temporarily lost to the device. This may be due to a loss of light condition.
0B	The CTC driver could not use the CTC because there were no paths to the device.
20	A software error has occurred. This code is provided for IBM diagnostic purposes only.
21	A software error has occurred. This code is provided for IBM diagnostic purposes only.
22	A software error has occurred. This code is provided for IBM diagnostic purposes only.
23	A software error has occurred. This code is provided for IBM diagnostic purposes only.
24	A software error has occurred. This code is provided for IBM diagnostic purposes only.
27	IBM internal error.
2C	A software error has occurred. This code is provided for IBM diagnostic purposes only.

System action: Global resource serialization processing ignores any data it receives on CTC *dev* and stops sending data through CTC *dev*. If the error is the result of a hardware error, global resource serialization processing enters the VARY *dev*,OFFLINE command for the CTC. If CTC *dev* was in use at the time the error occurred, the global resource serialization ring might be disrupted.

The system writes messages in the system logs (SYSLOG) of all active global resource serialization systems and of any systems that are restarting or joining the global resource serialization complex. The system might write a logrec data set error record and an ABEND dump.

d1 For return code X'10', the device is not varied offline so that the system can detect when paths become available

ISG047I

d1 again. Like other hardware errors this may result in a ring disruption. The system will utilize the device once the d1 paths are restored.

Operator response: If this message is accompanied by message IOS071I indicating a missing channel and device end, then notify the system programmer.

If the message text indicates a hardware error and the reason code is X'05' or X'07', the problem might be caused by another system in the global resource serialization ring. With the reason code of X'05', the problem might be caused by the device being configured as an SCTC, which GRS cannot use. If the message text indicates a hardware error and the reason code is X'0B', the configuration might be wrong. Make sure that all required channels are varied online and that your system was initialized with the correct GRSCNF parameter.

For other occurrences of message ISG046E, contact hardware support.

After the hardware error is corrected, enter a VARY *dev*,ONLINE command to make the CTC enabled for use by global resource serialization.

For other reason codes, notify the system programmer.

System programmer response: If the reason code is X'05', check to see if the device is configured as a BCTC. If the device is configured as a SCTC, GRS cannot use it. If possible, try to reconfigure the device as a BCTC.

If this message is accompanied by message IOS071I indicating a missing channel and device end, check for correct specification of MIH value for the CTC device. If this value is correct, the problem is caused by a system failure of another system in the global resource serialization ring such as disabled spin loop, wait state, or machine check. Investigate the cause of the failure of the other system. If the error recurs and the program is not in error, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the logrec data set error record and the ABEND dump, if available.

Source: Global resource serialization

Module: ISGBTC

Routing code: 1,10

Descriptor code: 11

ISG047I CTC *dev* {ENABLED | DISABLED}

Explanation: A channel-to-channel (CTC) device is either enabled or disabled.

dev

The device number of the CTC.

ENABLED

CTC *dev* is enabled and available for global resource serialization use. Either an operator or global resource serialization entered a VARY *dev*,ONLINE command. Global resource serialization might have entered the command because the system at the other end of the CTC is trying to join the global resource serialization complex.

DISABLED

CTC *dev* is disabled and no longer available for global resource serialization use. Either an operator or global resource serialization processing entered a VARY *dev*,OFFLINE command. Global resource serialization might have entered the command because of an I/O error.

System action: Processing continues.

Source: Global resource serialization

Module: ISGJENF0

Routing code: *

Descriptor code: 5

ISG048I VARY OFFLINE FOR *dev* DELAYED - CTC IN USE

Explanation: The operator tried to vary channel-to-channel (CTC) device *dev* offline, but this system is using CTC *dev* to send or receive the global resource serialization ring-processing system authority (RSA) message.

System action: The system marks CTC *dev* as pending offline.

Operator response: If you want to change the status of the CTC from pending offline to online, enter a VARY *dev*,ONLINE command. Message ISG047I appears when the CTC is back online.

If you want to take the CTC offline, enter the VARY GRS(*sysname*),QUIESCE command for at least one of the systems using the CTC.

When at least one of the systems is quiesced, reenter the VARY *dev*,OFFLINE command.

Source: Global resource serialization

Module: ISGJENF0

Routing code: *

Descriptor code: 5

ISG062I GRSRNL xx CANNOT BE READ

Explanation: The system cannot read the GRSRNL xx parmlib member because of an I/O error.

System action: The system stops processing the GRSRNL xx parmlib member. If the system is running in a sysplex, the system issues message ISG166W and enters wait state X'0A3' with reason code X'10'. Otherwise, the system issues message ISG009D and waits for the operator to respond.

Operator response: If this system should be part of the global resource serialization complex, correct the I/O error and reIPL.

If the system issued message ISG009D and you want this system to continue without global resource serialization, reconfigure any shared devices so that resources that would be protected by global resource serialization are protected by the configuration instead. Reply NONE in response to ISG009D.

Source: Global resource serialization

Module: ISGNRNLP

Routing code: 2,10

Descriptor code: 12

ISG063I SYNTAX ERROR IN GRSRNL xx - RECORD *nnnnnn*

Explanation: The system found a syntax error in a record in the GRSRNL xx SYS1.PARMLIB member.

In the message text:

xx The suffix of the GRSCNF xx parmlib member.

RECORD *nnnnnn*

Identifies the record relative to the beginning of the GRSCNF xx parmlib member. The value for *nnnnnn* does not include records that are blank except for a character in column 72.

If **RECORD *nnnnnn*** is one greater than the number of records in GRSCNF xx , either there is no usable GRSDEF statement for this system or the last GRSDEF statement is missing a required keyword.

If **RECORD *nnnnnn*** identifies a valid record containing the GRSDEF keyword, the previous GRSDEF statement is missing a required keyword.

This message can also mean that the GRSRNL xx parmlib member specified does not exist or that it contained obsolete keyword LINKLIB.

System action: The system stops processing GRSRNL xx . If the system is running in a sysplex, it issues message ISG166W and enters wait state X'0A3' with reason code X'10'. Otherwise, the system issues message ISG009D to prompt the operator for a reply.

ISG064I • ISG065D

Operator response: If this system should be part of the global resource serialization complex, correct the syntax error and reIPL, or reIPL with a different GRSRNLxx member.

If the system issued message ISG009D and you want this system to continue without global resource serialization, reconfigure any shared devices so resources that would have been protected by global resource serialization are protected by the configuration. Reply **NONE** in response to ISG009D.

System programmer response: Use the RNL checker, ISGRNLCK, in SYS1.SAMPLIB to find and correct the syntax error in the GRSCNFxx parmlib member.

Source: Global resource serialization

Module: ISGNRNLP

Routing code: 2,10

Descriptor code: 12

ISG064I INVALID REPLY

Explanation: During nucleus initialization, the last reply entered through the console did not contain the information requested by the system.

System action: The system rejects the reply just entered, issues message ISG009D, and waits for the operator to reply.

Operator response: See the operator response for message ISG009D.

Source: Global resource serialization

Module: ISGNRNLP

Routing code: 2,10

Descriptor code: 12

ISG065D RELOAD SYSTEM OR REPLY U [OR REPLY NONE]

Explanation: An error occurred during global resource serialization initialization. This error that could affect global resource serialization processing. If this message is preceded by message IEA301I, one of the specified GRSRNLxx parmlib members does not exist.

In the message text:

OR REPLY NONE

Appears in the message text if GRS=NONE is a valid option.

System action: The system waits for the operator to reply or reIPL the system.

System programmer response: Do one of the following:

- If you want this system to be part of the global resource serialization complex, correct the problem and reIPL the system.
- Reply **U** if this system should continue reading the other GRSRNL system parameters specified.
- If **OR REPLY NONE** appears in the message text, and this system should continue without global resource serialization, reconfigure any shared devices so resources that would have been protected by global resource serialization are protected instead by the configuration. Then reply **NONE**.

Source: Global resource serialization

Module: ISGNRNLP

Routing code: 1,10

Descriptor code: 2

ISG066I RESOURCE NAMED *qname,rname* TEMPORARILY EXCLUDED FROM GLOBAL PROCESSING

Explanation: Global resource serialization has temporarily excluded a resource from global processing to allow the system to continue with the IBM-supplied default resource name list (RNL) or the installation RNL.

In the message text:

qname The 8 byte major name of the resource.

rname The first 24 bytes of the minor name of the resource. Because the *rname* field includes only the first 24 bytes of the resource minor name, the message text might identify a group of resources.

System action: Processing continues.

System programmer response: Make sure the resource name specified in the message text is being serialized by global resource serialization according to your installation's requirements.

Source: Global resource serialization

Module: ISGGNRM

Routing code: 10

Descriptor code: 4

ISG080E AUTO RESTART PROCESSING TERMINATED BY SYSTEM *sysname*. AN OPERATOR MUST ENTER A VARY-GRS RESTART COMMAND AND MUST RESPOND TO OPERATOR PROMPTS.

Explanation: Automatic rebuilding of the global resource serialization ring ended because some systems did not communicate with *sysname*. The non-communicating systems may have information about multi-system ENQ/DEQ activity needed to rebuild the global resource serialization ring.

System action: AUTO RESTART processing ends. None of the systems will initiate AUTO RESTART.

Operator response: Enter DISPLAY GRS to determine whether global resource serialization communication links are disabled. Identify the systems that did not communicate. They are indicated by a **NO** in the **COMM** column of the display.

An operator on one of the systems should issue a VARY GRS RESTART command to rebuild the ring. This command might produce messages ISG081E and ISG082D. The operator should be prepared to do one of the following:

- Stop some systems in response to message ISG081E
- Cancel the VARY GRS RESTART command by responding **NO** to message ISG082D

Source: Global resource serialization

Module: ISGBRF

Routing code: 1,10

Descriptor code: 11

ISG081E STOP ALL REQUIRED SYSTEMS BEFORE CONFIRMING REBUILD-RING COMPLETION. THESE SYSTEMS SHOULD NOT BE ALLOWED TO BECOME ACTIVE GRS SYSTEMS IF REBUILD-RING COMPLETION IS CONFIRMED.

Explanation: The operator entered a VARY GRS RESTART command to rebuild the global resource serialization ring, but the systems named in the ISG123I messages that preceded this message did not respond. These systems contain information about multisystem ENQ/DEQ activity needed to rebuild the ring. If the global resource serialization ring is rebuilt without this information, data used by the global resource serialization ring could be destroyed. To prevent this, the indicated systems must be stopped and reIPLed once the RESTART RING operation is complete.

System action: The system issues message ISG082D and waits for the operator to reply.

Operator response: Stop the systems listed in preceding ISG123I messages and see the operator response for message ISG082D.

Source: Global resource serialization

ISG082D • ISG085E

Module: ISGCRST

Routing code: *

Descriptor code: 11

ISG082D CONFIRM REBUILD-RING FOR SYSTEM *sysname* - REPLY NO OR YES

Explanation: This message follows message ISG081E and one or more occurrences of message ISG123I. The operator entered a VARY GRS RESTART command on *sysname*, but the systems listed in the preceding ISG123I messages must be stopped before the global resource serialization ring can be rebuilt. This message prompts the operator to indicate whether the VARY GRS RESTART command should continue or be cancelled.

System action: The system waits for the operator to reply.

Operator response: Choose one of the following replies:

NO If some of the links used by global resource serialization are offline but will soon be online. Vary these links online and then reenter the VARY GRS RESTART command.

Enter DISPLAY GRS to determine the state of the links used by global resource serialization. Some of these links might be marked DISABLED because they have been varied offline as the result of I/O errors.

YES

To complete the VARY GRS RESTART command when all the indicated systems have been stopped.

Source: Global resource serialization

Module: ISGCRST

Routing code: *

Descriptor code: 2

ISG083E GRS CANNOT SEND ACK-TAP SIGNALS TO SYSTEM *sysname*

Explanation: Global resource serialization cannot send the required ACK-TAP ring acceleration signal to *sysname* to report that it has successfully received the ring-processing system authority (RSA) message.

System action: System *sysname* performance may be degraded.

Operator response: Enter DISPLAY GRS to determine whether global resource serialization links to *sysname* have been varied offline or disabled because of I/O errors. Notify the system programmer.

System programmer response: Determine whether global resource serialization needs additional links to prevent recurrence of this condition. Determine whether the performance of *sysname* is unacceptable.

The system deletes this message if:

- The global resource serialization ring is disrupted
- The issuing system is removed from the global resource serialization ring by a VARY GRS QUIESCE command
- Global resource serialization finds an alternate link

Source: Global resource serialization

Module: ISGBTC

Routing code: 1,10

Descriptor code: 11

ISG085E GRS IGNORED AN INCORRECT FAST-DEQ SLOT-COUNT VALUE

Explanation: CSECT ISGGRS00 was incorrectly changed by the use of the SPZAP service aid.

System action: The system rejects the incorrect value.

Operator response: Inform the system programmer.

System programmer response: Change the incorrect value.

Source: Global resource serialization

Module: ISGNAR

Routing code: 2,10

Descriptor code: 4

ISG086E *fc-rc* **ERROR OCCURRED IN PROCESSING GRS *option* OPTION. GRS PERFORMANCE MAY BE DEGRADED.**

Explanation: Global resource serialization encountered an error while processing the global resource serialization system parameter.

In the message text:

option The GRS parameter can be one of the following:

- **JOIN**
- **NONE**
- **START**
- **TRYJOIN**

fc A function code describing the error.

rc A reason code describing the error. If *rc*=06, the system encountered an insufficient storage condition.

If *rc*=04, the system encountered an unexpected error while initializing global resource serialization.

System action: System initialization proceeds, but global resource serialization performance may be degraded. All DEQs for global resources must be seen by all systems before the resources are freed.

System programmer response: If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Global resource serialization

Module: ISGNAR

Routing code: 2,10

Descriptor code: 4

ISG089D **IS THIS DEVICE REQUIRED BY GRS? REPLY YES OR NO.**

Explanation: Global resource serialization found a channel-to-channel (CTC) path specified in the GRSCNFxx parmlib member that is not defined as a CTC device.

System action: Processing stops until the operator enters a reply. The system issued message ISG045I listing the device number of the incorrect CTC device. If the operator replies **NO**, global resource serialization ignores the CTC device specified in message ISG045I and initialization continues. If the operator replies **NO** but none of the CTCs in GRSCNFxx are correct, then the system issues ISG009D and waits for a response.

If the operator replies **YES**, the system verifies all other CTC devices specified in the GRSCNFxx parmlib member, issues message ISG009D, and waits for a response.

Operator response: Choose one of the following replies:

NO If this system does not require the CTC device listed in message ISG045I or any substitute for that device. Choose **NO** if you want global resource serialization to ignore this CTC and continue the initialization process.

YES

If this system requires the CTC device for global resource serialization. Then do one of the following:

- Ask the system programmer to correct the error in the GRSCNFxx parmlib member and reIPL the system.
- ReIPL the system using a different GRSCNFxx parmlib member.

System programmer response: Correct the GRSCNFxx parmlib member.

Source: Global resource serialization

ISG100E • ISG102I

Module: ISGNCFP

Routing code: 2,10

Descriptor code: 2

ISG100E SYSTEM *sysname* IS STILL AN ACTIVE GRS SYSTEM

Explanation: An operator entered the VARY GRS PURGE command for system *sysname*, but *sysname* is already an active global resource serialization system.

System action: The system issues message ISG101D to prompt the operator to indicate whether to continue or cancel the PURGE command.

Operator response: See the operator response for message ISG101D.

Source: Global resource serialization

Module: ISGCPRG

Routing code: *

Descriptor code: 11

ISG101D CONFIRM PURGE FOR ACTIVE SYSTEM *sysname* - REPLY NO OR YES

Explanation: The operator entered a VARY GRS PURGE command for system *sysname*, but *sysname* is still an active global resource serialization system. This message follows message ISG100E.

System action: The system waits for the operator's response. If the operator replies **YES**, *sysname* is quiesced and then purged from the complex. All resource requests for *sysname* will be deleted which can create a data integrity exposure.

If the operator replies **NO**, the system issues message ISG102I, indicating that the command has been cancelled.

Operator response: Consult with the system programmer to choose one of the following replies:

No To cancel the VARY GRS(*sysname*),PURGE command.

Reply **NO** if there are any requestors from *sysname* using global resources. If there are requestors from *sysname* using global resources and the operator replies **YES**, letting the PURGE command complete, the system experience resource integrity loss.

YES

To purge system *sysname* from the global resource serialization complex. Reply **YES** if there are no requestors from *sysname* using global resources.

Source: Global resource serialization

Module: ISGCPRG

Routing code: *

Descriptor code: 2

ISG102I VARY PURGE REQUEST FOR ACTIVE SYSTEM *sysname* REJECTED - REQUEST CANCELLED BY OPERATOR

Explanation: An operator responded **NO** to message ISG101D to cancel a VARY GRS PURGE command.

System action: The system cancels the VARY GRS PURGE command.

Source: Global resource serialization

Module: ISGCPRG

Routing code: *

Descriptor code: 5

ISG103I VARY PURGE REQUEST FOR ACTIVE SYSTEM *sysname* REJECTED - SYSTEM CANNOT PURGE ITSELF

Explanation: The operator entered a VARY GRS PURGE command on system *sysname* to purge *sysname* from the complex. Global resource serialization does not allow a system to purge itself.

System action: The system rejects the VARY GRS PURGE command.

Operator response: If necessary, purge system *sysname* from the complex by entering the VARY GRS PURGE command on another active system. If *sysname* is the only system left in the complex, you cannot purge it from the complex.

Source: Global resource serialization

Module: ISGCPRG

Routing code: *

Descriptor code: 5

ISG104I VARY PURGE REQUEST FOR ACTIVE SYSTEM *sysname* REJECTED - SYSTEM REQUIRED IN GRS COMPLEX

Explanation: The operator entered a VARY GRS PURGE command to purge system *sysname* from the global resource serialization complex. Because system *sysname* is an active system, the system that received this message attempted to quiesce *sysname* before performing the purge. However, *sysname* could not be quiesced because it is required for the operation of the global resource serialization ring. The other systems in the complex need system *sysname* in order to communicate.

System action: The system rejects the VARY GRS PURGE command.

Operator response: Make sure that the required channel-to-channel (CTC) devices between systems in the complex are enabled and online.

Source: Global resource serialization

Module: ISGCPRG

Routing code: *

Descriptor code: 5

ISG106I VARY PURGE REQUEST FOR ACTIVE SYSTEM *sysname* REJECTED - THIS SYSTEM IS NOT AN ACTIVE GRS SYSTEM

Explanation: An operator entered a VARY GRS PURGE command on this system to purge system *sysname* from the complex. However, this system is no longer active and therefore cannot process the VARY GRS PURGE command.

System action: The system rejects the VARY GRS PURGE command.

Operator response: If a ring disruption was in progress when the command was entered, reenter the command on the same system once the ring has been rebuilt. If this system does not become active, enter the command on an active global resource serialization system.

Source: Global resource serialization

Module: ISGCPRG

Routing code: *

Descriptor code: 5

ISG110E NO ACTIVE SYSTEMS WERE FOUND IN THE GRS COMPLEX. REACTIVATE SHOULD BE ATTEMPTED IF THERE ARE NO ACTIVE GRS SYSTEMS IN OPERATION. REACTIVATE MUST NOT BE ATTEMPTED IF THERE ARE ACTIVE GRS SYSTEMS.

Explanation: An operator entered a VARY GRS RESTART command on this system to rebuild the disrupted global resource serialization ring, but all the systems in communication with this system have been quiesced from global

ISG111D • ISG112I

resource serialization. This system cannot rebuild the global resource serialization ring if there are no active systems in the complex.

System action: The system issues message ISG111D to prompt the operator to indicate whether to initiate the REACTIVATE function to reactivate a system to rebuild the ring.

Operator response: See the operator response for message ISG111D.

Source: Global resource serialization

Module: ISGCRST

Routing code: *

Descriptor code: 11

ISG111D CONFIRM REACTIVATE SHOULD BE ATTEMPTED - REPLY NO OR YES

Explanation: The operator entered a VARY GRS RESTART command to rebuild the global resource serialization ring, but the command failed because there are not active systems in the global resource serialization complex. This message prompts the operator to decide whether to reactivate a system so it can restart the global resource serialization ring. This message is always preceded by message ISG110E.

Reactivating a system can introduce data integrity exposures, so consult the system programmer before replying to this message.

System action: The VARY GRS RESTART command is suspended. The system waits for the operator to reply.

Operator response: Issue the DISPLAY GRS command and supply the output to the system programmer.

Reactivating a system can introduce data integrity exposures, so consult the system programmer before replying to this message.

System programmer response: Reactivation processing should not be allowed unless all the systems are quiesced. Before replying, look at the DISPLAY GRS output to check the status of systems and links.

Have the operator enter one of the following replies:

NO If there are active or inactive global resource serialization systems in the complex. These systems may have lost communication with this system or have been in a stopped or disabled state.

Repair any communication problems. Wait for all systems in the complex to become enabled and restart any inactive systems. Then enter the VARY GRS RESTART command from an active system.

YES

To initiate the reactivate function **only** after verifying the following:

- There are no ACTIVE or INACTIVE systems in the complex. All systems must be quiesced.
- All required links are operational

Source: Global resource serialization

Module: ISGCRST

Routing code: *

Descriptor code: 2

ISG112I SYSTEM *sysname* RESPONDED WITH GLOBAL RESOURCE STATUS - IT WILL BE PERMITTED TO RESTART AFTER REACTIVATE COMPLETES.

Explanation: This system is performing a REACTIVATE function. System *sysname* responded to a status request from this system to confirm that this system is quiesced. This system has the most up-to-date resource status and was in an active state more recently than system *sysname*. Therefore, this system will restart the ring after it completes reactivation processing. System *sysname* can rejoin the ring only after this system completes reactivation processing and restarts the ring.

System action: The system issues message ISG117D and waits for the operator to reply.

Operator response: See the operator response for message ISG117D.

Module: ISGCRST

Routing code: *

Descriptor code: 5

ISG113I NO RESPONSE RECEIVED FROM SYSTEM *sysname* - IT MUST BE STOPPED BEFORE CONFIRMING REACTIVATE COMPLETION

Explanation: System *sysname* did not respond to a status request from the this system, so the reactivating system does not know the state of system *sysname*. Reactivation processing cannot complete without this information.

System action: The system issues message ISG117D and waits for the operator's response.

Operator response: Consult the system programmer to:

- Determine the state of *sysname* and the reason it did not respond to the status request.
- Check the links to system *sysname*.

Do one of the following after consulting with the system programmer:

- If you want *sysname* to remain in the global resource serialization complex, reply **NO** to message ISG117D. Then, fix any link problems, and reissue the RESTART command.
- If you do not want *sysname* to remain in the global resource serialization complex, make sure that the complex is stopped and no longer using global resources. Then reply **YES** to message ISG117D.

System programmer response: Work with the operator to check the state of *sysname* and the links to system *sysname*.

Source: Global resource serialization

Module: ISGCRST

Routing code: *

Descriptor code: 5

ISG114I RESOURCE STATUS NOT RECEIVED FROM SYSTEM *sysname* - IT MUST BE STOPPED BEFORE CONFIRMING REACTIVATE COMPLETION

Explanation: This system is performing a REACTIVATE function. System *sysname* responded to a status request from the this system, but its response did not contain resource status information. Even though system *sysname* might have more current resource information than the this system, it cannot reactivate the ring.

System action: The system issues message ISG117D and waits for the operator to reply.

Operator response: Consult with the system programmer to determine whether reactivation should proceed. If reactivation should proceed, stop system *sysname* and reIPL it after reactivation processing completes. Failure to take this precaution could cause a resource integrity exposure.

System programmer response: Determine whether reactivation should proceed.

Source: Global resource serialization

Module: ISGCRST

Routing code: *

Descriptor code: 5

ISG115I IF ANY SYSTEMS WERE NOT LISTED IN THE PREVIOUS LIST, THEY ARE UNKNOWN TO THIS SYSTEM - THEY MUST BE STOPPED BEFORE CONFIRMING REACTIVATE COMPLETION

Explanation: This system is attempting to reactivate in order to begin rebuilding the ring. The system issued messages ISG112I, ISG113I, and ISG114I to confirm the reactivate request. Any systems that were not listed in these messages did not respond to the status request, and must have joined the global resource serialization complex after the reactivating system had been quiesced.

See the explanation for message ISG117D for further information.

ISG116E • ISG117D

System action: The system issues message ISG117D and waits for the operator to reply.

Operator response: Consult with the system programmer to determine if any systems that were in the ring were not listed in messages ISG112I, ISG113I, and ISG114I. If all the systems were listed, no response is necessary.

If any systems were not listed, do one of the following:

- If you want the system to remain in the global resource serialization complex without reIPLing, reply **NO** to message ISG117D to cancel the REACTIVATE command.
- If you want the reactivation processing to continue, stop the systems that were not listed in the messages issued.

Source: Global resource serialization

Module: ISGCRST

Routing code: *

Descriptor code: 5

ISG116E STOP INDICATED SYSTEMS BEFORE CONFIRMING REACTIVATE COMPLETION. REPLY NO TO CANCEL REACTIVATE.

Explanation: This system is attempting to reactivate in order to begin rebuilding the ring. The system issued messages ISG112I, ISG113I, ISG114I, and ISG115I to confirm the reactivate request. Message ISG117D always follows this message.

System action: The system issues message ISG117D and waits for the operator to reply.

Operator response: Enter the DISPLAY GRS command to gather information about the state of the complex.

Consult with the system programmer to determine whether reactivation should continue, stop all the systems you do not want to participate in the reactivated complex. The new complex will include the reactivating system and those systems listed in messages ISG112I, ISG113I, ISG114I, and ISG115I.

Source: Global resource serialization

Module: ISGCRST

Routing code: *

Descriptor code: 11

ISG117D CONFIRM REACTIVATE SHOULD BE COMPLETED - REPLY NO OR YES

Explanation: This system is attempting to reactivate in order to begin rebuilding the ring. This message follows ISG116E and prompts the operator for final confirmation for the reactivate request.

System action: The VARY GRS RESTART command is suspended and the system waits for the operator to reply.

Operator response: Reactivating a system can introduce data integrity exposures, so consult with the system programmer to choose a reply to this message.

System programmer response: Reactivation processing should not be allowed unless all the systems are quiesced. Determine the status of all the systems in the complex, including ones that were not listed in messages ISG112I, ISG113I, and ISG114I. Have the operator do one of the following:

- If you do not want the reactivation to continue, reply **NO**. Then enter the VARY GRS RESTART command later.
- If you want reactivation to continue, stop all the systems in the complex. Quiesce the systems listed in message ISG112I. Failure to take this precaution could cause a data integrity exposure.

Then reply **YES**.

Source: Global resource serialization

Module: ISGCRST

Routing code: *

Descriptor code: 2

ISG118I REACTIVATE FUNCTION IS COMPLETE. SYSTEM *sysname* HAS RESTARTED AS A RING OF ONE SYSTEM.

Explanation: The operator replied **YES** to message ISG117D to reactivate the ring. The function completed successfully, and the active ring (of one system) has been rebuilt.

System *sysname* is now in an active state, and the other systems are in a quiesced state.

System action: Processing continues.

Operator response: Restart the systems listed in message ISG112I with the VARY GRS(*sysname*),RESTART command. If necessary, purge systems listed in messages ISG113I and ISG114I with the VARY GRS(*sysname*),PURGE command, and then re-IPL each of the systems within the new complex.

Source: Global resource serialization

Module: ISGCRST

Routing code: *

Descriptor code: 5

ISG119I VARY RESTART REQUEST FOR SYSTEM *sysname* IGNORED DUE TO OPERATOR RESPONSE

Explanation: The operator cancelled a VARY RESTART command by replying **NO** in response to message ISG082D.

System action: The system ignores the VARY RESTART command.

Source: Global resource serialization

Module: ISGCRST

Routing code: *

Descriptor code: 5

ISG120I VARY RESTART REQUEST FOR SYSTEM *sysname* IGNORED DUE TO STATE OF GRS COMPLEX

Explanation: The operator replied **YES** to message ISG082D to continue the reactivation in response to a VARY GRS RESTART command. However, the state of the complex changed and the reactivation could not continue. The problem was caused by one of the following:

- An active system in the complex during reactivation processing
- An inactive system in the complex during reactivation processing
- A system that was active after the reactivating system entered the quiesced state

System action: The RESTART command and the reactivation are cancelled.

Operator response: Enter the DISPLAY GRS command to determine which system was causing the problem and reenter the VARY GRS RESTART command.

Source: Global resource serialization

Module: ISGCRST

Routing code: *

Descriptor code: 5

ISG121I VARY RESTART REQUEST REJECTED - ENTER COMMAND ON SYSTEM *sysname*

Explanation: The operator entered a VARY GRS RESTART command on this system, but all responding systems in the complex were quiesced and so could not rebuild the ring. System *sysname* has more up-to-date global resource information than this system because it was in an active state more recently and should be the one to rebuild the ring.

System action: This system rejects the VARY GRS RESTART command.

Operator response: Do one of the following:

- If there is no active system in the complex, enter the VARY GRS RESTART command from system *sysname*.

ISG122I • ISG150I

- If there is an active system in the complex, check the links between systems and correct any connectivity problems. Make sure the active system is able to respond and is not stopped or disabled because of a spin loop or an SVC dump. Then enter the VARY GRS RESTART command again from the active system.

Source: Global resource serialization

Module: ISGCRST

Routing code: *

Descriptor code: 5

ISG122I VARY RESTART REQUEST REJECTED - DUE TO STATE OF SYSTEM *sysname*

Explanation: The operator entered a VARY GRS RESTART command on this system. No active systems were found, and this system cannot rebuild the ring because system *sysname* is inactive.

System action: The system rejects the command.

Operator response: Do one of the following:

- If a ring disruption is in progress, wait until the complex is stable. Then, if system *sysname* is not brought into the ring automatically, reenter the VARY GRS(*),RESTART command on this system.
- If the ring is not rebuilt automatically, enter the VARY GRS(ALL),RESTART command on *sysname* to bring it and any other inactive systems to an active state.

Source: Global resource serialization

Module: ISGCRST

Routing code: *

Descriptor code: 5

ISG123I SYSTEM *sysname* GAVE NO RESPONSE - IT MUST BE STOPPED BEFORE CONFIRMING REBUILD-RING COMPLETION

Explanation: The operator entered a VARY GRS RESTART command to rebuild the global resource serialization ring, but *sysname* did not respond. System *sysname* contains information about multisystem ENQ/DEQ activity that is needed to rebuild the ring.

System action: After one or more occurrences of message ISG123I, the system issues messages ISG081E and ISG082D.

Operator response: Stop the system(s) indicated in this message, or prepare to stop the VARY GRS RESTART command by replying **NO** to message ISG082D.

Source: Global resource serialization

Module: ISGCRST

Routing code: *

Descriptor code: 5

ISG150I GRS=NONE IS NOT SUPPORTED WHEN RUNNING IN A MULTISYSTEM SYSPLEX.

Explanation: This system tried to IPL into the sysplex with a system parameter of GRS=NONE. All systems in the sysplex must be in the same global resource serialization complex.

System action: If possible, cross-system coupling facility (XCF) tries to IPL this system into its own sysplex and issues message IXC413I.

Otherwise, the system issues message IXC201A to prompt the operator for a new COUPLExx parmlib member.

Operator response: If the system issues a message prompting for a new COUPLExx parmlib member, specify one that will IPL the system in XCF-local mode. Notify the system programmer.

System programmer response: Do one of the following:

- Leave the system in XCF-local mode with the COUPLExx parmlib member specified by the operator.

- Ask the operator to reIPL the system and modify the system parameters as follows:
 - If the system should be a member of the multisystem sysplex, activate global resource serialization by specifying GRS=JOIN, START or TRYJOIN.
 - If the system should be in a sysplex by itself, specify one of the following:
 - GRS=NONE and PLEXCFG=MONOPLEX
 - PLEXCFG=XCFLOCAL
 - A combination of values that includes MONOPLEX and XCF-local

Make sure to provide serialization for shared resources on this system, since this system cannot use global resource serialization.

Source: Global resource serialization

Module: ISGNCBIM

Routing code: 2,10

Descriptor code: 2

ISG152W GRS PROCESSING TERMINATED. XCF SERVICE=*servicex* FAILED. RC=*rc* RSN=*reasoncd*

Explanation: Global resource serialization requested a cross-system coupling facility (XCF) service, but the request failed.

In the message text:

servicex The XCF service that failed

rc The return code for the failed service request

reasoncd

The 8 digit reason code for the failed service request

System action: The system enters non-restartable wait state X'0A3'.

Operator response: Notify the system programmer. If the programmer requests it, obtain a stand-alone dump. Make sure the dump includes the XCFAS and GRS address spaces as well as the necessary data spaces. For example, to dump the XCF data spaces, enter:

```
DUMP DATASPACE OF ASID('XCFAS')
```

System programmer response: See the system programmer response for wait state X'0A3'.

Source: Global resource serialization

Module: ISGBCSP

Routing code: 1,10

Descriptor code:

ISG153I VARY GRS IS NOT SUPPORTED WITHIN THE SYSPLEX.

Explanation: The operator entered a VARY GRS command, but the command is not valid when all the systems in the global resource serialization complex are in the same sysplex.

System action: The system rejects the command.

Operator response: Do one of the following:

- To remove a system from the global resource serialization complex when all the systems are in the same sysplex, enter the VARY XCF,*sysname*,OFFLINE command. This command removes the specified system from the sysplex and the global resource serialization complex. The system then enters a non-restartable wait state.
- To RESTART a system in the sysplex following a ring disruption, let the automatic recovery take place.

Source: Global resource serialization

Module: ISGCMDI

Routing code: *

ISG154I • ISG157D

Descriptor code: 5

ISG154I REJOIN(NO) IS NOT SUPPORTED IN A SYSPLEX. REJOIN(YES) IS USED.

Explanation: This system IPLed as part of a sysplex with REJOIN(NO) specified in the GRSCNFxx parmlib member. However, the system used REJOIN(YES) because global resource serialization always tries to reestablish the ring following a disruption.

System action: Initialization continues with REJOIN(YES) for this system.

Operator response: Notify the system programmer.

System programmer response: Remove REJOIN(NO) from the GRSCNFxx parmlib member when the system is part of a sysplex.

Source: Global resource serialization

Module: ISGXSIS

Routing code: 2,10

Descriptor code: 4

ISG155I RESTART(NO) IS NOT SUPPORTED IN A SYSPLEX. RESTART(YES) IS USED.

Explanation: The system IPLed as part of a sysplex with RESTART(NO) specified in the GRSCNFxx parmlib member. However, the system used RESTART(YES) because global resource serialization always tries to restart a ring following a ring disruption.

System action: Initialization continues with REJOIN(YES) for this system.

Operator response: Notify the system programmer.

System programmer response: Remove RESTART(NO) from the GRSCNFxx parmlib member when the system is part of a sysplex.

Source: Global resource serialization

Module: ISGXSIS

Routing code: 2,10

Descriptor code: 4

ISG157D SYSTEM IN {XCF-LOCAL|MONOPLEX} MODE WITH NO CTC DEFINITIONS. RELOAD THE SYSTEM OR REPLY NONE TO CONTINUE THE IPL.

Explanation: The system IPLed in either XCF-local mode or MONOPLEX mode. No global resource serialization channel-to-channel (CTC) path definitions were found in the GRSCNFxx parmlib member.

System action: Initialization stops until the operator enters a reply.

Operator response: Choose one of the following:

- To run the system without multisystem serialization, reply **NONE**.
- To run the system in a multisystem configuration, contact the system programmer for the necessary system parameters and then reIPL the system.

System programmer response: If the system should be part of a multisystem configuration, correct the system parameters and have the operator reIPL the system as part of a multisystem sysplex.

Source: Global resource serialization

Module: ISGNCBIM

Routing code: 2,10

Descriptor code: 2

ISG158D PLEXCFG SYSTEM PARAMETER IS INVALID. REPLY ANY, MULTISYSTEM, MONOPLEX OR XCFLOCAL.

Explanation: The system IPLed with an incorrect PLEXCFG system parameter. Valid specifications for the PLEXCFG system parameter are:

- ANY
- MONOPLEX
- MULTISYSTEM
- XCFLOCAL
- Any combination of these parameters

System action: Initialization stops until the operator enters a valid response. If the operator enters an incorrect response, the system issues message ISG158D to prompt the operator for a valid response.

Operator response: Notify the system programmer and choose one of the following replies:

ANY To IPL the system in any of the modes listed

MONOPLEX
To IPL the system into a one system sysplex

MULTISYSTEM
To IPL this system in a multisystem sysplex

XCFLOCAL
To IPL the system in XCF-local mode

System programmer response: Correct the PLEXCFG parameter in the IEASYSxx parmlib member.

Source: Global resource serialization

Module: ISGNCBIM

Routing code: 2,10

Descriptor code: 2

ISG159W GRS=NONE SYSTEM PARAMETER INVALID WITH PLEXCFG=MULTISYSTEM.

Explanation: The system IPLed with PLEXCFG=MULTISYSTEM and GRS=NONE, but these two parameters are incompatible. A multisystem sysplex must always have global resource serialization active.

System action: Initialization ends and the system enters non-restartable wait state X'0A3' with reason code X'1C'.

Operator response: Notify the system programmer.

System programmer response: ReIPL the system with either a different GRS or PLEXCFG parameter, depending on whether you intend to run as a single or a multisystem sysplex.

See the explanation for wait state X'0A3'.

Source: Global resource serialization

Module: ISGNCBIM

Routing code: 1,10

Descriptor code: 1

ISG160I GRS TRACE OPTIONS ARE NOT VALID.

Explanation: One of the following occurred:

- A TRACE CT command with COMP=SYSGRS command was entered with an incorrect option in either the option list or the CTRACE parmlib member.
- The global resource serialization component trace parmlib member specified at IPL contains an incorrect option.

Valid options are:

ISG161I

- CONTROL n
- MONITOR n
- REQUEST n
- RSA
- SIGNAL n
- FLOW n

Where n , a valid hexadecimal digit (0-F), is optional.

System action: If the options were specified on the TRACE CT command, the command is ignored. If the options were specified in the parmlib member used during system initialization, then global resource serialization uses the minimum tracing options (MINOPS).

Operator response: Do one of the following:

- If the options were listed on the TRACE CT command, reenter the command with valid options.
- If the options were contained in a global resource serialization CTRACE parmlib member, have the system programmer correct the parmlib member. When the parmlib member has been corrected, reenter the TRACE CT command.
- If this message was issued during initialization, wait for the system initialization to complete and then enter the DISPLAY TRACE,COMP=SYSGRS command to display the current tracing options. Then enter the TRACE CT command to change global resource serialization tracing activity, if necessary.

System programmer response: If the incorrect options were listed in a global resource serialization CTRACE parmlib member, correct the parmlib member. Notify the operator when the parmlib member is correct.

Source: Global resource serialization

Module: ISGTSSM

Routing code: -

Descriptor code: 12

ISG161I CTRACE DEFINE FAILED FOR COMP=SYSGRS, RETURN= *return-code*, REASON=*reason-code*
{WITH PARMLIB MEMBER=*memname*. | WITH NO PARMLIB MEMBER.}

Explanation: Global resource serialization tried to initiate component tracing, but the request failed.

In the message text:

RETURN=*return-code*

The return code from the CTRACE macro.

REASON=*reason-code*

The reason code from the CTRACE macro.

WITH PARMLIB MEMBER=*memname*.

The global resource serialization component trace request used the tracing options in one of the following parmlib members:

- The parmlib member specified on the CTRACE parameter in the GRSCNFxx parmlib member.
- The default global resource serialization component trace parmlib member, CTIGRS00.

WITH NO PARMLIB MEMBER.

The component trace request did not specify a parmlib member for tracing options.

System action: If WITH PARMLIB MEMBER=*memname* appears in the message text, the system ignores the parmlib member *memname* and uses default parmlib member, CTIGRS00. If the parmlib member specified was CTIGRS00, global resource serialization continues with minimum options (MINOPS).

If WITH NO PARMLIB MEMBER appears in the message text, global resource serialization continues with minimum options.

System programmer response: See *z/OS MVS Programming: Authorized Assembler Services Reference ALE-DYN* for the return and reason codes of the CTRACE DEFINE macro.

If WITH PARMLIB MEMBER=*memname* appears in the message text, there might be an error in the parmlib member. Once the IPL is complete, enter a TRACE CT,,COMP=SYSGRS,PARM=*memname* command. Component trace will issue more detailed messages about errors in the parmlib member.

If you cannot correct the problem, or if the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Global resource serialization

Module: ISGTDEF

Routing code: 2,10

Descriptor code: 12

ISG163D GRSCNF=*xx* SYSTEM PARAMETER IN ERROR. RESPECIFY GRSCNF OR PRESS ENTER.

Explanation: The GRSCNF system parameter specified is not valid. *xx* is the suffix for the GRSCNF*xx* parmlib member.

System action: Initialization stops until the operator enters a valid reply.

Operator response: Do one of the following:

- Respecify the GRSCNF system parameter. For example, for parmlib member GRSCNF02, enter:
REPLY id,GRSCNF=02
- Press ENTER to continue the IPL with the system defaults defined in parmlib member GRSCNF00. Note that the GRSCNF00 parmlib assumes that all systems in the global resource serialization complex are also in the same sysplex.

System programmer response: Correct the GRSCNF system parameter.

Source: Global resource serialization

Module: ISGNCNFP

Routing code: 2,10

Descriptor code: 2

ISG164W GRS STATUS EXIT HAS PERMANENTLY FAILED.

Explanation: The cross-system coupling facility (XCF) status exit on this global resource serialization system failed repeatedly and XCF will no longer schedule it. Global resource serialization continues running but might not detect the need for a global resource serialization ring disruption.

System action: The system continues processing without the global resource serialization status exit. The system writes an SVC dump.

System programmer response: ReIPL the system to restore global resource serialization monitoring.

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SVC dump.

Source: Global resource serialization

Module: ISGXGRPX

Routing code: 1,10

Descriptor code: 1

ISG165I GRS INVOCATION OF XCF SERVICE=IXCMOD FAILED. RC=*rc* RSN=*reasoncd*

Explanation: Global resource serialization tried to modify its monitoring interval with the IXCMOD macro, but the macro failed.

System action: The global resource serialization monitoring interval remains unchanged.

If this is a cross-system coupling facility (XCF) problem, the system writes an SVC dump.

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Operator response: Notify the system programmer.

System programmer response: If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SVC dump, if available.

Source: Global resource serialization

Module: ISGBCSP

Routing code: 2,10

Descriptor code: 12

ISG166W GRS INITIALIZATION FAILURE WHILE RUNNING IN A SYSPLEX.

Explanation: The system detected an error during global resource serialization initialization.

This problem could not be solved by removing global resource serialization function by specifying GRS=NONE, because the system is running in multisystem mode.

System action: The system enters non-restartable wait state X'0A3' with reason code X'0C' or X'10'. Global resource serialization removes the system from the sysplex. Global resource serialization issues other messages explaining the problem.

System programmer response: See the system programmer response for wait state X'0A3' and accompanying messages.

Source: Global resource serialization

Module: ISGNCBIM

Routing code: 1,10

Descriptor code: 1

ISG167W NO VALID RING CONFIGURATION POSSIBLE.

Explanation: This system IPLed into a multisystem sysplex with GRS=JOIN or GRS=TRYJOIN parameter, but was unable to join the global resource serialization ring. This system cannot remain in the sysplex unless it can also join the same global resource serialization ring as the other systems in the sysplex.

This problem might be due to either an inadequate number of channel-to-channel (CTC) definitions in the GRSCNFxx parmlib member or a hang in an address space or job on another system.

System action: Global resource serialization removes this system from the sysplex. The system enters wait state X'0A3' with reason code X'04'.

Operator response: Enter the DISPLAY XCF command and DISPLAY GRS command on the other systems in the sysplex and ring to determine the status of the other systems and the communication links between systems. Notify the system programmer. Provide the output of the DISPLAY command.

System programmer response: Make sure that there are adequate CTCs defined to global resource serialization. If the CTC connections are adequate, correct any system problems with other systems in the global resource serialization complex and then have the operator reIPL this system.

If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Global resource serialization

Module: ISNGRSP

Routing code: 1,10

Descriptor code: 1

ISG168W GRS FAILURE NOT TOLERATED WHILE RUNNING IN A SYSPLEX.

Explanation: Global resource serialization encountered an unrecoverable error while running in a sysplex. Global resource serialization must be active on a system in a multisystem sysplex.

System action: The system enters non-restartable wait state X'0A3' with reason code X'2C'. Global resource serialization removes the system from the sysplex. The system may issue an SVC dump.

Operator response: Notify the system programmer.

If the system did not issue an SVC dump and the system programmer requests it, obtain a stand-alone dump. Make sure the dump includes the global resource serialization address space.

System programmer response: See the explanation of wait state X'0A3'. Look in the SVC or stand-alone dump for the cause of the failure.

If you cannot determine the cause of the failure or if the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide either the SVC dump or stand-alone dump.

Source: Global resource serialization

Module: ISGBTC

Routing code: 1,10

Descriptor code: 1

ISG169D GRSRNL SYSTEM PARAMETER {INVALID | NOT SPECIFIED}. RESPECIFY GRSRNL.

Explanation: The GRSRNL system parameter specified is either incorrect or absent.

System action: Initialization stops until the operator enters a valid reply.

Operator response: Respecify the GRSRNL parameter in the IEASYSxx parmlib member as follows:

```
REPLY id,GRSRNL=02
```

or:

```
REPLY id,GRSRNL=EXCLUDE
```

Notify the system programmer.

System programmer response: Correct or add the GRSRNL system parameter.

Source: Global resource serialization

Module: ISGNRNLP

Routing code: 2,10

Descriptor code: 2

ISG171I TRACE OPTIONS REQUIRED FOR COMP=SYSGRS.

Explanation: No option list was specified on a TRACE CT command with COMP=SYSGRS or in the global resource serialization CTRACE parmlib member specified at IPL.

System action: If component tracing was started with a TRACE CT command, the system rejects the command. If component tracing was started with a global resource serialization CTRACE parmlib member, then global resource serialization uses the minimum component tracing options (MINOPS).

Operator response: Do one of the following:

- If tracing was started with the TRACE CT command, reenter the command with valid options.
- If tracing was started with a global resource serialization CTRACE parmlib member either:
 - Specify a parmlib member that contains an option list.
 - Have the system programmer correct the parmlib member.

Reenter the TRACE CT command after the system programmer corrects the parmlib member.

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- If the system issues this message during initialization, wait for the initialization to complete and then enter the DISPLAY TRACE,COMP=SYSGRS command to display the current tracing options. Then use the TRACE CT command with the desired options to change global resource serialization tracing activity, if necessary.

System programmer response: Add trace options to the global resource serialization CTRACE parmlib member, if it listed none. Notify the operator when the parmlib member is correct.

Source: Global resource serialization

Module: ISGTSSM

Routing code: 10

Descriptor code: 12

ISG172I COMP=SYSGRS TRACE BUFFER CANNOT BE MODIFIED WHILE TRACE IS ON.

Explanation: The operator specified the BUFSIZE keyword on either the TRACE CT,MOD,COMP=SYSGRS command or in a CTRACE parmlib member specified on the TRACE CT command. The trace buffer size however, can not be modified while the trace is on.

System action: The system rejects the TRACE CT command.

Operator response: To change the buffer size of SYSGRS tracing, first enter a TRACE CT,OFF,COMP=SYSGRS command. Then enter a TRACE CT command specifying the desired buffer size and the other options for your desired tracing activity. A valid buffer size for COMP=SYSGRS is a minimum of 64 kilobytes and a maximum of 16 megabytes. If the buffer size is not specified on the TRACE CT command, global resource serialization uses the default size of 64 kilobytes.

To display the current tracing options, enter the DISPLAY TRACE,COMP=SYSGRS command.

Source: Global resource serialization

Module: ISGTSSM

Routing code: 10

Descriptor code: 12

ISG173I SYSTEM *sysname* RESTARTING GLOBAL RESOURCE SERIALIZATION.

Explanation: A system was not participating in the global resource serialization ring, probably because of a ring disruption. The system is restarting global resource serialization processing.

sysname

The name of the system that is restarting global resource serialization.

System action: Global resource serialization processes the VARY command and system *sysname* begins to participate in the global resource serialization ring.

Source: Global resource serialization

Module: ISGCAJS

Routing code: 10

Descriptor code: 4

ISG174I RESTART REQUEST PASSED TO SYSTEM *sysname*.

Explanation: GRS restarted the ring after a ring disruption and passed the restart request to system *sysname* to do part of the processing.

System action: Processing continues.

Source: Global resource serialization

Module: ISGCART

Routing code: 10

Descriptor code: 4

ISG175I SYSTEM *sysname* RESTARTED GLOBAL RESOURCE SERIALIZATION.

Explanation: System *sysname* restarted global resource serialization and is processing global resource requests. System *sysname* is now a member of the global resource serialization ring.

System action: Processing continues.

Source: Global resource serialization

Module: ISGCAJS

Routing code: 10

Descriptor code: 4

ISG177E SYSTEM *sysname* DISRUPTED GLOBAL RESOURCE SERIALIZATION DUE TO SOFTWARE FAILURE. GLOBAL RESOURCE REQUESTORS WILL BE SUSPENDED.

Explanation: An error caused this system to disrupt the global resource serialization ring. All the active global resource serialization systems, including this system, become inactive to global resource serialization.

System action: The system writes message ISG177E or ISG178E to the system log (SYSLOG) of each system that was in the ring. All systems suspend any task that attempts to obtain global resources.

The systems rebuild the global resource serialization ring.

System programmer response: If you cannot correct the problem or if you have frequent or unexpected ring disruptions:

- Search problem reporting databases for a fix for the problem.
- See ISG177E and ISG178E recovery in *z/OS MVS Planning: Global Resource Serialization*.
- If no fix exists, contact the IBM Support Center.

Source: Global resource serialization

Module: ISGBTC

Routing code: 10

Descriptor code: 7,11

ISG178E GLOBAL RESOURCE SERIALIZATION HAS BEEN DISRUPTED. GLOBAL RESOURCE REQUESTORS WILL BE SUSPENDED.

Explanation: The global resource serialization ring is disrupted. Possible reasons are:

- An operator stopped one of the active global resource serialization systems.
- An active global resource serialization system was removed from the sysplex.
- A system in the global resource serialization ring is responding slowly, possibly because it is issuing an SVC dump.
- Communication loss exists between systems in the sysplex.
- A software error occurred in global resource serialization processing on one of the global resource serialization systems.
- An error occurred in the cross-system coupling facility (XCF) services that global resource serialization used to communicate between systems in the sysplex.

System action: All active global resource serialization systems, including this one, become inactive to global resource serialization. All the inactive systems suspend any task that attempts to obtain global resources. If a software error occurred on one of the global resource serialization systems, the system may issue message ISG177E to the system log (SYSLOG) of that system.

The inactive global resource serialization systems will rebuild the global resource serialization ring.

Operator response: If any of the systems that were in the ring do not become active global resource serialization systems when the ring is rebuilt, notify the system programmer.

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System programmer response: If you cannot correct the problem or if you have frequent or unexpected ring disruptions:

- Search problem reporting databases for a fix for the problem.
- See ISG177E and ISG178E recovery in *z/OS MVS Planning: Global Resource Serialization*.
- If no fix exists, contact the IBM Support Center.

Source: Global resource serialization

Module: ISGBTC

Routing code: 10

Descriptor code: 7,11

ISG179I **SYSTEM *sysname* INITIATED AUTO RESTART PROCESSING.**

Explanation: This system is rebuilding the global resource serialization ring after a ring disruption.

In the message text:

sysname

The system rebuilding the global resource serialization ring

System action: Processing continues.

Source: Global resource serialization

Module: ISGCART

Routing code: 10

Descriptor code: 4

ISG180E **SYSTEM *sysname* UNABLE TO INITIATE AUTO RESTART PROCESSING. SYSTEM ERROR.**

Explanation: A system failed to rebuild a disrupted global resource serialization ring because a system error occurred.

In the message text:

sysname

The name of the system that failed to rebuild the disrupted ring.

System action: System *sysname* continues to be inactive to global resource serialization. However, one of the systems in the global resource serialization complex will again try to rebuild the disrupted ring. If the attempts to rebuild the ring fail, this system is unable to resume global resource serialization processing, and might enter non-restartable wait state X'0A3'. The system also issues other messages to describe the error.

Operator response: Notify the system programmer.

System programmer response: Correct the error and reIPL the system. If this system enters wait state X'0A3', see the explanation for the wait state and reason code.

If the system does not enter wait state X'0A3', or if you cannot correct the problem, or if the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Global resource serialization

Module: ISGCART

Routing code: 10

Descriptor code: 4

ISG181I **REACTIVATE FUNCTION IS COMPLETE. SYSTEM *sysname* HAS RESTARTED AS A RING OF ONE SYSTEM.**

Explanation: A system reactivated the global resource serialization ring after global resource serialization found no active systems in the complex. All systems were in one of the following states:

- Quiesced from global resource serialization because the operator stopped the system or because of a system error
- Removed from the sysplex
- Quiesced from global resource serialization because the operator entered a VARY GRS,QUIESCE command before the global resource serialization complex was equivalent to the sysplex
- Attempting to enter the global resource serialization complex with the GRS=JOIN or GRS=TRYJOIN parameter

The system reactivated the global resource serialization ring and is now an active global resource serialization system.

Other systems in the ring are still in a quiesced state. They will perform automatic restart processing to join the new global resource serialization ring.

In the message text:

sysname

The name of the system that reactivated the global resource serialization ring.

System action: Processing continues.

Source: Global resource serialization

Module: ISGCART

Routing code: 10

Descriptor code: 4

ISG182W GRS DOES NOT SUPPORT THE USE OF MORE THAN ONE MULTISYSTEM SYSPLEX IN A GRS COMPLEX.

Explanation: This system tried to IPL into a multisystem sysplex other than the rest of the members of the global resource serialization complex. Global resource serialization does not support this configuration.

System action: Global resource serialization removes this system from the sysplex. The system enters non-restartable wait state X'0A3'.

System programmer response: See the explanation for wait state X'0A3'.

Source: Global resource serialization

Module: ISGNRSP

Routing code: 1,10

Descriptor code: 1

ISG183W GRS PROCESSING TERMINATED.

Explanation: An error occurred that ended global resource serialization processing.

System action: The system enters non-restartable wait state X'0A3' and may issue messages describing the error. In some cases, the system issues an SVC dump.

Operator response: Notify the system programmer.

System programmer response: See the explanation for wait state X'0A3' and any accompanying messages. Obtain the SVC dump, if available, to look for the error.

If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SVC dump, if one was issued.

Source: Global resource serialization

Module: ISGBCSP

Routing code: 1,10

Descriptor code: 1

ISG184I SYSTEM *sysname* IS NOT RESPONDING.

Explanation: System *sysname* in the sysplex is missing its status update. This is causing global resource serialization delays.

System action: Global resource serialization issues this message for each system that is causing global resource serialization delays. The system issues ISG185E once.

Operator response: Follow the operator response for message ISG185E.

System programmer response: Follow the system programmer response for message ISG185E.

Source: Global resource serialization

Module: ISGCART

Routing code: 2.

Descriptor code: 12

ISG185E GRS CANNOT RESTART THE RING BECAUSE SYSTEMS ARE NOT RESPONDING

Explanation: The global resource serialization ring was disrupted while global resource serialization was using ring acceleration. Some or all of the systems that were in the complex are not responding. The last system to put requests into the ring-processing system authority (RSA) is not responding and the requests may have been granted by another non-responding system. Global resource serialization cannot rebuild the ring because it cannot get updated RSA information.

System action: The system issues ISG184I for each system that may have granted requests unknown to the rest of the global resource serialization complex. Global resource serialization waits until a system with updated RSA information responds or until all of the non-responding systems specified in message ISG184I have been removed from the complex.

All the systems in the complex suspend any task attempting to obtain global resources until global resource serialization restarts the ring.

Operator response: Do one of the following:

- Follow the operator response for cross-system coupling facility (XCF) messages, (prefix IXC) or other critical system messages.
- Remove the non-responding systems from the sysplex.

System programmer response: If this problem occurs frequently in the global resource serialization complex, consider either discontinuing the use of ring acceleration or increasing the ACCELSYS value specified in the GRSCNFxx parmlib member.

Source: Global resource serialization

ISG186D GRS CTC *dev* WAS TARGET OF VARY OFFLINE,FORCE. REPLY KEEP TO HAVE GRS RETAIN THE CTC OR FREE TO REMOVE THE CTC FROM GRS.

Explanation: The operator entered a VARY *dev*,OFFLINE,FORCE command for a global resource serialization channel-to-channel (CTC) device. Global resource serialization can either keep or free the CTC.

In the message text:

dev The device number of the CTC device.

System action: VARY command processing stops until the operator enters a reply.

Operator response: Choose one of the following replies:

KEEP

To have global resource serialization retain its allocation of the CTC. Global resource serialization can then use the CTC if it is brought back online.

This is usually the best reply.

FREE

To remove the CTC from global resource serialization allocation. Another subsystem or component can then allocate the CTC. Once the CTC is removed, global resource serialization can never reallocate it.

Reply **FREE** if you want to remove the CTC from global resource serialization permanently, and want to reallocate it for other purposes, such as cross-system coupling facility (XCF) signalling.

Source: Global resource serialization

Module: ISGJENFO

Routing code: 2,10

Descriptor code: 2

ISG187D SOME GRS CTCS ARE ALREADY IN USE. RELOAD THE SYSTEM OR REPLY CONTINUE

Explanation: Global resource serialization found some channel-to-channel (CTC) paths specified in the GRSCNFxx parmlib member that were either allocated by another component or listed more than once in the GRSCNFxx parmlib member. They are not available for global resource serialization reuse.

System action: The system issues message ISG045I for each CTC. Processing stops until the operator enters a reply.

Operator response: Do one of the following:

- If this system requires those CTCs for global resource serialization, either correct the error in the GRSCNFxx parmlib member and then reIPL the system, or reIPL this system using a different GRSCNFxx parmlib member.
- If this system does not need the CTCs, reply **CONTINUE** to let the initialization go on processing.

System programmer response: Correct the error in the GRSCNFxx parmlib member.

Source: Global resource serialization

Module: ISGBTC

Routing code: 2,10

Descriptor code: 2

ISG188I GRS COMPLEX JOINED BY SYSTEM *sysname*

Explanation: System *sysname* joined the global resource serialization complex.

System action: The system continues processing.

Source: Global resource serialization

Module: ISGXGRPX

Routing code: 10

Descriptor code: 4

ISG189I SYSTEM SYSNAME - QUIESCING GLOBAL RESOURCE SERIALIZATION

Explanation: System SYSNAME is suspending GLOBAL RESOURCE SERIALIZATION in response to a system being partitioned out of a SYSPLEX on behalf of a 'VARY XCF,sysname,OFFLINE' operator command.

System action: Processing continues.

Source: Global resource serialization

Module: ISGCQSC

ISG190I SYSTEM SYSNAME - QUIESCED GLOBAL RESOURCE SERIALIZATION

Explanation: System SYSNAME suspended the processing of global resource requests and is no longer a member of the GRS ring. This response occurs when a system is partitioned out of a SYSPLEX on behalf of a 'VARY XCF,sysname,OFFLINE' operator command.

System action: Processing continues.

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Source: Global resource serialization

Module: ISGBTC

ISG210E RNL CHANGE WAS INITIATED BY SYSTEM *sysname*. SOME JOBS ARE BEING SUSPENDED UNTIL RNL CHANGE COMPLETES.

Explanation: The operator entered the SET GRSRNL command, but global resource serialization is unable to complete the processing immediately. Jobs on the system that issued this message are suspended if they requested resources affected by the pending change.

In the message text:

sysname

The system where the SET command was entered.

System action: Jobs remain suspended until the resource name list (RNL) change completes or is canceled. The system issues messages ISG219E and ISG220D.

Operator response: Enter the DISPLAY GRS,SUSPEND command to display jobs that are suspended until the RNL change completes.

System programmer response: If an important job is suspended by the pending RNL change, see the system programmer response to message ISG220D.

Source: Global resource serialization

Module: ISGCMR

Routing code: 2

Descriptor code: 3

ISG211I RNL CHANGE BY SYSTEM *sysname* HAS COMPLETED.

Explanation: A SET GRSRNL command initiating a resource name list (RNL) change completed successfully.

In the message text:

sysname

The system where the SET command was entered.

System action: Any jobs suspended by a pending SET GRSRNL command will now proceed. Any new ENQ or RESERVE macro requests use the resource name lists (RNL) specified on the SET GRSRNL command.

System programmer response: Make sure that the new RNLs are specified in the GRSRNLxx parmlib member for each system so that if the operator re-IPLs the system, it will have the correct RNLs specified.

Source: Global resource serialization

Module: ISGCIRC

Routing code: *,2

Descriptor code: 5

ISG219E RNL CHANGE WAITING FOR RESOURCES TO BE FREED. TO LIST DELAYING JOBS, USE ROUTE SYSNAME,DISPLAY GRS,DELAY. TO LIST SUSPENDED JOBS, USE ROUTE SYSNAME,DISPLAY GRS,SUSPEND.

Explanation: A SET GRSRNL command initiated a resource name list (RNL) change but the change is still pending. The resource name list (RNL) change has not yet taken place because there are jobs holding the resources affected by the RNL change.

System action: SET GRSRNL processing is pending. The system suspends jobs with new requests for resources affected by the pending change. The system issues ISG220D following this message.

System programmer response: See the system programmer response for message ISG220D.

Source: Global resource serialization

Module: ISGCRNLO

Routing code: *,2

Descriptor code: 3

ISG220D **REPLY C TO CANCEL RNL CHANGE COMMAND, OR S FOR SUMMARY OF RNL CHANGE PROGRESS.**

Explanation: A SET GRSRNL command entered on this system initiated a resource name list (RNL) change but the change is still pending. By replying to this message, the operator can cancel the pending change, or get an updated summary of the RNL change progress.

System action: The system waits for the operator's response while monitoring the resource requests that are delaying the RNL change. If those requests are DEQed or if the jobs are canceled, the system deletes messages ISG219E, ISG220D, and ISG210E, from the operator console. The RNL change will then complete.

While the RNL change is still pending, all systems in the complex suspend any jobs with new requests for resources affected by the RNL change. Message ISG210E appears on each system that suspends jobs.

If the operator replies **S** for a summary, the system issues this message again after global resource serialization gives the summary information.

System programmer response: Check the status of the RNL change. Either wait for the RNL change to finish without intervention, or do one or more of the following:

- Reply **S** to get a summary of the progress of the RNL change.
The system issues this message after each summary message ISG221I. The message is deleted when the RNL change successfully completes or is canceled.
- Enter DISPLAY GRS,DELAY to determine which jobs are delaying the RNL change. To display the same information about other systems, preface the command with 'ROUTE *sysname*' where *sysname* is the name of the desired system.
- Cancel jobs delaying the RNL change, if necessary.
- Enter DISPLAY GRS,SUSPEND to determine which jobs are being suspended explicitly due to the RNL change. To display the same information about other systems, preface the command with 'Route *sysname*' where *sysname* is the name of the desired system.
- Reply **C** to cancel the RNL change and release the suspended jobs listed in the DISPLAY GRS,SUSPEND display.
To cancel the RNL change from another system, enter the DISPLAY R,L,CN=(ALL) and find the reply id for message ISG220D.

Source: Global resource serialization

Module: ISGCRNLO

Routing code: *,2

Descriptor code: 2

ISG221I *text*

Explanation: In the message, *text* is:

```

SUMMARY FOR RNL CHANGE
SYSTEM sysname1
j1 RESOURCE REQUESTS DELAYING RNL CHANGE.
j2 JOBS SUSPENDED UNTIL RNL CHANGE COMPLETES.
SYSTEM sysname2
⋮

```

A summary of a pending resource name list (RNL) change was requested in response to message ISG220D. The message information in the message is repeated once for each system in the complex.

In the message text:

sysname

The name of a system being summarized for the RNL change.

ISG222I • ISG223I

- j1* The number of outstanding resource requests holding or waiting for resources at the time an RNL change was requested for system *sysname*. If more than 254 resource requests are detected, then *j1* will be >254.
- j2* The number of jobs suspended because they requested resources while the RNL change processing was still pending. If more than 254 jobs are detected, then *j2* will be >254.

System action: Processing continues. The system issues message ISG220D to prompt the operator for another summary.

System programmer response: Reply S to message ISG220D as many times as necessary to get information for all the systems.

If large values appear for *j1* or *j2*, the RNL change may be changing too many resources at one time. If a GENERIC RNL entry was specified, it might be affecting many resources. In this case, it might be necessary to cancel the RNL change and wait until the system has a lighter load or a complex-wide IPL is scheduled to perform the RNL change.

For a pending RNL change, consider canceling either the suspended jobs or the RNL change if:

- The suspended jobs are vital for systems operation.
- The jobs delaying the RNL change are going to hold the resources for a long period of time.
- There are jobs or related jobs in both the DELAY and SUSPEND lists. If there are jobs in both lists, the RNL change may not be able to complete because it cannot relinquish control of its DELAY resource.

Source: Global resource serialization

Module: ISGCRNLO

Routing code: *

Descriptor code: 5

ISG222I GRS INITIALIZATION DELAYED. WAITING FOR RESPONSE FROM SYSTEM *sysname*

Explanation: Global resource serialization is waiting for a response to a status request that has been sent to the system indicated by *sysname*. For global resource serialization to continue, the target system must **either** respond or must be ended from the sysplex.

System action: Global resource serialization initialization will be delayed while waiting for a response to the status request.

While global resource serialization is waiting for a response to the status request, this message will be issued periodically to inform the operator that initialization is still delayed.

Once the status request is responded to or the target system ends, message ISG223I will be issued.

Operator response: If this message continues to be repeated many times for the same system, check if the system indicated by *sysname* is still active. If the system is hung up, notify the system programmer.

System programmer response: When a response isn't being received because the target system is hung up, determine what is holding up the system and either correct the situation or partition the system out of the sysplex so that processing can continue on the system that is being initialized.

Source: Global resource serialization

Module: ISNGRSP

Routing code: 2

Descriptor code: 12

ISG223I GRS INITIALIZATION PROCESSING RESUMED.

Explanation: Message ISG222I was previously issued to indicate that global resource serialization was delayed because it was waiting for a response from another system. Either the response was received or the system ended such that global resource serialization initialization is now able to continue.

System action: Global resource serialization continues.

Source: Global resource serialization

Module: ISNGRSP

Routing code: 2

Descriptor code: 12

ISG224I GRS TRYJOIN OPTION PROCESSING DELAYED. GRS DISRUPTION MAY BE IN PROGRESS.

Explanation: This system is trying to join a global resource serialization complex, but is delayed by one of the following:

- The complex is in a disrupted state.
- A previously IPLed system has not started the global resource serialization ring yet.

System action: Global resource serialization initialization will be delayed while waiting for the ring to be started or rebuilt.

While this system is waiting for the ring to be started or rebuilt, this message will be issued periodically to inform the operator that initialization is still delayed.

Once the ring has been started or rebuilt, message ISG003I will be issued.

Operator response: If this message continues to be repeated many times, check for problems with the other systems in the global resource serialization complex. Contact the system programmer for assistance if necessary.

System programmer response: Check for problems with the other systems in the global resource serialization complex.

If the problem persists, search problem reporting databases for a fix to the problem. If no fix exists, contact the IBM Support Center.

Source: Global resource serialization.

Module: ISGNGRSP

Routing code: 2

Descriptor code: 12

ISG233I THIS SYSTEM NOT IN THE GLOBAL RESOURCE SERIALIZATION COMPLEX. SET GRSRNL COMMAND IGNORED.

Explanation: The operator entered a SET GRSRNL command. The GRSRNL keyword is only valid if the system was successfully initialized with GRS=START, GRS=TRYJOIN, or GRS=JOIN.

System action: The system ignores the GRSRNL keyword of the SET command.

System programmer response: Make sure that the system is an active global resource serialization system.

Source: Global resource serialization

Module: ISGCIRC, ISGCMDI

Routing code: *

Descriptor code: 5

ISG234I PARMLIB MEMBER GRSRNL_{xx} DOES NOT EXIST.

Explanation: The operator entered a SET command with a GRSRNL parmlib suffix specification of *xx*, but, SYS1.PARMLIB did not contain member GRSRNL_{xx}.

System action: If any more members were specified on the SET or the SET GRSRNL command, the system tries to process those members. The system cancels the SET command and issues message ISG238I when parmlib processing completes.

Operator response: Enter the SET command with correct values for the GRSRNL keyword. If the keyword is correct, notify the system programmer.

System programmer response: Make sure the required member is in SYS1.PARMLIB.

Source: Global resource serialization

ISG235I • ISG238I

Module: ISGCRNLP

Routing code: *

Descriptor code: 5

ISG235I PARMLIB MEMBER GRSRNL xx CONTAINS A SYNTAX ERROR IN RECORD $nnnnnnn$.

Explanation: The operator entered a SET command with a GRSRNL keyword. The system found a syntax error in this parmlib member.

In the message text:

xx The suffix of the GRSRNL xx parmlib member specified on the SET command.

$nnnnnnn$

The record number, in decimal, containing the syntax error.

System action: If any other members were specified on the SET GRSRNL command, the system tries to process them. The system issues message ISG238I at the end of parmlib processing.

Operator response: Reenter the SET command with correct values for the GRSRNL keyword. If the keyword was specified correctly, notify the system programmer.

System programmer response: Correct the syntax error in parmlib member GRSRNL xx . Global resource serialization provides routines to check resource name list (RNL) syntax in SYS1.SAMPLIB (ISGRNLCK). Run these routines on the RNLs before they are used at IPL or for the SET GRSRNL command. See *z/OS MVS Planning: Global Resource Serialization* for more information on the RNL syntax checker.

Source: Global resource serialization

Module: ISGCRNLP

Routing code: *

Descriptor code: 5

ISG236I PARMLIB MEMBER GRSRNL xx COULD NOT BE READ.

Explanation: The operator entered a SET GRSRNL command, but the system was unable to read parmlib member GRSRNL xx .

In the message text:

xx The suffix for the GRSRNL xx parmlib member specified on the SET command.

System action: The system ignores the GRSRNL keyword on the SET command and does not process any more parmlib members. The system issues message ISG238I.

Operator response: Enter the SET command with correct values for the GRSRNL keyword. If the keyword was specified correctly, notify the system programmer.

System programmer response: Correct the GRSRNL xx parmlib member.

Source: Global resource serialization

Module: ISGCRNLP

Routing code: *

Descriptor code: 5

ISG238I ERROR PROCESSING PARMLIB MEMBERS FOR SET GRSRNL COMMAND. SET GRSRNL COMMAND CANCELED.

Explanation: The operator entered a SET command with a GRSRNL keyword, but global resource serialization encountered an error while processing the GRSRNL keyword.

System action: The SET GRSRNL command is canceled. The system issues messages ISG234I, ISG235I, or ISG236I prior to issuing this message.

System programmer response: See the system programmer response for preceding message ISG234I, ISG235I, or ISG236I.

Source: Global resource serialization

Module: ISGCRNLP

Routing code: *

Descriptor code: 5

ISG239I NOT ALL SYSTEMS IN SYSPLEX. SET GRSRNL COMMAND IGNORED.

Explanation: The operator entered the SET command with a GRSRNL keyword. Global resource serialization found a system that is not participating in the same sysplex as the system where the command was entered. Global resource serialization requires all systems in the complex be in the same sysplex to use the SET GRSRNL function.

Note: For resource name list (RNL) changes, global resource serialization considers a complex of one system in cross-system coupling facility (XCF) MONOPLEX or XCF-local mode to be in a sysplex.

System action: The system ignores the GRSRNL keyword on the SET command.

System programmer response: If the RNLs still have to be changed in the global resource serialization complex, remove all the systems that are not in the same sysplex from the global resource serialization complex using the VARY GRS,PURGE or the VARY XCF OFFLINE command. Then, enter the SET GRSRNL command. After the SET GRSRNL command has completed, reIPL the other systems with the new RNLs.

When you reIPL the systems, specify the same RNLs on the GRSRNL system parameter that were specified on the SET GRSRNL command. The member names can differ, but the content of the RNLs must match.

Source: Global resource serialization

Module: ISGCIRC

Routing code: *

Descriptor code: 5

ISG241I RNL CHANGE WAS CANCELED BY OPERATOR.

Explanation: The resource name list (RNL) change is no longer pending. An operator canceled it in response to message ISG220D.

System action: The system will process any jobs suspended by the canceled RNL change.

Source: Global resource serialization

Module: ISGCIRC

Routing code: *

Descriptor code: 5

ISG242I SYSTEM *sysname* PARTITIONED FROM SYSPLEX. SET GRSRNL COMMAND CANCELED.

Explanation: The operator entered a SET GRSRNL command on system *sysname*, but global resource serialization removed *sysname* from the sysplex before the resource name list (RNL) change completed.

System action: The system cancels the SET GRSRNL command on the remaining systems in the sysplex.

System programmer response: If the RNL change is still desired, set up the RNLs and enter the SET GRSRNL command on another system in the sysplex.

Source: Global resource serialization

Module: ISGCPRC

Routing code: 2,10

Descriptor code: 4

ISG243I UNEXPECTED ERROR PROCESSING RNL CHANGE ON SYSTEM *sysname*. SET GRSRNL COMMAND CANCELED.

Explanation: System *sysname* encountered an unexpected error or abend while processing the SET GRSRNL command.

System action: The system cancels the SET GRSRNL command internally. System *sysname* issues message ISG250I and may issue an SVC dump.

System programmer response: Obtain the SVC dump from system *sysname*.

If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SVC dump if one was issued.

Source: Global resource serialization

Module: ISGCIRC

Routing code: *

Descriptor code: 5

ISG244I SYSTEM *sysname* IS ALREADY PERFORMING SET GRSRNL. SET GRSRNL COMMAND IGNORED.

Explanation: The operator entered a SET command with a GRSRNL keyword, but system *sysname* is already performing a SET GRSRNL command.

System action: The system ignores the GRSRNL keyword of the SET command on this system.

Operator response: System *sysname* is already performing an RNL change. If a second RNL change is desired, enter the SET GRSRNL command after system *sysname* completes or cancels its SET GRSRNL command.

System programmer response: Determine the status of that RNL change on system *sysname* by looking at the messages issued on that system. Enter the DISPLAY R,L,CN=(ALL) command to find outstanding prompts for the RNL change.

Source: Global resource serialization

Module: ISGCMDI

Routing code: *

Descriptor code: 5

ISG245I CURRENT RNLS ARE THE SAME AS RNLS SPECIFIED. RNLS REMAIN UNCHANGED.

Explanation: The operator entered a SET command with a GRSRNL keyword, but the resource name lists (RNL) specified on the command are identical to those already in use.

System action: The RNLS remain unchanged.

Operator response: Correct the SET GRSRNL command. If the correct value was specified for the GRSRNL keyword of the SET GRSRNL command, notify the system programmer.

System programmer response: Do the following:

- Make sure that the SYS1.PARMLIB contains the correct members.
- Check to see if the required RNL change was already processed.

Source: Global resource serialization

Module: ISGCIRC

Routing code: *

Descriptor code: 5

ISG248I CURRENT RNLS INDICATE EXCLUSION OF ALL GLOBAL RESOURCES. SET GRSRNL COMMAND CANCELED.

Explanation: This system was IPLed with the GRSRNL=EXCLUDE option, excluding all resources from global resource serialization processing. The SET GRSRNL command cannot be used to change these resource name lists (RNL).

System action: The system rejects the SET GRSRNL command.

Source: Global resource serialization

Module: ISGCIRC

Routing code: *

Descriptor code: 5

ISG250I *fc-rc* ERROR DURING RNL CHANGE.

Explanation: This system found an error while processing the SET GRSRNL command.

In the message text:

fc-rc The function and reason code containing diagnostic information that IBM might request.

System action: The system rejects the SET GRSRNL command. If the function and reason code was C4-00, some jobs that were suspended during the RNL change may not be released.

System programmer response: If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the function and reason codes.

Source: Global resource serialization

Module: ISGCIRC

Routing code: *,2,10

Descriptor code: 4

ISG251I RNLS SPECIFIED EXCEED MAXIMUM SIZE ALLOWED. SET GRSRNL COMMAND CANCELED.

Explanation: The operator entered a SET GRSRNL command, but the resource name lists (RNL) specified exceeded the maximum storage allowed. The global resource serialization RNLS are limited to a maximum storage size of about 61 kilobytes. That limits the number of entries possible, depending on the size of the RNAMEs specified on entries. For example, each RNL entry takes up 10 bytes, plus length of an RNAME. If the average RNAME in the list is 10 bytes, then the number of entries allowed would be:

$(61 \text{ kilobytes} * 1024 \text{ bytes per kilobyte}) / 20 \text{ bytes per entry} = \text{approximately } 3120 \text{ entries.}$

System action: Global resource serialization cancels the SET GRSRNL command.

Operator response: Determine if all the RNL entries are needed in the lists. Convert some of the SPECIFIC entries to GENERIC to lower the number and size of entries.

Source: Global resource serialization

Module: ISGCRNLP

Routing code: *

Descriptor code: 5

ISG252I SYSTEM *sysname* ATTEMPTING TO JOIN COMPLEX WHILE RNL CHANGE IN PROGRESS. JOIN WILL NOT BE ALLOWED.

Explanation: A new system is trying to join the complex while global resource serialization is processing a SET GRSRNL command to change the resource name lists (RNL). Global resource serialization does not permit systems to join the global resource serialization complex while an RNL change is in progress.

System action: The JOIN will not be processed until the RNL change completes.

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Operator response: If it is important that system *sysname* join the complex, cancel the RNL change. If the RNL change is more important, wait for it to complete.

Make sure that the joining system specifies the RNLs being used in the complex when it actually joins. For example:

- If you cancel the SET GRSRNL command, the joining system should specify the RNLs that were in use before the command was entered.
- If you allow the SET GRSRNL command to complete, make sure the joining system uses the RNLs that will be in place after the command completes.

Source: Global resource serialization

Module: ISGCART

Routing code: 2,10

Descriptor code: 4

ISG253E RNL CHANGE IN PROGRESS. JOIN PROCESSING WILL BE DELAYED UNTIL RNL CHANGE COMPLETES.

Explanation: This system is trying to join the global resource serialization complex while global resource serialization processes a SET GRSRNL command to change the resource name lists (RNL). Global resource serialization does not permit systems to join the global resource serialization complex while an RNL change is in progress.

System action: The JOIN will not be processed until the RNL change completes. The system waits until the RNL change completes and then tries to join the complex.

Operator response: If it is important that system *sysname* join the complex, cancel the RNL change. If the RNL change is more important, wait for it to complete.

Make sure that the joining system specifies the RNLs being used in the complex when it actually joins. For example:

- If you cancel the SET GRSRNL command, the joining system should specify the RNLs that were in use before the command was entered.
- If you allow the SET GRSRNL command to complete, make sure the joining system uses the RNLs that will be in place after the command completes.

Source: Global resource serialization

Module: ISNGRSP

Routing code: 2,10

Descriptor code: 4

ISG300I GRS=STAR INITIALIZATION COMPLETE FOR SYSTEM *sysname*.

Explanation: Global resource serialization on system *sysname* has completed initialization and is executing as part of a global resource serialization star complex. This message is issued either after global resource serialization completes initialization for system initialization or following a successful migration from a global resource serialization ring complex to a global resource serialization star complex.

System action: The system is now capable of processing ENQ, DEQ, and RESERVE requests for global resources.

Operator response: None.

System programmer response: None.

Source: Global resource serialization

Module: ISGWDR

Routing code: 2

Descriptor code: 4,12

ISG301W SYSTEM CANNOT JOIN GRS COMPLEX. SYSPLEX IS MIGRATING TO GRS STAR MODE.

Explanation: The global resource serialization complex is migrating from a global resource serialization ring complex to a global resource serialization star complex. During this migration, no new systems are allowed to join the complex.

System action: The system enters a non-restartable X'0A3' wait state.

Operator response: Wait for the migration to global resource serialization star mode to complete. Re-IPL the system using **GRS=STAR**. STAR Option

Source: Global resource serialization

Module: ISGNST

Routing code: 2,10

Descriptor code: 1

ISG303D GRS=STAR NOT ALLOWED WHEN SYSTEM IN *xcfmode* MODE. RELOAD THE SYSTEM OR REPLY NONE TO CONTINUE THE IPL.

Explanation: **GRS=STAR**, was specified to initialize the system into a global resource serialization star complex, but the system was IPLed to run either in XCF-LOCAL mode (PLEXCFG=XCFLOCAL) or as a one-system sysplex in MONOPLEX mode (PLEXCFG=MONOPLEX). Star is only valid in a multisystem environment, and is not allowed for this configuration.

In the message text:

xcfmode is one of the following:

- MONOPLEX
- XCF-LOCAL

System action: The system IPL is suspended until a reply is received.

Operator response: If the intent is to run the system as a one-system sysplex without global resource serialization, reply **NONE**. Otherwise, if the system should be initialized into a multisystem configuration, contact your system programmer for the necessary system parameters and re-IPL the system.

System programmer response: Correct the system parameters to reflect the environment in which this system is to execute.

Source: Global resource serialization

Module: ISGNCBIM

Routing code: 1,10

Descriptor code: 2

ISG304I GRS INVOCATION OF *sysreq* SERVICE FAILED, RC=*rc*, RSN=*rsn*.

Explanation: Global resource serialization requested a system service, but the request failed.

In the message text:

sysrec is the name of the system service invoked by global resource serialization.

RC=*rc* is the return code from the *sysreq* service.

RSN=*rsn*
is the reason code from the *sysreq* service.

System action: The system continues processing. Another message will be issued to indicate the result of the global resource serialization function that invoked the service.

Operator response: Notify your system programmer.

System programmer response: Use the return code identified in the message and the information associated with the follow-on message to determine the cause of the error and correct the problem. See *z/OS MVS Programming*:

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Authorized Assembler Services Reference EDT-IXG, or z/OS MVS Programming: Sysplex Services Reference. If the information is not sufficient to determine the cause of the error, contact the IBM support center.

Source: Global resource serialization

Module: ISGNST

Routing code: 2,10

Descriptor code: 12

ISG305W GRS INITIALIZATION ERROR. *sysreq* FOR *modname* FAILED WITH RC=*rc*.

Explanation: During initialization of the global resource serialization address space, the call to a system service to initialize a global resource serialization module failed.

In the message text:

sysreq is the name of the system service invoked by global resource serialization.

modname

is the name of the module global resource serialization was attempting to access.

RC=*rc* is the return code from the system service.

System action: The system enters a non-restartable X'0A3' wait state.

Operator response: Notify your system programmer. If your system programmer requests it, obtain a stand-alone dump. Make sure the dump includes the GRS address space.

System programmer response: Use the return code identified in the message to determine the cause of the error and correct the problem. See *z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG, or z/OS MVS Programming: Sysplex Services Reference*. If the return code is not sufficient to determine the cause of the error, have the operator take a stand-alone dump for further problem analysis.

Source: Global resource serialization

Module: ISGNASIM, ISGNAR, ISGNST

Routing code: 2,10

Descriptor code: 1

ISG306W GRS INITIALIZATION ERROR. CRITICAL TASK *xxxx* TERMINATED IN ERROR.

Explanation: During initialization of the global resource serialization address space, a task that is critical to global resource initialization or processing unexpectedly terminated due to an abnormal condition.

In the message text:

xxxx is an initialization error code that identifies the particular task that failed.

System action: The system enters a non-restartable X'0A3' wait state.

Operator response: Notify your system programmer.

System programmer response: Have the operator take a stand-alone dump for further problem analysis and contact the IBM Support Center.

Source: Global resource serialization

Module: ISGNAR, ISGNST

Routing code: 2,10

Descriptor code: 1

ISG307W GRS=*grscfg* IS INCONSISTENT WITH THE CURRENT *grsop* COMPLEX.

Explanation: During initialization, global resource serialization detected that the type of complex the system was instructed to join based on the GRS=*grscfg* option is different from the complex that already exists.

A system IPLed with GRS= START, JOIN, or TRYJOIN specified, cannot join an existing global resource serialization star complex.

And a system IPLed with GRS=STAR, cannot join an existing global resource serialization ring complex.

In the message text:

grscfg is the specified GRS= processing option:

- START
- JOIN
- TRYJOIN
- STAR

grsop is either RING or STAR, representing the type of complex that is currently operating. It is not compatible with *grscfg*.

System action: The system enters a non-restartable X'0A3' wait state.

Operator response: If the existing complex is a global resource serialization ring complex, then re-IPL the system specifying GRS=TRYJOIN to join the ring. Otherwise, re-IPL the system specifying GRS=STAR to join the global resource serialization star complex.

System programmer response: None.

Source: Global resource serialization

Module: ISGNST, ISGXSIS

Routing code: 2,10

Descriptor code: 1

ISG308W GRS PROCESSING TERMINATED. *sysreq* SERVICE FAILED WITH {RC=*rc* | ABEND=*abendcode*} RSN=*rsn*.

Explanation: Global resource serialization requested a system service, but the request failed.

In the message text:

sysreq is the name of the system service that failed.

RC=*rc* is the return code from the system service.

ABEND=*abendcode*
is the ABEND code issued by the system service.

RSN=*rsn*
is the reason code from the system service.

System action: The system enters a non-restartable X'0A3' wait state.

Operator response: Notify your system programmer.

System programmer response: If the name of the system service involved along with the error return code and reason code are sufficient enough to determine why the problem occurred, correct the problem and have the operator re-IPL the system. See *z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG*, or *z/OS MVS Programming: Sysplex Services Reference*. Otherwise, have the operator take a stand-alone dump for further problem analysis.

Source: Global resource serialization

Module: ISGNLS, ISGNRS

Routing code: 2,10

Descriptor code: 1

ISG309W GRS PROCESSING TERMINATED. UNRECOVERABLE FAILURE DURING LOCK STRUCTURE REBUILD PROCESSING. *text*

Explanation: *text* is one of the following:

- GLOBAL QUEUE DAMAGE DISCOVERED ON THIS SYSTEM.
- STOP REQUESTED BY OPERATOR. CANNOT ACCESS ORIGINAL LOCK STRUCTURE.
- SHUTDOWN REQUESTED BY SFM POLICY.
- PROTOCOL ERROR ENCOUNTERED.
- GRS/XES INTERFACE ERROR ENCOUNTERED.
- ERROR DURING MIGRATION. NO VALID LOCK STRUCTURES EXIST.
- STOP REASON UNKNOWN

An unrecoverable failure occurred during rebuild processing for the global resource serialization lock structure, ISGLOCK. The reason for the failure is in the message *text*.

The message *text*:

GLOBAL QUEUE DAMAGE DISCOVERED ON THIS SYSTEM.

The global resource serialization queue structure was corrupted by a previous global resource serialization error. This system is not able to participate in the rebuild of the global resource serialization lock structure.

STOP REQUESTED BY OPERATOR. CANNOT ACCESS ORIGINAL LOCK STRUCTURE.

An operator stopped the rebuild. The system could not access the original lock structure, so it is unable to continue to participate in the global resource serialization complex.

SHUTDOWN REQUESTED BY SFM POLICY.

As the result of rebuilding the global resource serialization lock structure, XES has determined that this system is not part of the optimal sysplex configuration that can continue following the rebuild of the structure. As a result, this system is unable to continue to participate in the global resource serialization complex.

PROTOCOL ERROR ENCOUNTERED.

An unexpected event violated the global resource serialization lock structure rebuild protocol. This system can no longer continue processing the rebuild.

GRS/XES INTERFACE ERROR ENCOUNTERED.

An unexpected return code was received from XES during rebuild. This system can no longer continue processing the rebuild.

ERROR DURING MIGRATION. NO VALID LOCK STRUCTURES EXIST.

While attempting to build the global resource serialization lock structure during the migration from global resource serialization ring mode to global resource serialization star mode, a problem was detected with the lock structure. This system can no longer continue processing the rebuild.

STOP REASON UNKNOWN

Global resource serialization is unable to determine the reason for the failure in rebuild. The system can no longer continue processing the rebuild.

System action: The system enters a non-restartable X'0A3' wait state.

Operator response: Notify your system programmer.

System programmer response: Correct the problem indicated by the reason and re-IPL the system.

Source: Global resource serialization

Module: ISGVRB

Routing code: 2,10

Descriptor code: 1

ISG310W GRS PROCESSING TERMINATED. UNRECOVERABLE FAILURE DURING (XES | XCF) (CONTENTION EXIT | COMPLETE EXIT | NOTIFY EXIT | MESSAGE EXIT | GROUP EXIT) PROCESSING.

Explanation: During global resource serialization processing, an unexpected error occurred in the listed exit. Global resource serialization is unable to recover from the failure.

System action: The system enters a non-restartable X'0A3' wait state.

Operator response: Notify your system programmer.

System programmer response: Take a stand-alone dump and contact the IBM Support Center.

Source: Global resource serialization

Module: ISGVTX, ISGVCX, ISGVNX, ISGXGX, ISGXXM

Routing code: 2,10

Descriptor code: 1

ISG312W GRS INITIALIZATION ERROR. *rnltype* RNL MISMATCH.

Explanation: During global resource serialization system initialization, global resource serialization detected a mismatch between the RNLs read from the parmlib and the RNLs in use by the systems in an active global resource serialization complex. Some resource requests may have already been processed on this system during initialization processing. Because of the conflict and the potential exposure to integrity problems if processing were to continue, the initializing system cannot be allowed to join the current global resource serialization complex.

In the message text:

rnltype is the type of RNL that did not match with the current complex.

rnltype is one of the following:

SYSTEM INCLUSION

SYSTEMS EXCLUSION

RESERVE CONVERSION

System action: The system enters a non-restartable X'0A3' wait state.

Operator response: Notify your system programmer.

System programmer response: Ensure that the GRSRNLxx parmlib members used to IPL the failing system are the same as what was specified for the other systems that were previously IPLed into the global resource serialization complex. Once the GRSRNLxx parmlib specification has been corrected, re-IPL the system.

Source: Global resource serialization

Module: ISGNST

Routing code: 2,10

Descriptor code: 1

ISG313I SYSTEM IS JOINING A GRS STAR COMPLEX. RING CONFIGURATION KEYWORDS IN GRSCNFxx ARE IGNORED.or SYSTEM IS JOINING A GRS RING COMPLEX. STAR CONFIGURATION KEYWORDS IN GRSCNFxx ARE IGNORED.or SYSTEM IS INITIALIZING IN GRS NONE MODE. RING AND STAR CONFIGURATION KEYWORDS IN GRSCNFxx ARE IGNORED.

Explanation: While initializing the system, a parameter was detected in the GRSCNFxx parmlib member that has no meaning for the selected mode of global resource serialization.

In the message text:

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GRSCNFxx

is the parmlib member that is being used to initialize global resource serialization. *xx* is the suffix of the parmlib member.

System action: The parameter is ignored and system initialization continues.

Operator response: None

System programmer response: If your installation no longer uses the GRSCNFxx. parmlib member to initialize a system into a global resource serialization ring complex, delete any parameters related to a ring complex.

Remove mode-specific keywords that are not applicable to avoid informational messages on subsequent IPLs. See the GRSQ(x) settings in *z/OS MVS Initialization and Tuning Reference* for details on mode-specific keywords.

Source: Global resource serialization

Module: ISGNCNFP

Routing code: 10

Descriptor code: *

ISG315W GRS PROCESSING ERROR *xxxx*. UNABLE TO RECOVER FROM THE FAILURE OF A TASK CRITICAL TO GRS PROCESSING.

Explanation: A task that is critical to global resource processing ended due to an abnormal condition. The task either could not be reinstated or had reached the limit of reinstatement attempts allowed.

In the message text:

xxxx is an error code that indicates the particular task that failed.

System action: The system enters a non-restartable X'0A3' wait state.

Operator response: Notify your system programmer.

System programmer response: Examine your system log for one or more instances of global resource serialization related failures (for example, SDUMPs) that occurred just prior to this failure. The task probably terminated as a result of these failures. Take a stand-alone dump of the system. Collect the available diagnostic data from these failures and contact the IBM Support Center.

Source: Global resource serialization

Module: ISGGRP00, ISGNLD, ISGNST, ISGRREC

Routing code: 2,10

Descriptor code: 1

ISG316W GRS UNABLE TO REINSTATE A CRITICAL TASK. ATTACH FOR *modname* FAILED WITH RC=*rc*.

Explanation: During global resource serialization processing, a task critical to global resource serialization processing ended due to an abnormal condition. Global resource serialization attempted to reinstate the task, it was not able to do so because the ATTACH for the task module *modname* failed with a return code of RC=*rc*.

In the message text:

modname

is the name of the module that could not be ATTACHed.

RC=*rc* is the error return code from the ATTACH service.

System action: The system enters a non-restartable X'0A3' wait state.

Operator response: Notify your system programmer.

System programmer response: Use the return code identified in the message to determine the cause of the ATTACH error and correct the problem. If the return code is not sufficient to determine the cause of the error, have the operator take a stand-alone dump for further problem analysis. See *z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG*, or *z/OS MVS Programming: Sysplex Services Reference*.

Source: Global resource serialization

Routing code: 2,10

Descriptor code: 1

ISG317W GRS CRITICAL ERROR. PRIMARY CONTROL BLOCK STRUCTURE DAMAGED.

Explanation: During recovery from a failure, one of the primary control blocks used by global resource serialization to anchor its control block structure was found to be either corrupted or the pointer to it was bad. Global resource serialization is unable to recover from this error.

System action: The system enters a non-restartable X'0A3' wait state.

Operator response: Notify your system programmer.

System programmer response: Take a stand-alone dump and contact the IBM Support Center.

Source: Global resource serialization

Module: ISGCMEST, ISGGQWBR, ISGXFRRX, ISGREC

Routing code: 2,10

Descriptor code: 1

ISG318I GRS INITIALIZATION IS SUSPENDED UNTIL LOCK STRUCTURE (ISGLOCK) REBUILD IS COMPLETE.

Explanation: During initialization, global resource serialization tried to connect to the ISGLOCK lock structure while the structure was being rebuilt. Global resource serialization initialization will continue when the structure is rebuilt.

System action: Global resource serialization initialization is temporarily suspended while ISGLOCK is being rebuilt. The system initialization is held up until the GRS initialization resumes.

Message ISG319I is issued when processing is resumed.

Source: Global resource serialization

Module: ISGNLS

Routing code: 2

Descriptor code: 12

ISG319I LOCK STRUCTURE (ISGLOCK) REBUILD IS COMPLETE, GRS INITIALIZATION IS RESUMED.

Explanation: Message ISG318I was issued prior to this message to indicate that global resource serialization initialization was temporarily suspended until the global resource serialization lock structure, ISGLOCK, was rebuilt. The lock structure has been successfully rebuilt and global resource serialization initialization is resumed.

System action: GRS initialization continues.

Source: Global resource serialization

Module: ISGNLS, ISGNRS

Routing code: 2

Descriptor code: 12

ISG322A THE ALLOCATED LOCK STRUCTURE (ISGLOCK) SIZE, *allocatesize*, IS LESS THAN THE POLICY SIZE, *polycysize*.

Explanation: Due to insufficient storage available on the coupling facility, the size of ISGLOCK is less than the size requested.

In the message text:

allocatesize

is the size of the lock structure allocated, in units of 1K blocks.

ISG323A

polycysize

is the structure size defined in the CFRM policy (SIZE or INITSIZE, if specified) in units of 1K blocks.

System action: Initialization continues, for global resource serialization, using the smaller structure size. Processing performance might be degraded.

Operator response:

1. Use the DISPLAY XCF and DISPLAY CF commands to display details about the coupling facility lock structure, ISGLOCK.
2. Notify your system programmer.

System programmer response: If the allocated storage for the structure is significantly less than the capacity required by your installation at peak periods of processing, take immediate steps to correct the problem by doing one of the following:

- Reduce the space utilization on the coupling facility where the structure is allocated, or
- Change the CFRM policy preference list to select a different coupling facility. After updating the policy, activate it by issuing SETXCF START,POLICY,TYPE= CFRM,POLNAME= *polyciname*.

Then, initiate a rebuild of the structure by issuing the command, SETXCF START,REBUILD,STRNAME=ISGLOCK

Source: Global resource serialization

Module: ISGNLS, ISGNRS

Routing code: 1

Descriptor code: 11

ISG323A GLOBAL RESOURCE SERIALIZATION STOPPED ON *sysname*. LOCK STRUCTURE (ISGLOCK) REBUILD IS DUE TO *reason*.

Explanation: A rebuild of the global resource serialization lock structure, ISGLOCK, has been initiated. While the rebuild is in progress, no global resource requests will be processed by global resource serialization on the system.

This message is issued by each system in the sysplex as it detects the rebuild condition and begins to perform its part of the rebuild process. The *reason* indicates what caused the rebuild.

In the message text:

sysname

is the name of the system in the process of rebuilding the lock structure.

reason is one of the following:

LOSS OF CONNECTIVITY BY THIS SYSTEM

This system lost connectivity to the coupling facility where the lock structure is allocated.

LOSS OF CONNECTIVITY BY ANOTHER MVS SYSTEM

Another system in the sysplex lost connectivity to the coupling facility where the lock structure is allocated.

STRUCTURE FAILURE

The lock structure failed or the coupling facility where the lock structure resides failed.

OPERATOR REQUEST

The operator requested the rebuild of the lock structure.

GRSRNL=EXCLUDE MIGRATION

The lock structure must be rebuilt to support the migration from GRSRNL=EXCLUDE through the SET GRSRNL command to specific GRSRNL parmlib members, because local ENQ resources in the GRSRNL=EXCLUDE environment might have been changed to become global ENQ resources. The rebuild might occur even if the migration is canceled.

UNKNOWN REASON

The reason for the rebuild is not known.

System action: A new ISGLOCK structure will be built on a coupling facility as defined by the installation's coupling facility policy. While the rebuild occurs, no ENQ/DEQ/RESERVE requests for global resources will be

processed by global resource serialization on the indicated system. Any program that issues an ENQ/DEQ/RESERVE request for a global resource will have to wait until the rebuild is complete. This is also true for all other systems in the sysplex.

Source: Global resource serialization

Module: ISGVRB

Routing code: 1,10

Descriptor code: 2

ISG325I GRS LOCK STRUCTURE (ISGLOCK) REBUILD HAS COMPLETED ON *sysname*.

Explanation: In response to a request to rebuild the lock structure, ISGLOCK, system *sysname* has completed its part of the rebuild process.

In the message text:

sysname

is the name of the system that completed its part of the rebuild process.

System action: When all systems in the sysplex complete their rebuild processing, global resource serialization continues processing.

Operator response: None

System programmer response: None

Source: Global resource serialization

Module: ISGVRB

Routing code: 2,10

Descriptor code: 12

**ISG326I GRS LOCK STRUCTURE (ISGLOCK) REBUILD PROCESSING HAS BEEN STOPPED ON *sysname*,
text.**

Explanation: The global resource serialization lock structure, ISGLOCK, rebuild process was stopped by either the operator or the SFM policy. As a result, the system *sysname* has halted its rebuild activity.

In the message text:

sysname

is the name of the stopped system.

text is one of the following:

THE NEW LOCK STRUCTURE DOES NOT CONTAIN AT LEAST 32767 LOCK ENTRIES.

The size of the lock entries is too small.

XES COULD NOT ALLOCATE THE NEW LOCK STRUCTURE.

There is no new lock structure.

THE REBUILD WAS STOPPED BY OPERATOR COMMAND.

The lock structure rebuild has been stopped by the operator.

A SYSTEM LOST CONNECTIVITY TO THE NEW STRUCTURE.

The rebuild was ended by the active SFM policy.

The NEW STRUCTURE FAILED.

The rebuild was ended by the active SFM policy.

The NEW STRUCTURE DOES NOT PROVIDE AT LEAST EQUIVALENT CONNECTIVITY.

The rebuild was ended by the active SFM policy.

The NEW STRUCTURE DOES NOT PROVIDE SUPERIOR CONNECTIVITY.

The rebuild was ended by the active SFM policy.

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STOP REASON=*rsn*, CONNECTOR CODE=0

Note: If the reason code is not one anticipated by global resource serialization, there will be no *text* included in the message.

System action: When all systems in the sysplex have halted their rebuild processing, global resource serialization will be resumed on all systems that can still use the old lock structure. Systems that cannot access the old lock structure will be wait-stated.

If the old lock structure cannot be used, global resource serialization will again start a rebuild of the global resource serialization lock structure.

Operator response: If the **rebuild stop** was not “operator requested”, notify your system programmer.

System programmer response: Correct the problem that caused the rebuild to stop and issue the following command, **SETXCF START,REBUILD,STRNAME=ISGLOCK** to rebuild the ISGLOCK lock structure. Correct any connectivity problems and re-IPL any systems that have been wait-stated.

For the message text **STOP REASON=*rsn*, CONNECTOR CODE=0**, determine why the rebuild stopped by looking at the *rsn*, which is in `EepIRebuildStopReason`, and the values for it are found in the `IXLYEPL` macro.

Source: Global resource serialization

Module: ISGVRB

Routing code: 2,10

Descriptor code: 12

ISG329W GRS PROCESSING ERROR. UNEXPECTED CONTROL FLOW DETECTED.

Explanation: The top-level global resource serialization task from which all other tasks are anchored unexpectedly received control. The task is not able to recover.

System action: The system enters a non-restartable X'0A3' wait state.

Operator response: Take a stand-alone dump of the error and notify your system programmer.

System programmer response: Collect the dump and syslog associated with the failure and contact your IBM support center.

Source: Global resource serialization

Module: Detecting Module

Routing code: 2,10

Descriptor code: 1

ISG330I NEW GRS LOCK STRUCTURE, ISGLOCK, CONTAINS *lockentries* LOCKS. ORIGINAL GRS LOCK STRUCTURE CONTAINED *lockentries* LOCKS.

Explanation: Global resource serialization is rebuilding the global resource serialization lock structure, ISGLOCK, into a new lock structure.

In the message text:

lockentries

The number of lock entries in the new or original lock structure.

System action: Global resource serialization will process global requests using the new ISGLOCK structure.

Source: Global resource serialization

Module: ISGVRB

Routing code: 2

Descriptor code: 4

ISG331E **SYSTEM *sysname* INITIATED SYSPLEX-WIDE MIGRATION TO GRS STAR MODE. THIS SYSTEM IS PARTICIPATING IN MIGRATION.**

Explanation: Sysplex-wide migration to the global resource serialization star mode is initiated by system *sysname*. This system is notified and participates in the migration.

In the message text:

sysname

is the name of the system that initiated the sysplex-wide migration.

System action: Global resource serialization will participate in migration to a star complex.

Source: Global resource serialization

Module: ISGCIMS, ISGCPMS

Routing code: 2,10

Descriptor code: 5,11 or 5,3

ISG332I **SETGRS MODE=STAR COMMAND IGNORED. *migration-error***

Explanation: In the message text *migration-error* is one of the following:

- GRS QUEUES ARE DAMAGED ON SYSTEM *sysname*.
- NOT ALL SYSTEMS ARE IN SYSPLEX.
- GRS RECORDS NOT DEFINED ON SYSPLEX COUPLE DATASET.
- THIS SYSTEM NOT IN A GLOBAL RESOURCE SERIALIZATION COMPLEX.
- OTHER SYSTEMS NOT RESPONDING.
- LOCK STRUCTURE (ISGLOCK) CONTAINS nnnnnnnn LOCKS. A MINIMUM OF 32767 IS REQUIRED.
- GRS MIGRATION TO STAR MODE ALREADY IN PROGRESS.
- GRS IS ALREADY IN STAR MODE.
- ANOTHER COMMAND IS CURRENTLY IN PROGRESS.
- RNL CHANGE IS IN PROGRESS.
- SYSTEM *sysname* PARTITIONED FROM SYSPLEX.
- SYSTEM *sysname* CANNOT ACCESS THE GRS LOCK STRUCTURE (ISGLOCK).
- INITIATING SYSTEM, *sysname*, PARTITIONED FROM SYSPLEX.
- SYSTEM *sysname* DOES NOT SUPPORT STAR MODE.
- SYSTEM *sysname* IS *status*.

While processing a SETGRS MODE=STAR command to migrate from a ring to a star complex, global resource serialization detected the condition specified in the *migration-error* message text.

In the message text:

sysname

the name of the system that has the condition.

status the state of the named system in the global resource serialization ring complex, either:

- INACTIVE
- QUIESCED
- JOINING

Operator response: Report the following *migration-error* values to the system programmer:

- GRS QUEUES ARE DAMAGED ON SYSTEM *sysname*.
- ALL SYSTEMS ARE NOT IN SYSPLEX.
- GRS RECORDS NOT DEFINED ON SYSPLEX COUPLE DATASET.
- THIS SYSTEM NOT IN A GLOBAL RESOURCE SERIALIZATION COMPLEX.
- OTHER SYSTEMS NOT RESPONDING.

ISG332I

- LOCK STRUCTURE (ISGLOCK) CONTAINS nnnnnnnn LOCKS. A MINIMUM OF 32767 IS REQUIRED.
- SYSTEM *sysname* CANNOT ACCESS THE GRS LOCK STRUCTURE (ISGLOCK).
- INITIATING SYSTEM, *sysname*, PARTITIONED FROM SYSPLEX.
- SYSTEM *sysname* DOES NOT SUPPORT STAR MODE.
- SYSTEM *sysname* IS *status*.

The following *migration-error* values require no action:

- GRS MIGRATION TO STAR MODE ALREADY IN PROGRESS.
- GRS IS ALREADY IN STAR MODE.

For the following *migration-error* values, wait for the action to complete and reissue the command:

- ANOTHER COMMAND IS CURRENTLY IN PROGRESS.
- RNL CHANGE IS IN PROGRESS.

System programmer response: Based on the *migration-error* value, take the appropriate action:

- GRS QUEUES ARE DAMAGED ON SYSTEM *sysname*.

A system with damaged global resource serialization structures cannot process migration to star mode. Quiesce all application activity on the system and partition it from the sysplex. Migrate the remaining sysplex to star mode and re-IPL the system into the star complex.

- NOT ALL SYSTEMS ARE IN SYSPLEX.

A ring complex that contains systems not in the sysplex cannot be migrated to star complex. Remove the non-sysplex systems from the global resource serialization complex and have the operator reissue the command or continue using global resource serialization in ring mode.

- GRS RECORDS NOT DEFINED ON SYSPLEX COUPLE DATASET.

Format and activate the sysplex couple data set that contains global resource serialization records. Have the operator reissue the command.

- THIS SYSTEM NOT IN A GLOBAL RESOURCE SERIALIZATION COMPLEX.

The system is in **NONE** mode. It cannot be migrated to a star complex.

- OTHER SYSTEMS NOT RESPONDING.

Look for a reason for the lack of response, such as,

- XCF messages indicating a communication link failure,
- A system update missing, or
- A spin loop.

Correct the reason for the response failure and have the operator reissue the command.

- LOCK STRUCTURE (ISGLOCK) CONTAINS nnnnnnnn LOCKS. A MINIMUM OF 32767 IS REQUIRED.

Make sure that the **SIZE** or **INITSIZE** specified in the CFRM policy for the global resource serialization lock structure, ISGLOCK, is sufficient for use by global resource serialization. If the lock size is not sufficient, increase the size specified in the CFRM policy. If the lock size is sufficient, update the CFRM policy preference list to select a coupling facility that has sufficient storage. After updating the CFRM policy, start the updated policy.

- SYSTEM *sysname* CANNOT ACCESS THE GRS LOCK STRUCTURE (ISGLOCK).

The global resource serialization lock structure, ISGLOCK, could not be allocated. Check the SYSLOG for one or more of messages IXL013I, IXL015I, and ISG304I which describe why the attempt to connect to the ISGLOCK structure failed. Correct the problem as described in the systems programmer response for these messages.

- INITIATING SYSTEM *sysname* PARTITIONED FROM SYSPLEX.

The system that issued the command had been partitioned from the sysplex; therefore, the command was ignored. Have the operator reissue the command from a system that is part of the sysplex.

- SYSTEM *sysname* DOES NOT SUPPORT STAR MODE.

The system is not at a level of MVS that supports a star complex. Partition the system from the sysplex and have the operator reissue the command. The system will not be able to participate in the star complex until it is brought up to required level.

- SYSTEM *sysname* IS *status*.

The system had started joining the global serialization complex before migration was initiated, or a ring disruption occurred before or during the migration. Use the D GRS command to determine when all systems become ACTIVE. Have the operator reissue the command.

Source: Global resource serialization

Module: ISGCMDI, ISGCMDR, ISGCIMS, ISGCPMS

Routing code: 2,10

Descriptor code: 5

ISG333I SYSTEM *sysname* HAS COMPLETED MIGRATION TO GRS STAR MODE.

Explanation: System *sysname* has participated and completed migration into a global resource serialization star complex.

System action: The sysplex operates in a star complex for the processing of global resource requests.

Source: Global resource serialization

Module: ISGCIMS, ISGCPMS

ISG336W GRS INITIALIZATION ERROR. THE GRSRNL *rnltpe* DEFINITION IS TOO LARGE.

Explanation: An RNL definition in the GRSRNL parmlib member is too large to be processed by the system.

rnltpe is one of the following:

SYSTEM INCLUSION

SYSTEMS EXCLUSION

RESERVE CONVERSION

Component

Global Resource Serialization

System action: The system enters a non-restartable X'0A3' wait state.

Operator response: Re-IPL the system after the system programmer has reduced the size of the RNL definition.

System programmer response: Remove entries from the specified RNL definition or combine like definitions into a single generic entry to reduce the size.

Routing code: 2,10

Descriptor code: 1

ISG337I GRS LOCK STRUCTURE (ISGLOCK) CONTAINS *lockentries* LOCKS.

Explanation: GRS has allocated the global resource serialization lock structure.

In the message text:

lockentries

The number of locks that will be used for satisfying global resource serialization requests.

System action: Global resource serialization will use the lock structure, ISGLOCK, to process global resource requests.

Source: Global resource serialization

Module: ISGNLS

Routing code: 2

Descriptor code: 4

ISG338W GRS INITIALIZATION ERROR. UNABLE TO ALLOCATE THE GRS LOCK STRUCTURE (ISGLOCK) *reason*

Explanation: GRS was unable to allocate the global resource serialization lock structure.

In the message text *reason* is one of the following:

- IXLCONN FAILED WITH RC=*rc*, RSN=*rsn*.
- LOCK STRUCTURE (ISGLOCK) CONTAINS *xxxxx* LOCKS. A MINIMUM OF 32767 IS REQUIRED.

System action: The system enters a non-restartable X'0A3' wait state.

Operator response: Inform the system programmer of the error. After the error condition has been relieved, reIPL the system.

System programmer response:

- If IXLCONN failed with RC=C RSN=0C08, make sure that you do the system IPL with a CFRM policy that defines the global resource serialization lock structure with sufficient connectivity to coupling facilities. See messages IXL013I and IXL015I for details on connect failures and on coupling facility status that prevents the use of GRS from allocating the lock structure. See IXC518I for details on coupling facility that is not connected to the system. A CFRM policy must be started to allow the use of coupling facilities and the global resource serialization lock structure. To start a CFRM policy, either use the SETXCF START,POLICY,TYPE=CFRM,POLNAME=*polname* operator command or specify CFRMPOL(*polname*) in the COUPLExx parmlib member to do sysplex IPL.

This problem might occur during a sysplex-wide IPL after a hardware upgrade when a coupling facility cannot be used. The SETXCF command cannot be used because this is occurring during a sysplex-wide IPL. The CFRMPOL keyword in the COUPLExx parmlib member is ineffective because a CFRM policy is already active in the CFRM couple data sets. To recover from this problem, perform the following steps:

1. Specify GRS=TRYJOIN in IEASYS or as a response to IEA101A. This allows the system to come up in the GRS ring mode.
2. Start a new CFRM policy, bring a new coupling facility online, or correct the size of the ISGLOCK structure to correct the problem that is keeping GRS from allocating the ISGLOCK structure.

For example, this problem can occur on a z/990 machine when the partition number of a coupling facility definition in the CFRM policy does not match the LPAR identifier of the coupling facility definition in the HMC Image Profile. In this case, correcting the CFRM policy (and starting that corrected policy) should correct the problem and allow the coupling facility to be brought into use.

3. Either re-IPL with the corrections, or issue SETGRS MODE=STAR to avoid the IPL.
 4. Start the remaining systems in GRS=STAR mode.
- Make sure that the SIZE or INITSIZE specified in the CFRM policy for the global resource lock structure is sufficient for use by global resource serialization. If it is not, increase the size specified in the policy. If it is, update the CFRM policy preference list to select a coupling facility that has sufficient storage. After updating the CFRM policy, start the updated policy.
 - If IXLCONN failed with RC=C RSN=0C27, use the D XCF,STR,STRNAME=ISGLOCK operator command to display detailed information about the ISGLOCK structure and its connectors. Additionally, you can use D XCF,STR, SSTRNAME=ISGLOCK, CONNAME=*xconname* for details about each connector.

Source: Global resource serialization

Module: ISGNLS

Routing code: 2,10

Descriptor code: 1

ISG340W UNRECOVERABLE ERROR OCCURRED DURING MIGRATION TO STAR MODE ON SYSTEM *sysname*. REASON = *fc* - *rc*..

Explanation: When processing a SETGRS MODE=STAR command to migrate from a ring complex to a global resource serialization star complex, GRS detected error(s) with internal function code *fc* and return code *rc*.

Component

Global Resource Serialization

System action: The system enters a non-restartable X'0A3' wait state.

Operator response: Inform the system programmer of the error. After the sysplex has completed migration to global resource serialization star complex mode, re-IPL the system into the sysplex.

System programmer response: Take a stand-alone dump of the failed system and report the problem to the IBM service center.

Routing code: 2,10

Descriptor code: 1

ISG341I SYSTEM *sysname* PARTITIONED FROM SYSPLEX. SYSTEM DID NOT RESPOND TO MIGRATION REQUEST.

Explanation: Following a SETGRS MODE=STAR command, the system described in the message was detected not participating in the migration to GRS Star mode. To maintain the integrity of the GRS complex, the system was partitioned from the sysplex.

Component

Global Resource Serialization

System action: The system enters a non-restartable X'0A3' wait state.

Operator response: Inform the system programmer of the error. After the sysplex has completed migration to global resource serialization star complex mode, re-IPL the system into the sysplex.

System programmer response: Take a stand-alone dump of the failed system and report the problem to the IBM service center.

Routing code: 2,10

Descriptor code: 1

ISG342W GRS INITIALIZATION ERROR. THE SYSTEM IS UNABLE TO ACCESS THE GRS RECORD ON THE SYSPLEX COUPLE DATA SET. RC=*returncode* RSN=*reasoncode*

Explanation: During initialization of a global resource serialization star complex, the system was not able to access the global resource serialization record in the sysplex couple data set.

In the message text:

returncode

Is the system return code

reasoncode

Is the system reason code

The expected return code, X'00000008' with a reason code of X'00000020', indicates that the global resource serialization record was not allocated on the current sysplex couple data set when the data set was formatted. Any other return and reason codes indicate that an internal error condition exists.

System action: The system enters a non-restartable X'0A3' wait state.

Operator response: Inform the system programmer of the error and reIPL the system when the error condition is corrected.

System programmer response: For the expected return code, X'00000008' with a X'00000020' reason code, correct the error using the following methods:

- If you want to run with global resource serialization (monoplex or non-sysplex, only), correct the GRS= specification to be NONE.
- If you want to IPL a global resource serialization ring complex, correct the GRS= specification (in IEASYSxx parmlib member or in response to message IEA101A) to be one of the following:
 - START
 - JOIN
 - TRYJOIN
- If you want to IPL a global resource serialization star complex, check the following:

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1. The global resource serialization record was formatted on the sysplex couple data set via the IXCL1DSU formatting utility.
2. The sysplex couple data set with the global resource serialization record is the current primary sysplex couple data set.

If the return is not X'00000008' with a X'00000020' reason code, contact the IBM support center with the message number, and the return and reason codes.

Source: Global resource serialization

Module: ISGNRI

Routing code: 1,10

Descriptor code: 1

ISG343I *hh.mm.ss* GRS [LATCH] STATUS *idr text*

Explanation: This message was received in response to a DISPLAY GRS command.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59) or **00.00.00** if the time of day (TOD) clock is not working.

idr

A 3-digit identifier. It is used with the CONTROL C,D command to cancel status displays.

In the message, *text* consists of:

text1

LIST	TYPE	QNAME	RNAME	flag
list	type	qname	rname	flag

SYSTEM	STATE	SYSTEM	STATE
sysname	state	sysname	state

[GRS STAR MODE INFORMATION]
[LOCK STRUCTURE (ISGLOCK) CONTAINS lockentries LOCKS.]
[THE CONTENTION NOTIFYING SYSTEM IS sysname]
[SYNCHRES: YES/NO/DIS]
[ENQMAXU: *value*]
[ENQMAXA: *value*]
[GRSQ: CONTENTION/LOCAL/ALL]
[AUTHQLVL: 1]
[MONITOR: YES/NO]

[GRS NONE MODE INFORMATION]
[SYNCHRES: YES/NO/DIS]
[ENQMAXU: *value*]
[ENQMAXA: *value*]
[AUTHQLVL: 1]
[MONITOR: YES/NO]

SYSTEM	STATE	COMM	SYSTEM	STATE	COMM
sysname	state	comm	sysname	state	comm

SYSTEM sysname MAY BE ATTEMPTING TO JOIN, BUT ALREADY IN COMPLEX

LINK	STATUS	TARGET	LINK	STATUS	TARGET
------	--------	--------	------	--------	--------


```

dev          status      targsys dev      status      targsys

S=scope      qname      rname      flag
SYSNAME     JOBNAME    ASID      TCBADDR    EXC/SHR    OWN/WAIT
sysname     job       asid      tcbaddr    exc/shr    own/wait/use

qname       qname      qname      ...

```

```

[GLOBAL REQUESTS PENDING FOR ISGLOCK STRUCTURE:]
[NO REQUESTS PENDING FOR ISGLOCK STRUCTURE]

```

```
text2
```

```

JOBNAME     ASID          QNAME          RNAME
jobname     asid          qname          rname

```

```
[error-condition]
```

```
text3
```

```
text4
```

```

LATCH SET NAME: latch_set_name
CREATOR JOBNAME: creator_jobname  CREATOR ASID: creator_asid

```

```
[LATCH NUMBER: latch_num]
```

```
[LATCH ID: latch_id]
```

```

REQUESTOR      ASID      EXC/SHR      OWN/WAIT  WORKUNIT  TCB  ELAPSED TIME
req_name       asid      req_status   req_type  hexaddr   Y/N  elapsed_time

```

The operator entered a DISPLAY GRS command. This message displays information about the systems in the same global resource serialization complex as this system. This DISPLAY GRS command does not display any systems that have been purged from the global serialization complex even if the command was entered on that system.

If HEX was specified on a DISPLAY GRS command, each character is translated into two hexadecimal digits vertically underneath the character.

The first line, with the time stamp, is always issued. The rest of the information displayed varies with the command entered. Lines of information may be repeated.

The following commands display global resource serialization information:

DISPLAY GRS,RNL

The message displays the contents of one or all the resource name lists (RNL).

DISPLAY GRS,SYSTEM

The message displays information about other global resource serialization systems. If this system is an active or inactive global resource serialization system, information about the following systems is displayed:

- This system
- All other global resource serialization systems in the global resource serialization
- All systems joining the global resource serialization complex and in the same sysplex as this system
- All responding systems joining the global resource serialization complex with channel to channel (CTC) devices to this system

If this system is a quiesced or restarting global resource serialization system information about the following systems is displayed:

- This system
- The other global resource serialization systems which are in the same sysplex as this system
- The other responding global resource serialization systems with CTC links to this system

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- All global resource serialization systems in the global resource serialization complex if there is an active or inactive responding system in the same sysplex as this system, or if there is a functional CTC link to this system.

DISPLAY GRS, LINK

The message displays the CTC status if global resource serialization CTC links were defined in the GRSCNFxx parmlib member, parmlib member, and the system is in a global resource serialization ring complex.

DISPLAY GRS, RES=(*qname*, *rname*)

The message displays resource information.

DISPLAY GRS, CONTENTION

This message displays information about tasks that are contending for ownership of resources through one or more ENQ or Latch_Obtain requests.

DISPLAY GRS, LATCH

When specified with the CONTENTION, JOBNAME, or ENQ operands, or any combination of those three operands, this message displays latch information.

DISPLAY GRS, RES=[*|*qname*]

The message displays major resource names specified.

DISPLAY GRS, ALL

The message displays:

- The contents of system inclusion, systems exclusion, and reserve conversion resource name lists (RNL)
- Resource contention information
- System information
- Communication links status, if the global resource serialization ring complex is not equal to the sysplex
- Information about the global resource serialization lock structure if the system is in a star complex
- Delay and suspend information if an RNL change is in progress
- The value of AUTHQLVL returned from the SETGRS AUTHQLVL for the number of authorized qname lists in effect for the system.

DISPLAY GRS

The message displays the system status. If the global resource serialization ring complex is not the same as the sysplex, it displays the status of the communication links.

DISPLAY GRS, DELAY

This message displays information about the jobs that are delaying a pending RNL change. The jobs listed hold resources affected by the RNL change and must relinquish control of those resources before the RNL change can complete.

A maximum of 500 lines of output can appear for this command. The first line of the output is a one-line header, which is followed by a maximum of 499 lines of resource information. Information for each resource is presented on one line, so information can be displayed for a maximum of 499 resources.

DISPLAY GRS, DEV=*dev*

This message displays a list of non-converted RESERVE requests for the specified device.

DISPLAY GRS, SUSPEND

This message displays information about jobs suspended by the pending RNL change. The jobs listed are requesting resources affected by the RNL change. The system does not permit these jobs access to these resources, so they remain suspended until the RNL change completes.

A maximum of 500 lines of output can appear for this command. The first line of the output is a one-line header, which is followed by a maximum of 499 lines of resource information. Information for each resource is presented on one line, so information can be displayed for a maximum of 499 resources.

text1 is one of the following:

DEVICE *dev* IS NOT A DIRECT ACCESS STORAGE DEVICE

The device specified in command D,GRS,DEV=*dev* was not a direct access storage device. No output is formatted.

DEVICE *dev* CURRENTLY NOT DEFINED TO THE CONFIGURATION

There is no UCB defined for the device specified in command D,GRS,DEV=*dev*.

DEVICE *dev* DISPLAY COMMAND CANCELLED DUE TO UCBLLOOK RC=*xx*

The system encountered an unexpected return code from the UCBLLOOK service. Contact the IBM Support Service.

DEVICE *dev* VOLUME *volser* NOT RESERVED BY SYSTEM *sysname* NO RESERVE RESOURCE REQUEST EXISTS

No reserve request exists for the device number specified in command D,GRS,DEV=*dev* for this system.

DEVICE *dev* VOLUME *volser* RESERVED BY SYSTEM *sysname*

Device *dev* is reserved for this system.

In the following section, the information that is displayed is character data:

LIST	TYPE	QNAME	RNAME	
<i>list</i>	<i>type</i>	<i>qname</i>	<i>rname</i>	<i>flag</i>

list

Is one of the following:

INCL

This RNL entry is contained in the system inclusion RNL.

EXCL

This RNL entry is contained in the systems exclusion RNL.

CON

This RNL entry is contained in the reserve conversion RNL.

type

The type of resource identified in the RNL entry. *type* is one of the following:

SPEC

The RNL entry identifies a specific resource name.

GEN

The RNL entry identifies a generic resource name.

PATT

The RNL entry identifies a resource name that contains a wildcard character.

qname

The major name of the resource in the RNL requested. Any unprintable characters appear as blanks.

rname

The minor name of the resource in the RNL requested. Any unprintable characters appear as blanks.

flag

The value of flag indicates whether the *rname* was truncated. Any *rname* exceeding 39 bytes is truncated. *flag* is one of the following:

T The *rname* was truncated.

blank

rname was not truncated.

In this heading:

DEVICE: dev VOLUME: vol RESERVED BY SYSTEM sysname

all non-converted RESERVE macro requests that have been issued against a particular device are displayed. By determining what program has the RESERVE request, a deadly embrace situation can be resolved.

In the following section:

SYSTEM	STATE	SYSTEM	STATE
<i>sysname</i>	<i>state</i>	<i>sysname</i>	<i>state</i>

sysname

The name of a system in the global resource serialization complex.

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state

The state of a system in global resource serialization.

ACTIVE

The system is a member of the global resource serialization ring.

INACTIVE

The system was an active global resource serialization system when the global resource serialization ring was disrupted. The system's status will change to quiesced as soon as it communicates with a global resource serialization system that is already active. The system suspends any tasks that try to obtain global resources.

QUIESCED

The system suspended its participation in the global resource serialization ring, but a global resource serialization ring does exist. The system suspends any tasks that try to obtain global resources.

JOINING

The system is processing the GRS=JOIN or TRYJOIN system parameter. It is not yet a member of either the global resource serialization ring or the global resource serialization complex.

RESTARTING

The system is trying to rejoin the global resource serialization ring. It is already a member of the global resource serialization complex, but it is not yet a member of the global resource serialization ring.

ACTIVE + VARY

The system is an active global resource serialization system that is processing a VARY command.

ACTIVE + WAIT

The system is an active global resource serialization system that is waiting to process a global resource serialization VARY command.

CONNECTING

The system is processing the GRS=STAR system parameter. It is not yet a member of the global resource serialization star complex.

CONNECTED

The system is a member of the global resource serialization star complex.

REBUILDING

The system is a member of the global resource serialization star complex, but is currently rebuilding the global resource serialization lock structure. The system suspends any tasks that try to obtain global resources.

MIGRATING

The system is processing migration from a global resource serialization ring complex to a star complex. The system suspends any tasks that try to obtain global resources.

This heading:

```
[GRS STAR MODE INFORMATION]
[LOCK STRUCTURE (ISGLOCK) CONTAINS lockentries LOCKS]
[THE CONTENTION NOTIFYING SYSTEM IS sysname/N/A]
[SYNCHRES: YES/NO/DIS]
[GRSQ: grsq value/CONTENTION]
[ENQMAXU: value]
[ENQMAXA: value]
```

indicates that global resource serialization is operating in star mode. The global resource serialization lock structure, ISGLOCK contains *lockentries* locks. The contention notifying system is *sysname* or *N/A* when no system in the complex that is capable of handling contention notification. SYNCHRES indicates the current setting of the SYNCHRES parameter. This only appears when global resource serialization is in star mode. See the explanations for ENQMAXU, ENQMAXA, and GRSQ.

This heading:

```
[GRS STAR MODE INFORMATION]
[LOCK STRUCTURE (ISGLOCK) CONTAINS lockentries LOCKS]
[THE CONTENTION NOTIFYING SYSTEM IS sysname/N/A]
```

```
[SYNCHRES: YES/NO/DIS]
[GRSQ: CONTENTION|LOCAL|ALL]
[ENQMAXU: value]
[ENQMAXA: value]
```

indicates that global resource serialization is operating in star mode. The global resource serialization lock structure, ISGLOCK contains *lockentries* locks. The contention notifying system is *sysname* or *N/A* when no system in the complex that is capable of handling contention notification. SYNCHRES indicates the current setting of the SYNCHRES parameter. This only appears when global resource serialization is in star mode. See the explanations for ENQMAXU, ENQMAXA, and GRSQ.

This heading:

```
[GRSQ: CONTENTION]
[AUTHQLVL: value]
```

indicates the authorized QNAME level value for global resource serialization that is set by the GRSCNFxx parmlib member or SETGRS AUTHQLVL command or the GRSCNFxx parmlib member where *value* is the decimal number 1 or 2.

| This heading:

```
| [AUTHQLVL: value]
| [MONITOR: YES/NO]
```

| indicates whether GRS SMF 87 monitoring is active.

This heading:

```
[GRS NONE MODE INFORMATION]
[SYNCHRES: YES/NO/DIS]
[ENQMAXU: value]
[ENQMAXA: value]
```

indicates that global resource serialization is not operating in ring or star mode.

This heading:

```
[AUTHQLVL: value]
```

indicates the authorized QNAME value for global resource serialization that is set by the SETGRS AUTHQLVL command where *value* is the decimal number 1 or 2.

| This heading:

```
| [AUTHQLVL: value]
| [MONITOR: YES/NO]
```

| indicates whether GRS SMF 87 monitoring is active.

The GRS NONE mode information is as follows:

SYNCHRES: YES

The system default is to perform synchronous reserves for unconverted RESERVEs. Note that RESERVEs requested through the ISGENQ service may override this value via the SYNCHRES keyword option.

SYNCHRES: NO

The system default is not to perform synchronous reserves for unconverted RESERVEs. Note that RESERVEs requested through the ISGENQ service may override this value via the SYNCHRES keyword option

SYNCHRES: DIS

Synchronous reserves are not being performed due to a failure in synchronous reserve processing. Message ISG348E was issued at the time the error occurred. See message ISG348E for further information. The system default and disabled state can be reset by issuing the SETGRS SYNCHRES command.

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ENQMAXU *value*

The system-wide maximum number of concurrent unauthorized ENQ requests allowed for any given address space.

ENQMAXA *value*

The system-wide maximum number of concurrent authorized ENQ requests allowed for any given address space.

GRSQ: **CONTENTION|LOCAL|ALL**

Indicates if ENQ resources are collected from the local system or the entire global resource serialization complex. GRSQ contains one of the following values:

- **CONTENTION** causes GRSQ processing to collect all ENQ resources on the local system and only collect information about global resources in contention in the rest of the GRS complex.
- **LOCAL** causes GRSQ processing to collect all ENQ resources on the local system only. This is NOT a recommended value and should only be used as a circumvention. The GQSCAN that is issued does not collect data from the other systems.
- **ALL** causes GRSQ processing to collect all ENQ resources from all systems in the entire GRS complex. Specifying GRSQ(CONTENTION) adds WAITCNT=1.

In this heading:

SYSTEM	STATE	COMM	SYSTEM	STATE	COMM
sysname	state	comm	sysname	state	comm

sysname

The name of a system in the global resource serialization ring complex.

state

The state of a system in global resource serialization.

ACTIVE

The system is a member of the global resource serialization ring.

INACTIVE

The system was an active global resource serialization system when the global resource serialization ring was disrupted. The system's status will change to quiesced as soon as it communicates with a global resource serialization system that is already active. The system suspends any tasks that try to obtain global resources.

QUIESCED

The system suspended its participation in the global resource serialization ring, but a global resource serialization ring does exist. The system suspends any tasks that try to obtain global resources.

JOINING

The system is processing the GRS=JOIN or TRYJOIN system parameter. It is not yet a member of either the global resource serialization ring or the global resource serialization complex.

RESTARTING

The system is trying to rejoin the global resource serialization ring. It is already a member of the global resource serialization complex, but it is not yet a member of the global resource serialization ring.

ACTIVE + VARY

The system is an active global resource serialization system that is processing a VARY command.

ACTIVE + WAIT

The system is an active global resource serialization system that is waiting to process a global resource serialization VARY command.

comm

The status of communication between this system and system *sysname*.

YES

This system has a functional communication link to system *sysname*.

NO

This system does not have a functional communication link to system *sysname*.

In this section:

SYSTEM *sysname* MAY BE ATTEMPTING TO JOIN, BUT ALREADY
IN COMPLEX

indicates the system *sysname* is attempting to join the complex, but a system with that name is already defined to the complex. Until the defined system is purged from the complex, the new system will not be prevented from joining.

In this section:

LINK	STATUS	TARGET	LINK	STATUS	TARGET
dev	status	targsys	dev	status	targsys

dev

The device number of a channel-to-channel (CTC) device belonging to this system and assigned to global resource serialization.

status

The status of CTC *dev* is one of the following:

IN-USE

Global resource serialization is using this CTC to send the ring-processing system authority (RSA).

ALTERNATE

Global resource serialization is not using this CTC to send the RSA, but it could do so. Global resource serialization might be using this CTC for ring acceleration.

DISABLED

Global resource serialization does not use this CTC and ignores any communications from it.

QUIET

Global resource serialization sent a message to the system on the other end of device *dev*, but received no response.

targsys

The name of the system at the other end of this device. If blank, no system has responded since this system joined the global resource serialization complex.

In this section, the data is either character or hexadecimal:

S=scope qname rname flag

scope

The scope requested for the resource is one of the following:

- **STEP**
- **SYSTEM**
- **SYSTEMS**

qname

The major name of the resource with the indicated scope. Any unprintable characters appear as blanks.

rname

The minor name of the resource with the indicated scope. Any unprintable characters appear as blanks. Any *rname* that exceeds 39 bytes is truncated.

flag

The value of flag indicates whether the *rname* was truncated. *flag* is one of the following:

T *rname* was truncated.

blank

rname was not truncated.

In this section:

SYSNAME	JOBNAME	ASID	TCBADDR	EXC/SHR	OWN/WAIT
sysname	job	asid	tcbaddr	exc/shr	own/wait/use
qname	qname	qname	...		

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sysname

The name of the system that requested the resource identified on the DISPLAY GRS command.

jobname

The names of the jobs that requested the resources identified on the DISPLAY GRS command.

The *jobname* field is in format *jobname1/jobname2*, where *jobname1* requested the resource for *jobname2*.

If *jobname1* is not processing a request for another job, the *jobname2* and *asid2* fields will be blank. If the request originated on a different system or *jobname1* did not provide GRS with *jobname2*, the *jobname2* value will be *UNKNOWN and the *asid2* value will be X'0000'. If *jobname1* provided GRS with an invalid *asid2* value, then the *jobname2* value will be UNKNOWN.

asid

The address space identifier (ASID), in hexadecimal, for the address space that requested the resource.

The *asid* field is in format *asid1/asid2*, where *asid1* is the asid of *jobname1* and *asid2* is the asid of *jobname2*.

If *jobname1* is not processing a request for another job, the *asid2* and *jobname2* fields will be blank. If the request originated on a different system, the *jobname2* value will be *unknown and the *asid2* value will be X'0000'

tcbaddr

The address of the task control block (TCB) that requested the resource identified on the DISPLAY GRS command.

exc/shr

One of the following:

EXCLUSIVE

The job requested exclusive use of the resource.

SHARE

The job requested shared use of the resource.

own/wait/use

One of the following:

OWN

The job owns the resource.

WAIT

The job is waiting for the resource.

USE-MASID

The job has access to the resource via a matching task request.

WAIT-MASID

The job is waiting for access to the resource via a matching task request.

qname

The major name of a resource.

This section:

```
[GLOBAL REQUESTS PENDING FOR ISGLOCK STRUCTURE:]  
[NO REQUESTS PENDING FOR ISGLOCK STRUCTURE]
```

indicates whether global requests are pending for the ISGLOCK structure. These lines are returned for a DISPLAY GRS,C command only. If global requests are pending for the ISGLOCK structure, the following information is returned for each requestor:

major

ENQ request major name (QNAME)

minor

ENQ request minor name

jobname

The name of the jobs that requested the ISGLOCK resource.

asid

The address space identifier (ASID), in hexadecimal, for the address space that requested the ISGLOCK resource.

tcbaddr

The address of the task control block (TCB) that requested the ISGLOCK resource.

request

One of the following:

ENQ-EXCL

ENQ request for exclusive ownership

ENQ-SHR

ENQ request for shared ownership

DEQ

DEQ request

SYNC

Address space synchronization

mm/dd/yyyy

The date on which the request for the ISGLOCK resource was made in month/day/year format.

hh:mm:ss

The time at which the request for the ISGLOCK resource was made in hour/minute/second format.

THIS REQUEST IS DELAYED MORE THAN 2 SECONDS

This line is displayed if the request is delayed for at least two seconds. If the request is not delayed, this line is not displayed.

PENDING PREVIOUS LOCK REQUEST

This line is displayed for each request waiting for the lock request to complete.

DISPLAY TRUNCATED

This line is displayed if the system cannot display all of the outstanding requests.

If global requests are not pending for the ISGLOCK structure, the following line is returned:

NO REQUESTS PENDING FOR ISGLOCK STRUCTURE

text2 is one of the following:

JOBS BEING SUSPENDED DUE TO RNL CHANGE ON SYSTEM *sysname*

The jobs displayed requested resources that are affected by the pending RNL change. The jobs remain suspended until the RNL change completes.

JOBS FROM SYSTEM *sysname* DELAYING RNL CHANGE

Jobs running on system *sysname* hold resources that are suspending an RNL change.

In this section:

JOBNAME	ASID	QNAME	RNAME
jobname	asid	qname	rname

jobname

The names of the jobs that requested the resources identified on the DISPLAY GRS command.

The *jobname* field is in format *jobname1/jobname2*. *jobname1* requested the resource for *jobname2*.

If *jobname1* is not processing a request for another job, the *jobname2* and *asid2* fields will be blank. If the request originated on a different system, the *jobname2* value will be ***unknown** and the *asid2* value will be X'0000'.

asid

The address space identifier (ASID), in hexadecimal, for the address space that requested the resource.

The *asid* field is in format *asid1/asid2*. *asid1* is the asid of *jobname1* and *asid2* is the asid of *jobname2*.

If *jobname1* is not processing a request for another job, the *asid2* and *jobname2* fields will be blank. If the request originated on a different system, the *jobname2* value will be ***unknown** and the *asid2* value will be X'0000'.

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qname

The major name of a resource affected by the RNL change requested. Any unprintable characters appear as blanks.

rname

The minor name of the resource affected by the RNL change requested. Any unprintable characters appear as blanks. If the RNAME is truncated, the character **t** will appear at the end of the line.

This section is displayed if an error occurred:

[*error-condition*]

and one of the following appears in the message text:

AN INVALID QEL HAS BEEN DETECTED. NO SYSTEM WILL BE ABLE TO JOIN OR RESTART INTO THE GLOBAL RESOURCE SERIALIZATION COMPLEX UNTIL THE PROBLEM IS CORRECTED.

Global resource serialization queue scanning services detected an invalid queue element (QEL) in the resource queues. Each QEL represents a requestor of a resource. Global resource serialization prevents other systems from restarting global resource serialization or joining a complex.

FUNCTION INOPERATIVE - NO STATUS

This system cannot process the DISPLAY GRS command for one of the following reasons:

- This system is still processing the GRS START, JOIN, or TRYJOIN system parameter.
- The global resource serialization command processor failed.

NO ENTRIES EXIST IN THE RESERVE CONVERSION RNL

This system has an empty RESERVE conversion resource name list.

NO ENTRIES EXIST IN THE SYSTEM EXCLUSION RNL

This system has an empty SYSTEMS exclusion resource name list.

NO ENTRIES EXIST IN THE SYSTEM INCLUSION RNL

This system has an empty SYSTEM inclusion resource name list (RNL).

NO REQUESTORS FOR RESOURCE *qname*, *rname*

No system has requested the resources specified by the DISPLAY GRS,RES command. *qname* is the major name of the resource specified. *rname* is the minor name of the resource specified.

NO REQUESTORS FOR RESOURCE WITH QNAME *qname*

No system requested any resource with the *qname* specified in the DISPLAY GRS,RES command. *qname* is the major name of the resource specified.

NO RESOURCE CONTENTION EXISTS

Global resource serialization determined that no resource contention existed when the command was entered.

NOT ENOUGH STORAGE TO COMPLETE THE REQUEST

There was a large amount of data resulting from this request and although GRS was able to gather the information, it could not all fit into the buffer used in GRS display processing. If a D GRS,RES= type of request was specified, try narrowing down the search by applying additional filtering. For example, a search of D GRS,RES=(SYSDSN,SYS1*) has a higher likelihood of completing successfully than a search of D GRS,RES=(SYSDSN,*).

REQUEST NOT COMPLETED - UNRECOVERABLE ERROR IN GQSCAN

The system was unable to retrieve all the resources for the display request due to an error in the GQSCAN service.

REQUEST NOT COMPLETED - UNABLE TO OBTAIN GLOBAL DATA FROM ALL SYSTEMS IN THE SYSPLEX

The system was unable to retrieve all the resources for the display request because not all the systems in the sysplex responded to the request.

REQUEST NOT COMPLETED - MIGRATION TO STAR MODE IN PROGRESS

The system was unable to complete the request because the complex is migrating from ring mode to star mode.

GRSRNL=EXCLUDE IS IN EFFECT. ALL ENQ/DEQ REQUESTS EXCEPT THOSE SPECIFYING SCOPE=SYSTEMS, RNL=NO ARE BEING TREATED AS LOCAL REQUESTS.

RNLs are not in use. ENQ and DEQ requests for SCOPE=SYSTEMS, RNL=NO are treated as global, SCOPE=SYSTEMS requests. All other global requests (SCOPE=SYSTEMS,RNL=YES) are being treated as if they were local requests.

LINK STATUS NOT APPLICABLE - GRS IS IN STAR MODE.

A link status display was requested, but global resource serialization is currently running in STAR mode.

text3 is one of the following:

RNLS ARE NOT IN EFFECT

Resource name lists (RNL) are not being used because global resource serialization is not active.

DISPLAYED STATUS IS *ttt* SECONDS OLD

This system was processing either a GRS VARY command or a previously entered GRS DISPLAY when the operator entered this DISPLAY GRS command.

This line shows how old the status displayed in this message was at the time the command was entered. *ttt* is the age of the state in seconds.

To display current status, enter the DISPLAY GRS command.

GRS IS USING XCF COMMUNICATION FACILITIES

This system is in a multisystem sysplex.

>>SYSTEM *sysname* MAY BE ATTEMPTING TO JOIN, BUT ALREADY IN COMPLEX<<

There is more than one system with the same name. This can mean that a system is trying to join the complex with a name already in use in the complex.

NO ACTIVE SYSTEMS RESPONDED, SOME SYSTEMS MAY NOT BE DISPLAYED

All systems are quiesced or inactive.

THERE ARE NO JOBS SUSPENDED ON SYSTEM *sysname* DUE TO RNL CHANGE.

System *sysname* has no jobs suspended by an RNL change.

THERE IS NO RNL CHANGE IN PROGRESS.

No RNL changes were in progress when the operator entered the DISPLAY command.

THERE ARE NO DELAY REASONS ON SYSTEM *sysname*

System *sysname* shows no delays due to an RNL change.

REPORT EXCEEDS 500 LINES AND HAS BEEN TRUNCATED

The DISPLAY GRS,SUSPEND or DELAY command can only display 500 resource requests. Additional information is truncated.

text4 is one of the following:

NO [ENQ RESOURCE|LATCH] CONTENTION EXISTS

One of the following commands was entered:

- DISPLAY GRS,ENQ,CONTENTION
- DISPLAY GRS,LATCH,CONTENTION
- DISPLAY GRS,CONTENTION
- DISPLAY GRS,ALL

No contention exists for the specified serialization service. If DISPLAY GRS,CONTENTION was entered, the system displays both forms of this message to indicate that no contention exists for *both* latches and ENQs.

PARTIAL LATCH INFORMATION AVAILABLE

The system did not display all the available latch contention information because there was too much data to display, the system took too long to gather the information, or the information was changing when the system tried to gather it.

LATCH DISPLAY FOR JOB *jobname*

[NO LATCHES OWNED OR WAITED UPON]

A DISPLAY GRS,LATCH,JOB=*jobname* command was entered. If the specified job currently owns a latch or has a

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pending request to obtain a latch, the system displays information about those latches. Otherwise, the system displays **NO LATCHES OWNED OR WAITED UPON** to indicate that no latches are owned or waited on by the specified job.

In this section:

```
LATCH SET NAME: latch_set_name
CREATOR JOBNAME: creator_jobname  CREATOR ASID: creator_asid
LATCH NUMBER: latch_num
```

REQUESTOR	ASID	EXC/SHR	OWN/WAIT	WORKUNIT	TCB	ELAPSED TIME
req_name	asid	req_status	req_type	hexaddr	Y/N	elapsed_time

the system displays the following fields for each latch in the latch set that meets the selection criteria (contention, jobname, or both).

latch_set_name

The name of the latch set that is currently displayed. If the HEX option is specified on the DISPLAY GRS command, the system displays the latch set name in EBCDIC and hexadecimal. The hexadecimal characters are displayed vertically under each EBCDIC character.

creator_jobname

The name of the job associated with the primary address space when the latch set was created.

creator_asid

The hexadecimal identifier for the primary address space when an application called the Latch_Create service to create latch set *latch_set_name*.

latch_num

The decimal number of the latch for which information is displayed. The latch is a member of latch set *latch_set_name*. If the CONTENTION operand was specified on the DISPLAY GRS command, the latch has contention. If the JOBNAME operand was specified on the DISPLAY GRS command, the specified job either owns the latch or has a pending request to obtain the latch.

latch_id

The requested latch number and identity. For compatibility reasons, the message displays the latch id format only when LATCHID is specified on the command. If LATCHID is specified but no latch identity is provided by the latch creator, the message displays the latch number followed by "(ID NOT SPECIFIED)". If LATCHID is specified and an available latch identity with a printable string exists, the message displays the identity string in one or more lines truncated after 255 characters. If truncation occurs, the character "T" follows the string, separated by a space.

req_name

The eight character name of the job associated with the home address space when a task or SRB routine called the Latch_Obtain service to obtain the specified latch.

asid

The hexadecimal identifier for the primary address space when a task or SRB routine called the Latch_Obtain service to obtain the specified latch.

req_status

One of the following:

EXCLUSIVE

The task or SRB routine associated with the specified job name requested exclusive ownership of the latch.

SHARE

The specified task or SRB routine requested shared ownership of the latch.

req_type

One of the following:

OWN

The named task or SRB routine owns the latch.

WAIT

The named task or SRB routine is waiting (for example, has a pending request) to obtain ownership of the latch.

hexaddr

The hexadecimal address of the requesting TCB or SRB.

Y/N

The Y indicates that the request for the latch was made by a TCB. The N indicates that the request was made by an SRB.

elapsed_time

The *elapsed_time* shows how much time has elapsed between the time the request entered this state and the issuance of this message in hh:mm:ss.ddd format. No rounding is done. If the elapsed time is greater than 24 hours, the following text is displayed: -over 24 hrs.

Example:

```
ISG343I 09.59.16 GRS STATUS      FRAME 1    F    E    SYS=S1
LATCH SET NAME:  LAR25SET1
CREATOR JOBNAME: GRJLAR25  CREATOR ASID: 0028
LATCH NUMBER:    0
REQUESTOR ASID  EXC/SHR  OWN/WAIT  WORKUNIT  TCB  ELAPSED TIME
GRJLAR25  0028  EXCLUSIVE  OWN      006E6CF0  Y  00:00:07.438
GRJLAR25  0028  SHARED    WAIT     006E6B58  Y  00:00:06.416
LATCH NUMBER:    1
REQUESTOR ASID  EXC/SHR  OWN/WAIT  WORKUNIT  TCB  ELAPSED TIME
GRJLAR25  0028  EXCLUSIVE  OWN      006E6CF0  Y  -over 24 hrs
GRJLAR25  0028  SHARED    WAIT     006E6B58  Y  00:00:06.416
```

System action: The system continues processing.

Operator response: None.

System programmer response: None.

Problem determination: The TCB or SRB and elapsed time information can be used to resolve long standing latch contention that might be in error.

Source: Global resource serialization

Module: ISGCDSF, ISGCDDS, ISGCLDM

Routing code: None.

Descriptor code: 5,8,9

ISG344I GRS PROCESSING ERROR *xxxx* - FAILURE OF A GRS TASK.

Explanation: A global resource serialization task that is not considered critical to global resource processing ended due to an abnormal condition. The task either could not be re-instated or it had reached the limit of re-instatement attempts allowed.

In the message text:

xxxx is a reason code that indicates the particular task that failed.

System action: Global resource serialization continues to operate with reduced capability. The following table describes the system impact for the reason codes that appear in the message:

Reason Code**System Impact**

C8C5 Listeners for GRS's ENF signals (event code 51) will not receive contention data generated by requests on this system for global resources. Contention monitors such as RMF will not have access to global contention information generated by requests on this system.

Operator response: Notify your system programmer. To restore full capability, re-IPL the system after collecting the appropriate diagnostic data.

System programmer response: Examine your system log for one or more instances of GRS related failures (for example, SDUMPs) that occurred just prior to this failure. The task probably terminated as a result of these failures. Take a stand-alone dump of the system. Collect the available diagnostic data from these failures and contact the IBM Support Center.

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Source: Global resource serialization

Module: ISGNST

Routing code: 1,10

Descriptor code: 3

ISG345I **CONTENTION NOTIFICATION LOST FOR RESOURCE** S=*scope*, *qname*, *rname* [T] **GQSCAN**
RC=*rc*, RSN=*rsn*

Explanation: GRS could not issue an ENF signal (event code 51) to report a change in contention for the named resource because it could not collect current ownership data for the resource. This message is only issued when the system does not issue an ABEND to record the problem.

In the message text:

qname is the resource major name

rname is the resource minor name. If followed by a 'T', the name has been truncated to fit on the line.

scope is the resource scope

rc is the GQSCAN return code

rsn is the GQSCAN reason code

System action: GRS does not issue the signal to notify contention monitors such as RMF that a change in contention has occurred. The monitor's records of contention information for the affected resource will not reflect the actual state of contention until the next successful signal pertaining to that resource.

Operator response: Notify your system programmer.

System programmer response: Determine the cause for the GQSCAN failure and correct it if possible. If the GQSCAN return code is C and the reason code 10 indicating that notification was lost because the system was migrating from ring mode to star mode, no further action is required. If the scope is SYSTEMS (S=SYSTEMS), the GQSCAN return code was C, and the reason code C indicating a sysplex processing failure, this is most likely a case where another STAR mode system is not responding for a long period of time. Investigate messages related to XCF connectivity and systems recently being partitioned out of the sysplex. Recent XCF partitioning of an unresponsive system would have most likely removed the root cause of the problem.

Source: Global resource serialization

Module: ISGGCN

Routing code: 2,10

Descriptor code: *

ISG347I **SETGRS COMMAND IGNORED.** *reason*

Explanation: The SETGRS command to alter global resource serialization processing was not valid.

In the message text:

reason One of the following:

TOLINT ONLY VALID FOR A RING COMPLEX.

The system is not participating in a global resource RING complex. TOLINT is only valid in a RING complex.

RESMIL ONLY VALID FOR A RING COMPLEX.

The system is not participating in a global resource serialization RING complex. RESMIL is only valid in a RING complex.

GRSQ ONLY VALID FOR A STAR COMPLEX.

The system is not participating in a global resource serialization STAR complex. GRSQ is only valid in a STAR complex.

System action: The system does not process the command.

Operator response: Notify the system programmer.

System programmer response: Not all systems in the Sysplex are at the required level for SETGRS CNS. Systems that are below z/OS V1R8 require a PTF to handle SETGRS CNS requests. The SETGRS command will fail until all systems in the Sysplex that are below z/OS V1R8 have the PTF installed. Find the associated PTF information in *z/OS Migration*.

Determine from the current configuration if you need to enter a subsequent SETGRS command.

Source: Global resource serialization

Module: ISGCSET

Routing code: —

Descriptor code: 12

ISG348E GRS SYNCHRES OPTION SET TO "DIS" AFTER ERROR.

Explanation: The IOS routine IOSVDSTF failed when processing the SYNCHRES option for a given RESERVE request. The system will no longer perform RESERVEs synchronously. This is true whether the installation requested that all reserves be done synchronously or if a particular ISGENQ OBTAIN request had requested a synchronous reserve regardless of the installation setting.

System action: Diagnostic data is collected. All future RESERVEs are not processed synchronously.

Operator response: Contact the system programmer.

System programmer response: Search the problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Global resource serialization

Module: ISGGRSV

Routing code: 1,10

Descriptor code: 3

ISG349I GRS ANALYSIS *text*

Explanation: This message is issued as a result of the D GRS,ANALYZE command. The message has three different formats, depending on which parameters were specified on the command. The system displays the following lines when a DISPLAY GRS, ANALYZE,BLOCKER command is entered:

LONG BLOCKER ANALYSIS: request specification

BLOCKTIME	SYSTEM	JOBNAME	E/S	SCOPE	QNAME	RNAME
hh:mm:ss	sysname	jobname	*	scope	qname	rname[T]
			r*			
				others		

The first line defines the format of the table. For each blocker that matches the input specifications on the command, the information identified by the header will be displayed. Starting with the longest blocker, the displayed information includes:

- how long this request has been blocking the resource
- the system on which this request is running
- the jobname under which this request is running
- the type of enqueue, exclusive (E) or shared (S) (the asterisks are used to help visually separate the lines of the messages)
- the scope of the request (SYS or SYSS)
- the resource qname and rname
- how many other requests are blocking this resource
- how many other requests are waiting for this resource.

The system displays the following lines when a DISPLAY GRS, ANALYZE,WAITER command is entered:

ISG349I

LONG WAITER ANALYSIS: request specification

```
WAITTIME  SYSTEM  JOBNAME  E/S  SCOPE  QNAME  RNAME
hh:mm:ss  sysname  jobname  *    scope  qname  rname[T]
                r*
BLOCKER   sysname  jobname  r    [others]
```

The first line defines the format of the table. For each waiter that matches the input specifications on the command, the information identified by the header will be displayed. Starting with the longest waiter, the displayed information includes:

- how long this request has been waiting for the resource
- the system on which this request is waiting for the resource
- the jobname under which this request is running
- the type of enqueue, exclusive (E) or shared (S) (the asterisks are used to help visually separate the lines of the message)
- the scope of the request (SYS or SYSS)
- the resource qname and rname
- the longest blocker of this resource
- how many other requests are blocking this resource
- how many other requests are waiting for this resource.

The system displays the following lines when a DISPLAY GRS,ANALYZE,DEPENDENCY command is entered:

DEPENDENCY ANALYSIS: request specification

descriptor

```
WAITTIME  SYSTEM  JOBNAME  E/S  SCOPE  QNAME  RNAME
hh:mm:ss  sysname  jobname  *    scope  qname  rname[T]
                r*
BLOCKER   sysname  jobname  r
```

The first line identifies the element of the analysis that is being displayed. The second line defines the format of the table. For each element, each waiting unit of work is reflected by the third line. The fourth line indicates the top blocker of the resource. The third and fourth lines are repeated until the analysis is completed. The displayed information includes:

- how long this request has been waiting for the resource
- the system on which this request is waiting for the resource
- the jobname under which this request is running
- the type of enqueue, exclusive (E) or shared (S) (the asterisks are used to help visually separate the lines of the message)
- the scope of the request (SYS or SYSS)
- the resource qname and rname
- the longest blocker of this resource

The system displays the following lines when a DISPLAY GRS, ANALYZE,BLOCKER,DETAIL command is entered:

LONG BLOCKER ANALYSIS: request specification

```
BLOCKER  SYSTEM:   sysname
          JOBNAME: jobname  (ASID=asid TCB=tcbaddr)
          REQUEST: reqtype  [(WITH nn OTHERS)]
state    hh:mm:ss  SYSTEM[S]RESOURCE
qname    rname                                     [T]
```

The blocker for that resource and the number of other blockers and waiters for the resource is displayed.

The system displays the following lines when a DISPLAY GRS,ANALYZE,WAITER,DETAIL command is entered:

LONG WAITER ANALYSIS FOR request specification

```

WAITER  SYSTEM:  sysname
        JOBNAME: jobname  (ASID=asid TCB=tcbaddr)
        REQUEST: reqtype  [(WITH nn OTHERS)]
state   hh:mm:ss SYSTEM[S]RESOURCE
qname   rname                                     [T]

```

The waiter for that resource and the number of other blockers and waiters for the resource is displayed.

The system displays the following lines when a DISPLAY GRS,ANALYZE,DEPEND,DETAIL command is entered:

DEPENDENCY ANALYSIS: request specification

descriptor

```

        SYSTEM:  sysname
        JOBNAME: jobname  (ASID=asid TCB=tcbaddr)
        REQUEST: reqtype  [(WITH nn OTHERS)]
state   hh:mm:ss SYSTEM[S]RESOURCE
qname   rname                                     [T]

```

The first line identifies the long waiter number or resource owner number *nn*. For each subsequent resource request, the first five lines are repeated. Each resource request is dependent on the resource request identified by the next five lines.

In the message text:

request specification

reflects the input specified by the command issuer, where:

ENTIRE SYSPLEX

is displayed if no additional parameters were specified.

SYSTEM=sysname

is displayed if **SYSTEM** was specified.

SYSTEM=sysname ASID=asid

is displayed if **SYSTEM** and **ASID** were specified.

SYSTEM=sysname JOBNAME=jobname

is displayed if **SYSTEM** and **JOBNAME** were specified.

SYSTEM=sysname ASID=asid[TCB=tcbaddr]

is displayed if **SYSTEM**, **ASID**, and [,TCB tcbaddr] were specified.

SYSTEM=sysname JOBNAME=jobname TCB=tcbaddr]

is displayed if **SYSTEM**, **JOBNAME**, and [,TCB tcbaddr] were specified.

SCOPE=SYSTEMS RESOURCE

qname rname [T]

is displayed if **DEPENDENCY**, **RES** and **SCOPE=SYSTEMS** were specified.

SCOPE=SYSTEM RESOURCE SYSTEM=sysname

qname rname [T]

is displayed if **DEPENDENCY**, **RES**, **SCOPE=SYSTEM**, and **SYSTEM** were specified.

hh:mm:ss

is the length of time the resource request has been in that state. *hh:mm:ss* could have **:**:** when the value exceeds 100 hours.

sysname

is the resource requester's system name.

jobname

is the resource requester's jobname.

r is the enqueue request type **E** (for exclusive) or **S** (for shared).

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scope

is the requested enqueue scope SYSTEM or SYSTEMS

qname

is the requested qname.

rname

is the requested rname. T indicates that *rname* is truncated.

others

OTHER BLOCKERS: *nn* **WAITERS:***nn* will appear when there are additional blockers and waiters for the resource.

descriptor

indicates which element of the analysis is being displayed when the DEPENDENCY keyword is specified, where:

----- **LONG WAITER # *nn***

is the *nn*th waiter element.

----- **RESOURCE OWNER # *nn***

is the *nn*th owner of the specified resource.

asid

is the resource requester's address space ID (hexadecimal).

tcbaddr

is the resource requester's TCB address.

reqtype

is the enqueue request type, **EXCLUSIVE** or **SHARED**.

state

is the requester's state, **WAITING** or **BLOCKING**. This only appears when the **DETAIL** keyword is specified.

ANALYSIS ENDED: *reason*

indicates that the analysis ended because of *reason*:

THIS UNIT OF WORK IS NOT WAITING

the unit of work at the end of the dependency chain is not waiting for GRS—managed resources.

A DEADLOCK WAS DETECTED

an apparent deadlock between multiple units of work has been detected. None of the units of work in the list will proceed until one or more of them are ended.

Note: It is possible that a true deadlock does not exist if one of the units of work passed the responsibility to DEQ to a different unit of work. It is also possible that the apparent deadlock resolves if one of the units of work specified an ECB and issues a DEQ before waiting to be posted.

INTERNAL ERROR

the DISPLAY GRS,ANALYZE command processor failed. A dump is produced to document the problem.

UNABLE TO COMMUNICATE WITH BLOCKER SYSTEM

the DISPLAY GRS,ANALYZE command is unable to communicate with the system where the blocking job is running.

GQSCAN FOR ANALYSIS FAILED

the DISPLAY GRS,ANALYZE command is unable to obtain the blocker from the GQSCAN service.

SYSPLEX IS MIGRATING TO STAR MODE

the DISPLAY GRS,ANALYZE command is unable to gather data during the migration to STAR mode. Reissue the command when migration is complete.

PROCESSING ENDED: *reason*

reason may be one of the following:

COULD NOT OBTAIN STORAGE

the DISPLAY GRS,ANALYZE command could not obtain sufficient storage to process the command.

COULD NOT SEND XCF MESSAGE

the DISPLAY GRS,ANALYZE command was unable to send a message via XCF. A dump will be produced to document the failure.

INTERNAL ERROR

An error occurred during processing. A dump is produced to document the failure.

GQSCAN REQUEST FAILED

The DISPLAY GRS,ANALYZE command is unable to obtain the blocker from the GQSCAN service.

SYSPLEX IS MIGRATING TO STAR MODE

The DISPLAY GRS,ANALYZE command is unable to gather data during the migration to STAR mode. Reissue the command when migration is complete.

UNABLE TO COMMUNICATE WITH SYSTEM *sysname* :
reason

reason may be one of the following:

THE SYSTEM DOES NOT SUPPORT GRS ANALYSIS

The system is not at a high enough level to respond to a GRS ANALYSIS command.

THE SYSTEM IS NOT A MEMBER OF THE SYSPLEX

A system that is not a member of the sysplex cannot respond to a GRS ANALYSIS command.

THE SYSTEM DID NOT RESPOND TO THE ANALYSIS REQUEST

The system did not respond to the request for analysis data. It could be down or unable to respond.

The following lines may also appear in the message text:

DATA MAY BE INCOMPLETE, NOT ALL SYSTEMS SUPPORT GRS ANALYSIS

All systems in the sysplex are not at the same level.

THERE ARE NO {BLOCKING|WAITING} TASKS MATCHING THE INPUT SPECIFICATION

The DISPLAY GRS,ANALYZE command found no tasks that matched the options specified on the command.

GQSCAN FOR THE FOLLOWING RESOURCE FAILED: RC=*rc* RSN=*rsn*

The DISPLAY GRS,ANALYZE command attempted to use the GQSCAN service and failed with return code *rc* and reason code *rsn*.

System action: The system continues processing.

System programmer response: None required. However, if there is an indication of a problem with GRS—managed resources, the system programmer can choose to take action against one or more units of work.

Source: Global resource serialization

Module: ISGCDANC

ISG351I GLOBAL RESOURCE SERIALIZATION RNL EXIT *exitname* DETECTED. THIS EXIT IS NO LONGER SUPPORTED.

Explanation: During system initialization, global resource serialization detected the presence of the specified RNL exit. This exit is no longer supported by global resource serialization.

In the message text:

exitname

The name of the detected RNL exit; one of the following:

ISGGSIEX

RNL exit routine for System Inclusion RNL

ISGGSEEX

RNL exit for Systems Exclusion RNL

ISGGRCEX

RNL exit for Resource Conversion RNL

System action: The specified exit will not be invoked during ENQ/DEQ RNL processing.

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Operator response: Contact the system programmer.

System programmer response: Remove the specified exit from the system. If the exit provides required function, implement the function with the ISGNQXIT dynamic exit point.

Source: Global resource serialization

Module: ISGNCBIM

Routing code: 2,10

Descriptor code: 4

ISG352E PATTERN ENTRY DOES NOT CONTAIN WILDCARD CHARACTER '*' OR '?'. *qname*,[*rname*] [T]

Explanation: RNLDEF entry specified TYPE(PATTERN); however neither QNAME or RNAME contain wildcard character '*' or '?'. The QNAME and up to 58 bytes of RNAME, if specified in the RNLDEF entry, is displayed. T at the end of the line indicates the RNAME has been truncated.

In the message text:

qname

The major name of the resource in the RNL requested. Any unprintable characters appear as blanks.

rname

The minor name of the resource in the RNL requested. Any unprintable characters appear as blanks.

System action: Processing continues. The entry will be checked with the other PATTERN and GENERIC entries, but will match only those requests that exactly match the specified QNAME and RNAME.

Operator response: Contact the system programmer.

System programmer response: Correct the RNLDEF entry by changing the TYPE or the QNAME/RNAME parameters.

Source: Global resource serialization

Module: ISGNBRSE

Routing code: 2,10

Descriptor code: 3

ISG353E GRS RESOURCE SHORTAGE - USAGE AT *xx* % FOR STORAGE AREA *#yy*

Explanation: Global resource serialization is nearing the maximum amount of storage available for control blocks used in ENQ/DEQ processing.

In the message text:

xx%

The percentage of the storage block that global resource serialization has already allocated for its internal control blocks.

#yy

The global resource serialization storage area for which the storage shortage exists.

System action: Processing continues. However, if global resource serialization exhausts all of its available storage, the system image will wait state.

Operator response: Contact the system programmer.

System programmer response: Reduce workload on this system immediately. Global resource serialization will issue ISG354I when the shortage is relieved.

Source: Global resource serialization

Module: ISGSALC, ISGSALG, ISGSDAL, ISGSDAG, ISGSPR

Routing code: 1, 2, 10

Descriptor code: 3, 11, 2

ISG354I GRS RESOURCE SHORTAGE RELIEVED FOR STORAGE AREA #yy

Explanation: The resource shortage detail in message ISG353E has been relieved.

In the message text:

#yy

The global resource serialization storage area that is relieved of storage constraint.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Source: Global resource serialization

Module: ISGSALC, ISGSALG, ISGSDAL, ISGSDAG, ISGSPR

Routing code: 1, 2, 10

Descriptor code: 4

ISG355I IARV64 *service-name* SERVICE FAILED, RC=*return-code*, RSN=*reason-code* START@=*64-bit starting address* END@=*64-bit ending address* DIAG=*GuardArea x* DETECTING MODULE=*name of the detecting module*

Explanation: An IARV64 service was issued, but failed with an error return and reason code. Refer to the IARV64 documentation for information on return and reason codes.

In the message text:

service-name

The name of the IARV64 service.

return-code

The IARV64 service RETURN CODE.

reason-code

The IARV64 service REASON CODE.

64-bit starting address

The requested IARV64 service was to perform an operation on storage starting with this virtual 64-bit address.

64-bit ending address

The requested IARV64 service was to perform an operation on storage ending with this virtual 64-bit address.

GuardArea x

This field is for diagnostic data.

name of the detecting module

The IARV64 service was issued from this module.

System action: The system continues processing.

Operator response: Contact the system programmer

System programmer response: Refer to the IARV64 documentation in *z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG* for information on return and reason codes. If a configuration problem can not be determined from the IARV64 return and reason codes, then search the problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

User response: None.

Programmer response: None.

Source: Global resource serialization

Module: ISGNASIM, ISGSPR

Routing code: Note 13

Descriptor code: 12

ISG356E **SYSTEM** *system-name* **DOES NOT SUPPORT ISGQUERY. SYSPLEX WIDE REQUESTS MAY CONTAIN INCOMPLETE DATA.**

Explanation: Global resource serialization detected a system in the global resource serialization complex that is incapable of handling ISGQUERY requests from other systems.

In the message text:

system-name

The name of the system that can not handle the ISGQUERY request.

System action: The issuing system continues processing, but it will not send any sysplex wide ISGQUERY requests to the named system. Data returned on all sysplex wide ISGQUERY requests could be incomplete.

Operator response: Contact the system programmer

System programmer response: Systems that are below z/OS V1R6 require a compatibility PTF to handle ISGQUERY requests. To find the relevant PTF information, see the z/OS APAR book (http://publibz.boulder.ibm.com/cgi-bin/bookmgr_OS390/Shelves/ZDOCAPAR) and *z/OS Migration*.

User response: None.

Programmer response: None.

Source: Global resource serialization

Module: ISGXGX

Routing code: 2

Descriptor code: 11

ISG357E **GLOBAL RESOURCE SERIALIZATION ATTEMPTED TO OBTAIN** *hex attempt value* **X MB BUT COULD ONLY OBTAIN** *hex obtain value* **X MB FOR THE EXTENDED RESOURCE QUEUE AREA.**

Explanation: The extended resource queue area (ERQA) is used for internal global resource serialization storage management. Global resource serialization obtained a smaller size ERQA than expected.

In the message text:

hex attempt value

Hexadecimal value in megabytes representing the attempted size of the ERQA to be obtained.

hex obtain value

Hexadecimal value in megabytes representing the actual size of the ERQA obtained.

System action: Processing continues.

Operator response: Contact the system programmer

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

User response: None.

Programmer response: None.

Source: Global resource serialization

Module: ISGNASIM

Routing code: 1, 2, 10

Descriptor code: 11

ISG358A **GRS EXIT CACHE FAILED TRYING TO OBTAIN STORAGE**

Explanation: GRS could not obtain the storage required to build the GRS exit cache. GRS exit caching will not be enabled on this system. An IPL is necessary to restore the function.

System action: The system will not see the performance benefit of GRS exit caching.

System programmer response: Take an SDUMP of the GRS address space and contact the IBM Support Center.

Source: Global resource serialization

Module: ISGNWMSI

Routing code: 1

Descriptor code: 2

ISG359I GRS EXIT CACHE WAS CREATED SUCCESSFULLY

Explanation: GRS Exit Caching has been initialized on this system.

System action: The system will participate in GRS exit caching.

Source: Global resource serialization

Module: ISGNWMSI

Routing code: Note 13

Descriptor code: 4

ISG360A GRS EXIT CACHE FAILED ACCESSING THE CACHE

Explanation: GRS failed while trying to access or update the GRS exit cache. GRS exit caching will be disabled on this system. IPL to restore the function.

System action: The system will no longer see the performance benefit of GRS exit caching.

Source: Global resource serialization

Module: ISGGNX

Routing code: 1

Descriptor code: 2

ISG361A GLOBAL REQUEST PROCESSING DELAYED ON *sysname*. THE SYSTEM HAS BEEN WAITING *seconds* SECONDS FOR THE LIST LOCK.

Explanation: Global Resource Serialization Star mode processing on system *sysname* is delayed because it cannot obtain the GRS List Lock in the ISGLOCK structure. Each complex wide system that is affected by the delay issues this message, but the system that is causing the delay might not be one of the systems that issue the message. GRS is unable to determine which system is the root cause of the problem. Immediate action is required because all global ENQ/DEQ processing is stalled on system *sysname* until the problem is alleviated.

The GRS complex wide List Lock is used by GRS to ensure that list requests are atomic and to prevent deadlock scenarios. Typically, it is only held by a system for a small period of time and contention is negligible. This message denotes an excessive delay in obtaining the lock by the issuing system.

In the message text:

sysname

The name of the system experiencing the delay.

seconds

The amount of time specified in seconds that the system has been waiting. The threshold used is approximately twice the maximum failure detection interval of every active system in the sysplex. The issuing of the message is also dependent upon a subsequent global request being made on the same system.

System action: All global request processing on this system is stalled until the list lock can be obtained. Monitoring will continue. The system will DOM this message and issue message ISG362I after the problem is alleviated, or reissue message ISG361A if the threshold is exceeded again and further global requests are queued.

Operator response: Contact the system programmer.

System programmer response: Ensure that no systems need to be partitioned out of the sysplex. This message can be a side effect of not confirming that a system is down. If all systems are active, contact your IBM support center.

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System dumps for GRS and XES on all systems in the sysplex are necessary for diagnosis. A rebuild of the ISGLOCK structure may alleviate the problem, but dumps must be taken prior to the rebuild.

User response: None.

Programmer response: None.

Source: Global resource serialization

Module: ISGWDR

Routing code: 1, 10

Descriptor code: 2

ISG362I GLOBAL REQUEST PROCESSING RESUMED ON SYSTEM *sysname*. {THE SYSTEM OBTAINED THE LIST LOCK. |REBUILD COMPLETE FOR THE ISGLOCK STRUCTURE.}

Explanation: This message will only be issued when global resource serialization is running in Star mode, and is preceded by message ISG362A. Global request processing is no longer stalled by the list lock.

In the message text:

sysname

The name of the system that had been experiencing the delay.

THE SYSTEM OBTAINED THE LIST LOCK

Contention was resolved and this system successfully obtained the list lock.

REBUILD COMPLETE FOR THE ISGLOCK STRUCTURE

A rebuild of the ISGLOCK structure cleared the hold condition of the list lock. The system will subsequently attempt to acquire the list lock again.

System action: Processing continues.

Operator response: None.

System programmer response: None.

User response: None.

Programmer response: None.

Source: Global resource serialization

Module: ISGWFP, ISGVRB

Routing code: 2

Descriptor code: 12

ISG363I SYNCHRES RESERVE FLUSH INCOMPLETE FOR DEVICE:*devnum/volser* IOSVDSTF RC: *iosvdstfrc*
SYNCHRES REASON: CURRENT SYSTEM SETTING. API SPECIFIED. FICON CHANNEL
EXTENSIONS DEVICE. RESOURCE NAME *qname,rname* JOBNAME: *jobname* ASID: *asid* TCBADDR:
tcbaddr

Explanation: The target device of a RESERVE has I/O errors.

The RESERVE service attempted to complete a reserve request synchronously by doing I/O to the target device. The I/O requested failed due to problems with the device. See the IOS error messages that are associated with the same device.

The message identifies why the request was done synchronously (synchres), which ENQ resource was used, and the originator of the request. As this is not a GRS error, the message is only written to the hardcopy log for diagnostics. Depending on the SYNCHRES REASON, the system may or may not inform the RESERVE issuer of the failure.

In the message text:

devnum

Identifies the device by volume number and volser.

iosvdstfrc

Identifies return code provided to GRS from the internal IOS IOSVDSTF service.

SYNCHRES REASON:

CURRENT SYSTEM SETTING

Indicates that system currently had GRS SYNCHRES=YES enabled and this is the reason why the RESERVE I/O was attempted. The requester of the RESERVE service is resumed/posted normally without being notified of the failure. Its next I/O to the device will fail.

API SPECIFIED

The SYNCHRES was specifically requested via the ISGENQ RESERVEVOLUME=YES,SYNCHRES=YES API. Depending on the conditional keyword (COND=) specification, the system informs to the requester of the failure via either an ABEND 738 RSN 1 or a return/reason code of 10/xxxx1006.

HIGH PERFORMANCE FICON DEVICE

The SYNCHRES was performed because the target device was a HIGH PERFORMANCE FICON DEVICE, which requires that all RESERVEs be done synchronously. SYNCHRES is performed even in cases where SYNCHRES=NO is specified on the ISGENQ RESERVEVOLUME=YES API. The requester of the RESERVE service is resumed/posted normally without being notified of the failure. Its next I/O to the device will fail.

RESOURCE NAME *qname, rname* T

qname

The major name of the target ENQ resource. Any unprintable characters appear as blanks.

rname T

The minor name of the target ENQ resource. Any unprintable characters appear as blanks. Only the first 49 characters are printed. A T indicates that the RNAME was truncated.

JOBNAME: *jobname*

Specifies the name of the job/STC which issued the RESERVE API.

ASID: *asid*

Specifies the Address Space Identifier of the address space which issued the RESERVE request.

TCBADDR: *tcbaddr*

Specifies the TCB address of the RESERVE requester.

System action: IOS will issues message related to the I/O failure. The device may become boxed.

If SYNCHRES REASON: is CURRENT SYSTEM SETTING, then the system treats the failure as if synchres was off. The requester is resumed normally.

If SYNCHRES REASON: is API SPECIFIED, then depending on the conditional keyword (COND=) specification, the system informs the requester of the failure via either an ABEND 738 RSN 1 or a return/reason code of 10/xxxx1006.

Operator response: See the operator response for the related IOS message to determine why the device is not usable.

System programmer response: See the system programmer response for the related IOS message to determine why the device is not usable.

Source: Global resource serialization

Module: ISGGRSV

Routing code: Note 13

Descriptor code: N/A

ISG364I **CONTENTION NOTIFYING SYSTEM** *text*

Explanation: The global resource serialization contention notifying system has been initially assigned or has moved from *system-name1* to *system-name2*. This message is issued on every system in the GRS STAR complex as they acknowledge the movement.

In the message text: *text* is one of the following:

- IS SYSTEM *system-name2*
- MOVED FROM SYSTEM *system-name1* TO SYSTEM *system-name2*. *reason*

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IS SYSTEM *system-name2*

In this version, *system-name2* is the name of the initial contention notifying system.

MOVED FROM SYSTEM *system-name1* TO SYSTEM *system-name2*. *reason*

In this version, *system-name1* is the previous contention notifying system and *system-name2* is the new contention notifying system.

reason

One of the following:

OPERATOR COMMAND INITIATED.

This message is in response to a SETGRS CNS=*system-name2* command that was issued.

SYSTEM INITIATED

Global resource serialization internal processing initiated the migration of the CNS.

System action: Global resource serialization continues processing with *system-name2* acting as the contention notifying system.

System programmer response: If *system-name2* is not the preferred contention notifying system, given the systems that are currently in the GRS STAR complex, use the SETGRS CNS=*system-name* command to move the contention notifying system to the preferred active system.

Source: Global resource serialization

Module: ISGGCN, ISGVTX, ISGVNX

Routing code: 2, 2, 2

Descriptor code: 5/(4,12)/4

ISG365I SETGRS *commandType* COMMAND FAILED. *detail*

Explanation: See specific *commandType* for more information.

In the message text:

commandType

CNS

The SETGRS command to alter global resource serialization contention notification processing was not successful. See specific detail for more information

detail

detail is one of the following:

TARGET SYSTEM IS THE CONTENTION NOTIFYING SYSTEM.

The system targeted by the CNS command is already the contention notifying system.

NOT ALL SYSTEMS SUPPORT SETGRS CNS.

There is at least one system in the Sysplex that is at an earlier level with respect to contention notification processing.

CNS MIGRATION CURRENTLY IN PROGRESS.

Another CNS migration is currently in progress.

TARGET SYSTEM *system-name* NOT FOUND.

where: - *system-name*: Name of the target system that cannot be located in the Sysplex.

CONTENTION NOTIFICATION TASK OF TARGET SYSTEM *system-name* IS DOWN.

system-name

Name of the target system that cannot assume the contention notification responsibilities because its contention notification task is not functioning properly.

COMMAND CANCELLED BY OPERATOR.

The operator chose to cancel this command.

ANOTHER CNS MIGRATION OCCURRED AFTER THE COMMAND WAS ISSUED.

If the migration that occurred did not place the CNS on the desired system, reissue the command to move it to the desired system.

UNABLE TO COMMUNICATE WITH CURRENT CNS.

Ensure that the CNS is healthy and that XCF messaging in the sysplex is working properly. Reissue the command to move the CNS to the desired system.

ISGLOCK STRUCTURE TEMPORARILY UNAVAILABLE.

This is likely due to an ISGLOCK structure rebuild. Wait for the completion of the rebuild and if necessary, reissue the command to move the CNS to the desired system.

UNEXPECTED ISGLOCK FAILURE.

This might result in an ISGLOCK structure rebuild. Wait for the completion of the rebuild and if necessary, reissue the command to move the CNS to the desired system

System programmer response: The *detail* indicates the response:

CNS TARGET SYSTEM IS THE CONTENTION NOTIFYING SYSTEM.

None.

CNS MIGRATION CURRENTLY IN PROGRESS.

If the migration in progress does not place the CNS on the desired system, wait until it finishes and reissue the command to move it to the desired system

NOT ALL SYSTEMS SUPPORT SETGRS CNS.

Install the PTF that contains the CNS migration function on all z/OS V1R7 systems. For additional information, see *z/OS Migration*.

TARGET SYSTEM *system-name* NOT FOUND.

Reissue the command to move the CNS to the desired system.

CONTENTION NOTIFICATION TASK OF TARGET SYSTEM *system-name* IS DOWN.

If the target system's contention notification task is down, look for message ISG344I with a reason code of C8C5 to determine the scenario. There are two possible scenarios:

- If message ISG344I with a reason code of C8C5 is found on the target system, the contention task is down permanently, see ISG344I for response.
- If message ISG344I with a reason code of C8C5 is not found on the target system, the task may only be down temporarily. Re-issue the command.

ANOTHER CNS MIGRATION OCCURRED AFTER THE COMMAND WAS ISSUED.

If the migration that occurred did not place the CNS on the desired system, reissue the command to move it to the desired system.

UNABLE TO COMMUNICATE WITH THE CURRENT CNS

Reissue the SETGRS CNS command.

ISGLOCK STRUCTURE TEMPORARILY UNAVAILABLE.

Check to see if an ISGLOCK rebuild is in progress. Retry the SETGRS CNS after the ISGLOCK structure is rebuilt.

UNEXPECTED ISGLOCK FAILURE.

Check to see if an ISGLOCK rebuild is in progress. Retry the SETGRS CNS after the ISGLOCK structure is rebuilt.

Source: Global resource serialization

Module: ISGCSET, ISGGCN, ISGXMX, ISGVNX, ISGVTX

Routing code: 2

Descriptor code: 5

ISG366D CONFIRM SETGRS REQUEST ON SYSTEM *system-name*. REPLY {ENQMAXA|ENQMAXU}=*value* TO CONFIRM OR C TO CANCEL. CONFIRM REQUEST TO MIGRATE THE CNS TO *system-name*. REPLY CNS=*system-name* TO CONFIRM OR C TO CANCEL.

Explanation: The SETGRS command to alter the maximum number of ENQ requesters needs confirmation or migration of the current CNS needs confirmation.

In the message text:

system-name

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- For ENQMAXU/ENQMAXA requests, *system-name* is the issuing system of the SETGRS command.
- For CNS migration requests, *system-name* is the target system of the SETGRS command.

value

The new maximum for authorized or unauthorized requesters.

System action: Global resource serialization waits for a reply from the operator before issuing the SETGRS ENQMAXA, ENQMAXU, or CNS command. Note that the authorized service, ISGADMIN, also sets an address-space specific ENQ maximum. For any given address space, the system will use the greater of the two maximums. See *z/OS MVS Planning: Global Resource Serialization* for a description of what constitutes a request count for comparing against these maximums.

Operator response: If *value* is the appropriate amount for the SETGRS ENQMAXA or ENQMAXU command, reply with MAXVALUE=*value*. If is not the appropriate amount, reply with C to cancel the command.

If *system-name* is an appropriate target system for SETGRS CNS command, reply with CNS=*system-name*. If it is not the appropriate target *system-name*, reply with C to cancel the command.

If you do not require this prompt (for example, if the command is issued through automation) and want to suppress it, use the NOPROMPT parameter on the SETGRS CNS command.

Source: Global resource serialization

Module: ISGCSET

Routing code: *, 2

Descriptor code: 2

ISG367I THE RESPONSE TO MESSAGE *messageid* IS INCORRECT: *reply* IS *reason*

Explanation: An unexpected response was encountered.

In the message text:

messageid

The message id of the message to which the operator replied.

reply

The operator's reply.

reason

One of the following:

IS NOT A VALID ACTION

The syntax of the reply was incorrect.

IS NOT THE SPECIFIED VALUE

The replied value does not match what was specified in the original SETGRS system command or is not a valid reply to the previous ISG880D message.

System action: Message *messageid* is reissued.

Operator response: See the message description of message *messageid* for an appropriate reply.

Source: Global resource serialization

Module: ISGCSET, ISGCIRS

Routing code: 2

Descriptor code: 5

ISG368E THE CONCURRENT {AUTHORIZED|UNAUTHORIZED} REQUEST COUNT FOR ASID *asid* HAS EXCEEDED THE *percentage* PERCENT THRESHOLD OF THE {ADDRESS SPACE|SYSTEM-WIDE} MAXIMUM, *maximum*.

Explanation: The address space is approaching the maximum number of concurrent ENQ requests that are currently allowed.

In the message text:

asid

The *asid* of the address space approaching the maximum.

percentage

The threshold percentage used by the monitoring system.

maximum

The current maximum.

System action: Processing continues. If the request count reaches the maximum, every subsequent unconditional ENQ or ISGENQ request fails with ABEND538, and every subsequent conditional ENQ, ISGENQ, GQSCAN, or ISGQUERY fails with appropriate return and reason code.

System programmer response: Determine if this is a runaway use of ENQ or not. If so, then action might be required to cancel or fix the application. A temporary increase in the ENQ limit may be required if it is a critical application. If it is not a runaway and more capacity for the space is required because of demand, then attempt to use a corresponding application means to adjust its address space ENQ limit or concurrent acceptance of work. Care should be taken on choosing a new ENQ maximum in all cases where the ENQ limit needs to be increased.

For short-term alleviation, set a higher system-wide maximum by entering the SETGRS command for ENQMAXA or ENQMAXU. IBM recommends that you make address space specific adjustments to protect against runaway address spaces, which mistakenly request excessive amounts of ENQs.

Source: Global resource serialization

Module: ISGCSET

Routing code: 1, 2, 10

Descriptor code: 2

ISG369I THE CONCURRENT {AUTHORIZED|UNAUTHORIZED} REQUEST COUNT FOR ASID *asid* HAS DROPPED BELOW THE *percentage* PERCENT THRESHOLD OF ITS MAXIMUM.

Explanation: The concurrent ENQ threshold problem for the address space has been relieved.

In the message text:

asid

The *asid* of the address space that had been approaching the maximum.

percentage

The threshold percentage used by the monitoring system.

System action: The system will DOM message ISG368E and processing continues.

Source: Global resource serialization

Module: ISGCSET

Routing code: 1, 2, 10

Descriptor code: 4

ISG370I {ENQMAXA|ENQMAXU|GRSQ} ON SYSTEM *system-name* HAS BEEN SET TO *value*.

Explanation: The SETGRS command regarding the keywords listed above has succeeded.

In the message text:

system-name

The issuing and target system of the SETGRS command.

value

The new setting.

System action: Global resource serialization uses the new setting. See the SETGRS command in *z/OS MVS System Commands* for more details.

Source: Global resource serialization

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Module: ISGCSET

Routing code: 2

Descriptor code: 4, 12

ISG371I ISGADMIN ISSUED FROM JOBNAME: *jobname* ASID: *asid*. REQUEST(*request*) MAXTYPE(*maxtype*) [MAXVALUE(X'*newvalue*')] SPECIFIED. [PREVIOUS VALUE: X'*oldvalue*'].

Explanation: An application issued the ISGADMIN service.

In the message text:

jobname

Jobname of the application issuing the ISGADMIN.

asid

ASID of the application issuing the ISGADMIN

request

ISGADMIN request keyword

maxtype

ENQ limit type: authorized or unauthorized

newvalue

New value for the maximum number of ENQ requests

oldvalue

Prior value for the maximum number of ENQ requests

System action: For REQUEST(SETENQMAX), GRS will now use *newvalue* as the maximum authorized or unauthorized ENQ limit for the address space denoted by *asid*. If the system-wide limit is greater, the space-specific limit will have no immediate effect. The greater value is used.

For REQUEST(RESETENQMAX), GRS will now use the system-wide value as the maximum authorized or unauthorized ENQ limit for the address space denoted by *asid*.

See *z/OS MVS Programming: Authorized Assembler Services Reference EDT-IXG* for more information on the ISGADMIN service.

Source: Global resource serialization

Module: ISGGADMN

Routing code: Note 13

Descriptor code: N/A

ISG372E THE GRSCNF SYSTEM PARAMETER IS UNUSABLE. GRSDEF DEFAULTS ARE USED.

Explanation: Either there was an I/O error accessing the GRSCNF parmlib member(s) or a syntax error was detected during the parsing. Because the specified GRS mode is either STAR or NONE, the IPL can continue with defaults of all keywords relevant to the respective mode.

System action: Processing continues.

Operator response: Contact your system programmer.

System programmer response: Ensure the GRSCNFxx parmlib member(s) can be accessed and are accurate before the next IPL.

Source: Global resource serialization

Module: ISGNCBIM

Routing code: 1,2,10

Descriptor code: 2

ISG373W **GRS PROCESSING ENDED.** *reason.* **DIAG1=hex diagnostic value**

Explanation: Global Resource Serialization processing has ended and cannot continue.

In the message text:

IARV64 GRQA ORIGIN TOO HIGH

The Global Resource Queue Area (GRQA) was allocated by the IARV64 service at an address higher than that can be tolerated by GRS. Wait state code 0A3 08E is issued along with this message.

UNRECOVERABLE ERROR OCCURRED DURING MIGRATION TO RNLS

An unrecoverable error occurred while GRS was migrating from GRSRNL=exclude to standard RNLS. Wait state code 0A3 0EE is issued along with this message.

hex diagnostic value

Diagnostic information that should be provided to IBM service.

System action: System issues wait state code depending on the reason.

Operator response: Contact your system programmer.

System programmer response: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Programmer response: None.

Source: Global resource serialization

ISG374I *time* **GRS ANALYSIS text**

Explanation: This message is issued as a result of the D GRS,ANALYZE,LATCH command. The format of this message depends on which parameters are specified on the command.

Text is:

- Output for DISPLAY GRS,ANALYZE,LATCH,BLOCKER

The system displays the following lines when a DISPLAY GRS,ANALYZE,LATCH,BLOCKER command is entered:

```
LONG BLOCKER ANALYSIS: request specification
OWNTIME JOBNAME E/S CASID LSETNAME/LATCHID
hh:mm:ss jobname *r* casid lsetname
                        latchId
```

```
OTHER BLOCKERS: nn WAITERS: nn2
```

- Output for DISPLAY GRS,ANALYZE,LATCH,WAITER

The system displays the following lines when a DISPLAY GRS,ANALYZE,LATCH,WAITER command is entered:

```
LONG WAITER ANALYSIS: request specification
WAITTIME JOBNAME E/S CASID LSETNAME/LATCHID
hh:mm:ss jobname *r* casid lsetname
                        latchId
```

```
BLOCKER jobname2 r2 OTHER BLOCKERS: nn
```

- Output for DISPLAY GRS,ANALYZE,LATCH,DEPENDENCY

The system displays the following lines when a DISPLAY GRS,ANALYZE,LATCH,DEPENDENCY command is entered:

```
DEPENDENCY ANALYSIS: request specification
descriptor
WAITTIME JOBNAME E/S CASID LSETNAME/LATCHID
hh:mm:ss jobname *r* casid lsetname
                        latchId
```

```
BLOCKER jobname2 r2
ANALYSIS ENDED: analysis outcome
```

- Output for DISPLAY GRS,ANALYZE,LATCH,BLOCKER,DETAIL

The system displays the following lines when a DISPLAY GRS,ANALYZE,LATCH,BLOCKER,DETAIL command is entered:

```
LONG BLOCKER ANALYSIS: request specification
BLOCKER JOBNAME: jobname (ASID=asid, TCB|WEB=wuaddr)
REQUEST: reqtype [(WITH nn OTHERS)] LT:latchtoken
```

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```
BLOCKING hh:mm:ss RESOURCE (CREATOR ASID= casid)
lsetname          LST:lsettoken
latchId
THERE ARE nn2 REQUESTS WAITING FOR THIS RESOURCE
```

- Output for DISPLAY GRS,ANALYZE,LATCH,WAITER,DETAIL

The system displays the following lines when a DISPLAY GRS,ANALYZE,LATCH,WAITER,DETAIL command is entered:

```
LONG WAITER ANALYSIS: request specification
WAITER JOBNAME: jobname (ASID=asid, TCB|WEB=wuaddr)
      REQUEST: reqtype [(WITH nn OTHERS)] LT:latchtoken
      WAITING hh:mm:ss FOR RESOURCE (CREATOR ASID= casid)
      lsetname
      LST:lsettoken
      latchId
BLOCKER JOBNAME: jobname2 (ASID=asid2, TCB|WEB=wuaddr2)
      REQUEST: reqtype2 [(WITH nn2 OTHERS)]
```

- Output for DISPLAY GRS,ANALYZE,LATCH,DEPEND,DETAIL

The system displays the following lines when a DISPLAY GRS,ANALYZE,LATCH,DEPEND,DETAIL command is entered:

```
DEPENDENCY ANALYSIS: request specification
      descriptor
      JOBNAME: jobname (ASID=asid, TCB|WEB=wuaddr)
      REQUEST: reqtype [] LT:latchtoken
      state hh:mm:ss FOR RESOURCE (CREATOR ASID= casid)
      lsetname
      LST:lsettoken
      latchId
ANALYSIS ENDED: analysis outcome
```

- Error Output for DISPLAY GRS,ANALYZE,LATCH

The system displays the following lines when a DISPLAY GRS,ANALYZE,LATCH command is entered and encounters an error:

```
PROCESSING ENDED:
error_reason
```

In the message text:

time The time the command was issued.

request specification

The input was specified by the command issuer, and can have a combination of the following possible values:

- ASID=*rsasid*
- JOBNAME=*rsjobname*
- CASID=*casid*
- CJOBNAME=*cjobname*
- ASID=*rsasid*, TCB=*rstcbaddr*\
- ASID=*rsasid*,WEB=*rswebaddr*
- JOBNAME=*rsjobname*, TCB=*rstcbaddr*
- JOBNAME=*rsjobname*,WEB=*rswebaddr*

Note: ASID, JOBNAME, and XJOBNAME are mutually exclusive.

hh:mm:ss

The length of time the latch request has been in that state. For blockers this is the time when it has owned the resource. For waiters this is the time when it has been waiting.

jobname, jobname2

When the jobname can not be obtained, *UNAVAIL will be displayed. This can be due to the address space having terminated or due to the latch queues changing too quickly.

casid The hexadecimal asid of the latch set creator.

lsetname

The requested latch set name. T indicates that the name has been truncated.

latchId The requested latch number and identity. If no latch identity is provided, the latch number will be shown followed by "(ID NOT SPECIFIED)". When DETAIL is requested the ID will fill up to four lines and be truncated after 255 characters. Non-DETAIL will use only one line.

r, r2 The latch request type: E for exclusive or S for shared.

reqtype, reqtype2

The latch request type: EXCLUSIVE or SHARED.

descriptor

- LONG WAITER #xx
- LONG BLOCKER #xx

where xx is the long waiter or latch blocker number with respect to the output message.

analysis outcome

DATA NOT AVAILABLE - DIAG=xxxxxxxx yyyyyyyyyy

The latch data was changing so rapidly that an accurate snapshot could not be obtained.

- THIS UNIT OF WORK IS NOT WAITING.

The unit of work at the end of the dependency chain is not waiting for a latch. The last requestor shown is the fundamental blocker of this analysis. Determine why this requestor is held up.

- A DEADLOCK WAS DETECTED.

An apparent deadlock between multiple units of work has been detected. None of the units of work in the list proceed until one or more of them release ownership.

Note: It is possible that a true deadlock does not exist if one of the units of work passed the responsibility to release ownership to a different unit of work. It is also possible that the apparent deadlock resolves if one of the units of work specified an ECB and releases ownership before waiting to be posted.

- INTERNAL ERROR

The DISPLAY GRS,ANALYZE,LATCH command processor failed. A dump is produced to record the problem.

nn,nn2 The count of requests as specified by the surrounding text. The count is decimal.

tcbaddr, tcbaddr2, webaddr, webaddr2

The tcb address or WEB address for SRBs of the latch requestor.

asid, asid2

The asid of the latch requestor. The asid and asid2 are hexadecimal.

state BLOCKING or WAITING.

lsettoken

The token of the latch set.

latchtoken

The latch token for the longest blocker of the resource.

error_reason

The error is caused by one of the following reasons:

- COULD NOT OBTAIN GRS PRIVATE STORAGE
- INTERNAL ERROR

System action: The system continues processing.

Operator response: Contact System Programmer.

System programmer response:

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- INTERNAL ERROR: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.
- DATA NOT AVAILABLE - DIAG=xxxxxxx yyyyyyyy: If there was an INTERNAL ERROR, try the request again. If this is a consistent response, search problem reporting databases for a fix for the issue. If no fix exists, contact the IBM Support Center.
- COULD NOT OBTAIN GRS PRIVATE STORAGE: Determine the cause of the storage constraint. If the error was "INTERNAL ERROR," collect the dump generated by GRS and search problem reporting databases for a solution. If one is not found, contact IBM support.
- For other cases: If there is an indication of a problem with a GRS managed latch, the system programmer can choose to take an action against one or more jobs or units of work. For more information about diagnosing system related latch usage, see *z/OS MVS Diagnosis: Reference*.

Source: Global resource serialization

ISG375I THE LATCH IDENTITY TABLE IS NOT USABLE FOR CREATOR ASID: *asid* JOBNAME: *jobname*
LATCH SET NAME: *lsetname*.

Explanation: DISPLAY GRS processing encountered a problem with a latch set identity table. This table has been removed from operation.

In the message text:

asid The ASID of the latch set creator. The ASID is hexadecimal.

jobname The JOBNAME of the latch set creator.

lsetname

The name of the latch set.

System action: As this is not a GRS error, the system does not take a dump but does record the event in SYS1.LOGREC that contains the LSET name and other information.

Operator response: Contact your system programmer.

System programmer response: The system records the error in SYS1.LOGREC that contains the LSET name and other information.

Programmer response: The application programmer (latch set owner) might have specified a bad address for the latch identity table or for one of the latch identity array entries that would lead to this failure when the application invoked either the ISGLID or the ISGLID64 service to attach a latch identity array. The problem might not be detected until a latch is in contention and the D GRS,ANALYZE,LATCH command is used to get information about latches in contention. The application programmer must validate parameters used on the ISGLID or ISGLID64 service to make sure that they point to a valid latch table address and that the Latch identity array built has valid pointers to latch identity entries.

Source: Global resource serialization

ISG376I GLOBAL RESOURCE SERIALIZATION FREEING STORAGE BUFFERS DUE TO *reason* DIAG=
diag1

Explanation: Global resource serialization (GRS) is freeing internally managed storage buffers. This does not affect GRS processing except that it must obtain more storage when needed instead of using the preallocated buffers.

In the message text:

reason is one of the following values:

REAL STORAGE SHORTAGE

The system is constrained on real storage as indicated by the ENF 55 signal.

AUX STORAGE SHORTAGE

The system is constrained on auxiliary storage as indicated by the ENF 55 signal.

BUFFER THRESHOLD EXCEEDED

The system exceeded one or more thresholds associated with the internally managed storage buffers as determined by GRS.

diag1 This field is for diagnostic data.

System action: Global resource serialization frees the internal storage buffers so that this virtual memory is no longer backed by real storage.

In the cases of real or auxiliary storage shortage, GRS will repopulate the internal buffers when the system storage constraint is relieved.

In the case of the buffer threshold being exceeded, this is normal processing after heavy ENQ activity. This message merely identifies how the system is self-managing its resources, and GRS will immediately repopulate the internal buffers because it receives new requests.

Operator response: None

System programmer response: None

Programmer response: None

Problem determination: None

Source: Global resource serialization

Module: N/A

Routing code: 10

Descriptor code: 4

ISG377I GRS QSCAN INTERNAL ERROR, DIAG=*diag1*

Explanation: Global resource serialization has detected an internal error during GQSCAN or ISGQUERY processing.

In the message text:

diag1 This field is for diagnostic data for IBM.

System action: The system fails the request.

Operator response: None

System programmer response: Contact IBM support.

Programmer response: None

Problem determination: None

Source: Global resource serialization

Module: N/A

Routing code: None

Descriptor code: 4

ISG378I GRS QSCAN ERROR COMMUNICATING WITH SYSTEM *sysname*, DIAG=*diag1*

Explanation: Global resource serialization has detected a communication error during GQSCAN or ISGQUERY processing.

In the message text:

sysname

The name of the system where communication failed.

diag1 This field is for diagnostic data for IBM.

System action: The system fails the request.

Operator response: Contact the system programmer.

System programmer response: Check the XCF communication status between the system that receives this message and the system with *sysname* identified in the message.

Programmer response: None.

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Problem determination: None

Source: Global resource serialization

Module: N/A

Routing code: None

Descriptor code: 4

| **ISG379E** **GRS UNABLE TO CONNECT TO THE ISGLOCK STRUCTURE. VALIDATE THAT THERE IS A**
| **COUPLING FACILITY DEFINED IN THE CFRM POLICY AND THAT IT IS PHYSICALLY**
| **CONNECTED TO THE SYSTEM. ENSURE THAT THE CF IS IN THE PREFLIST FOR THE**
| **ISGLOCK STRUCTURE.**

| **Explanation:** GRS in unable to connect to the lock structure required for Star mode.

| **System action:** Message ISG381D is issued.

| **Operator response:** Contact the system programmer.

| **System programmer response:** See the system programmer response for message ISG381D.

| **Source:** Global resource serialization

| **Module:** ISGNLS

| **Routing code:** 1, 10

| **Descriptor code:** 11

| **ISG380E** **GRS UNABLE TO USE THE ISGLOCK STRUCTURE DUE TO INSUFFICIENT NUMBER OF**
| **LOCKS. VALIDATE THAT THE SIZE AND INITSIZE IN THE CFRM POLICY ARE SUFFICIENT**
| **FOR ISGLOCK AND THAT THE CF HAS THAT STORAGE AVAILABLE.**

| **Explanation:** GRS connected to a lock structure of insufficient size required for Star mode.

| **System action:** Message ISG381D is issued.

| **Operator response:** Contact the system programmer.

| **System programmer response:** See the system programmer response for message ISG381D.

| **Source:** Global resource serialization

| **Module:** ISGNLS

| **Routing code:** 1, 10

| **Descriptor code:** 11

| **ISG381D** **GRS UNABLE TO INITIALIZE IN STAR MODE. RELOAD THE SYSTEM OR REPLY NONE TO**
| **CONTINUE THE IPL IN NONE MODE.**

| **Explanation:** GRS in unable to initialize in Star mode. This is the first system attempting to connect, and you have the option of continuing the IPL in GRS NONE mode in order to resolve the problem.

| **System action:** With a reply of NONE, the IPL continues in GRS NONE mode.

| **Operator response:** Contact the system programmer.

| **System programmer response:** See corresponding message ISG379E or ISG380E for information on the error.

| Determine whether it is necessary to IPL this one system in GRS NONE mode in order to fix the problem, and then respond appropriately. Another IPL will be necessary to re-attempt STAR mode initialization.

| **Source:** Global resource serialization

| **Module:** ISGNLS

| **Routing code:** 1, 10

| **Descriptor code:** 2

ISG880D WARNING: GRSRNL=EXCLUDE IS IN USE. REPLYING FORCE WILL RESULT IN THE USE OF SPECIFIED RNLS. REPLY C TO CANCEL

Explanation: The SET GRSRNL command to alter the current RNLS when in a GRSRNL=EXCLUDE environment needs confirmation.

System action: Global resource serialization waits for a reply from the operator before attempting to force the change to the specified RNLS.

Operator response: The systems programmer needs to confirm this action. If the forced RNL change is the desired action, reply with FORCE. Otherwise reply with C.

System programmer response: Extensive planning is required before this forced RNL change is made. Ensure that all the necessary planning has been performed before replying FORCE. If it is necessary to resume an GRSRNL=EXCLUDE environment, the sysplex has to be IPLd that results in a sysplex-wide outage. For more information about this function, see *z/OS MVS Planning: Global Resource Serialization*.

Problem determination: Describe the problem determination steps or action that can be performed.

Source: Global resource serialization

Module: ISGCIRS

Routing code: *

Descriptor code: 2

ISG881I SET GRSRNL COMMAND CANCELED. *reason*

Explanation: The SET GRSRNL command was canceled for the reason specified.

In the message text:

reason is one of the following:

THE REPLY TO ISG880D WAS C.

The operator replied C to the prompt for message ISG880D, indicating that the change should be canceled.

THERE IS AT LEAST ONE OTHER SYSTEM IN THE SYSPLEX.

During a change from GRSRNL=EXCLUDE to standard RNLS, another system was found to be in the sysplex. Only one system can be active in the system for this migration.

AN ISGNQXIT OR AN ISGNQXITFAST EXIT IS CURRENTLY ACTIVE.

During a change from GRSRNL=EXCLUDE to standard RNLS, an ISGNQXIT or ISGNQXITFAST installation exit was found to be active.

AN ISGNQXITBATCH OR AN ISGNQXITBATCHCND EXIT IS CURRENTLY ACTIVE.

During a change from GRSRNL=EXCLUDE to standard RNLS, an ISGNQXITBATCH or ISGNQXITBATCHCND installation exit was found to be active. This could result if the GRS ENQ/DEQ monitor or an alternate serialization product is running.

REQUEST FOR RESOURCE WAS AFFECTED BY AN EXIT.

A resource request was found that had been affected by an ISGNQXIT or ISGNQXITFAST exit. See message ISG882I for the name of the resource.

RESOURCE HAS A MASID REQUEST.

During a change from GRSRNL=EXCLUDE to standard RNLS, a resource was found that was requested with ENQ options MTCB/MASID and only a part of the requester chain would be moved. See message ISG882I for the name of the resource.

RESOURCE NAME IS OWNED AS BOTH A LOCAL AND GLOBAL RESOURCE.

During a change from GRSRNL=EXCLUDE to standard RNLS a resource name was found that is owned with both scope SYSTEM and SYSTEMS. See message ISG882I for the name of the resource.

RESERVE CONVERTED BY AN EXIT BUT NOT RNLS.

An outstanding RESERVE request was found that currently owns a resource when it was converted by an ISGNQXITBATCH or ISGNQXITBATCHCND exit but the new RNLS do not indicate

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conversion. This could result if the resource was managed globally by an alternative serialization product before the migration, but afterwards is to be serialized by device RESERVE. See message ISG882I for the name of the resource.

System action: The SET GRSRNL command is canceled after the first error was found and the system continues using the existing GRSRNL setting.

Operator response: Contact the system programmer.

System programmer response: Do one of the following, depending on the reason:

THE REPLY TO ISG880D WAS C.

None.

THERE IS AT LEAST ONE OTHER SYSTEM IN THE SYSPLEX.

Ensure there is only one system in the sysplex, then try the command again.

AN ISGNQXIT OR AN ISGNQXITFAST EXIT IS CURRENTLY ACTIVE.

Remove the dynamic exit routine(s), then try the command again. The DISPLAY PROG,EXIT command can be used to determine what exits are active.

AN ISGNQXITBATCH OR AN ISGNQXITBATCHCND EXIT IS CURRENTLY ACTIVE.

Remove the dynamic exit routine(s) then try the command again. The DISPLAY PROG,EXIT command can be used to determine what exits are active.

REQUEST FOR RESOURCE WAS AFFECTED BY AN EXIT.

Determine the origin of the request, and take the appropriate action to remove the request from the system. Once the request is removed, try the command again. See message ISG882I for the name of the resource. The DISPLAY GRS,RES command can be used to find more information on the given request.

RESOURCE HAS A MASID REQUEST.

Determine the origin of the MASID request, and take the appropriate action to remove the request from the system. Once the request is removed, try the command again. See message ISG882I for the name of the resource. The DISPLAY GRS,RES command can be used to find more information on the given request.

RESOURCE NAME IS OWNED AS BOTH A LOCAL AND GLOBAL RESOURCE.

Determine the origin of the requests, and take the appropriate action to remove one of the resources from the system. Once one of the resources is removed, try the command again. See message ISG882I for the name of the resource. The DISPLAY GRS,RES command can be used to find more information on the given request.

RESERVE CONVERTED BY AN EXIT BUT NOT RNLS.

Investigate why this resource will be serialized by RESERVE when it was previously converted. If this change in setup is correct, try the migration again when this resource is not owned.

Source: Global resource serialization

Module: ISGCIRS, ISGGDLYP

Routing code: 2

Descriptor code: 5

ISG882I GRSRNL STOPPING RESOURCE IS QNAME=*qname*. RNAME=*rname*.

Explanation: The given resource name indicates the resource that caused the SET GRSRNL command to be canceled. See message ISG881I for the reason of the cancelation.

In the message text:

qname is the major name (QNAME) of the resource.

rname is the minor name (RNAME) of the resource truncated to 52 bytes.

System action: The SET GRSRNL command is canceled after the first error was found and the system continues using the existing GRSRNL setting.

Operator response: Contact the system programmer.

System programmer response: Do one of the following, depending on the reason:

THE REPLY TO ISG880D WAS C.

None.

THERE IS AT LEAST ONE OTHER SYSTEM IN THE SYSPLEX.

Ensure there is only one system in the sysplex, then try the command again.

AN ISGNQXIT OR AN ISGNQXITFAST EXIT IS CURRENTLY ACTIVE.

Remove the dynamic exit routine(s), then try the command again. The DISPLAY PROG,EXIT command can be used to determine what exits are active.

REQUEST FOR RESOURCE WAS AFFECTED BY AN EXIT.

Determine the origin of the request, and take the appropriate action to remove the request from the system. Once the request is removed, try the command again. See message ISG882I for the name of the resource. The DISPLAY GRS,RES command can be used to find more information on the given request.

RESOURCE HAS A MASID REQUEST.

Determine the origin of the MASID request, and take the appropriate action to remove the request from the system. Once the request is removed, try the command again. See message ISG882I for the name of the resource. The DISPLAY GRS,RES command can be used to find more information on the given request.

RESOURCE NAME IS OWNED AS BOTH A LOCAL AND GLOBAL RESOURCE.

Determine the origin of the requests, and take the appropriate action to remove one of the resources from the system. Once one of the resources is removed, try the command again. See message ISG882I for the name of the resource. The DISPLAY GRS,RES command can be used to find more information on the given request.

Source: Global resource serialization

Module: ISGGDLYP

Routing code: 2

Descriptor code: 5

ISG883I **GRS INVOCATION OF *service* SERVICE FAILED, DIAG1=*diag1*, DIAG2=*diag2*, DIAG3=*diag3*, DIAG4=*diag4*, DIAG5=*diag5*, DIAG6=*diag6*.**

Explanation: A system service routine invoked by global resource serialization has failed. Diagnostic fields are supplied to determine the cause of the error.

In the message text:

service is the name of the failing system service routine.

diag1 is diagnostic data.

diag2 is diagnostic data.

diag3 is diagnostic data.

diag4 is diagnostic data.

diag5 is diagnostic data.

System action: The system continues processing.

Operator response: Contact your system programmer.

System programmer response: Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Global resource serialization

Module: ISGGDLYP

Routing code: 2, 10

Descriptor code: 12

Chapter 21. ISGH messages

ISGH0001I *check_name* check was started with PARMs='active_check_parameters'.

Explanation: Displays check parameters at runtime. If PARMs="" then no parameters were provided.

System action: N/A

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: N/A

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0002I *check_name* check was entered with an unknown function code of *function code*.

Explanation: This check was not coded to recognize the specified function code. The function code was ignored.

System action: N/A

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: N/A

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0101I *check_name* check cannot be processed because parameters were found when none were expected.
Remove the parameters specified in your HZSPRMxx parmlib member and refresh the check.

Explanation: The installation provided parameter overrides, but this check does not support any parameters.

System action: Check is not processed.

Operator response: Contact your system programmer.

System programmer response: Update the PARM field for this check in your HZSPRMxx parmlib member to the appropriate value and refresh the check.

Problem determination: N/A

Source: N/A

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0102I • ISGH0105I

ISGH0102I *check_name* **check cannot be processed because more than one parameter was found.**

Explanation: This check supports one parameter.

System action: Check is not processed.

Operator response: Contact your system programmer.

System programmer response: Update the PARM field for this check in your HZSPRMxx parmlib member to the appropriate value and refresh the check.

Problem determination: N/A

Source: N/A

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0103I *check_name* **check cannot be processed because the installation supplied value, *active_check_parameters*, is not a valid parameter. The parameter should have a value of STAR, RING or NONE.**

Explanation: The installation provided overrides were in error.

System action: Check is not processed.

Operator response: Contact your system programmer.

System programmer response: Update the PARM field for this check in your HZSPRMxx parmlib member to the appropriate value and refresh the check.

Problem determination: N/A

Source: N/A

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0104I *check_name* **check cannot be processed because an unexpected error occurred in service *service*. Service RC = rc, RSN = rsn. Diag = check diagnostic data.**

Explanation: A system service returned an unexpected return code.

System action: Check is not processed.

Operator response: Contact your system programmer.

System programmer response: Refresh the check. If the problem persists, contact IBM Support with the information provided in this error message.

Problem determination: N/A

Source: N/A

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0105I *check_name* **check cannot be processed because it was entered with an unexpected entry code of *entry code*.**

Explanation: An unexpected error occurred.

System action: Check is not processed.

Operator response: Contact your system programmer.

System programmer response: Refresh the check. If the problem persists, contact IBM Support with the information provided in this error message.

Problem determination: N/A

Source: N/A

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0106I *check_name* **check did not complete because it timed out. Diagnostic data: Service** *ServiceName*. **Service RC = rc, RSN = rsn. Diag = DiagData.**

Explanation: A check did not complete because it has timed out. Refer to the diagnostic data in the message for additional details.

In the message text:

CheckName

The name of the check.

ServiceName

The name of the service that caused the timeout.

rc Return code provided from the service *ServiceName*.

rsn

Reason code provided from the service *ServiceName*.

DiagData

Diagnostic data describing information about the timeout.

System action: Check is not processed.

Operator response: Notify the system programmer.

System programmer response: Refresh the check. If the problem persists, contact IBM Support with the information provided in this error message.

Problem determination: N/A

Source: N/A

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0107I *check_name* **detected a parameter error. The parameter value of 'parm' is problem.**

Explanation: The check detected an error in the check parameter. The installation updated the parameter in either the HZSPRMxx parmlib member or a MODIFY *hzsproc* command.

System action: Check is not processed.

Operator response: Contact your system programmer.

System programmer response: Update the PARM field for this check in your HZSPRMxx parmlib member to the appropriate value and refresh the check.

Problem determination: N/A

Source: N/A

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0201I • ISGH0204I

ISGH0201I *check_name* check is not applicable because the system *system_name* is in XCF-Local or monoplex mode.

Explanation: This check is only applicable for a system in a parallel sysplex.

System action: Check is not processed.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: N/A

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0202I *check_name* check is not applicable because Coupling Facility Resource Management (CFRM) is not active on system *system_name*.

Explanation: This check is only applicable for a system in a parallel sysplex.

System action: Check is not processed.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: N/A

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0203I This check is applicable in STAR mode only.

Explanation: This check is only applicable in global resource serialization star mode.

System action: Check is not processed.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: N/A

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0204I GRSRNL=EXCLUDE is in effect so there is no RESERVE Conversion RNL to be checked. No RESERVEs are being converted to global ENQs by the Global Resource Serialization RNLs. If an alternative serialization product is in use, check with that product to see if RESERVEs are being converted.

Explanation: This check did not run because it is not applicable when GRSRNL=EXCLUDE. GRSRNL=EXCLUDE means requests are excluded from SYSTEMS scope as if the SYSTEMS exclusion RNL contained "TYPE(PATTERN) QNAME(*)".

System action: Check is not processed.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: N/A

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0205I This check is not applicable in Global Resource Serialization NONE mode.

Explanation: This check is only applicable in global resource serialization STAR or RING mode.

System action: Check is not processed.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: N/A

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0206I This check is not applicable when GRSRNL=EXCLUDE is specified.

Explanation: This check is only applicable in a Global Resource Serialization environment where GRSRNL=EXCLUDE is not specified.

System action: Check is not processed.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: N/A

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0300I Global Resource Serialization is currently running in STAR mode.

Explanation: Check successful

System action: N/A

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: N/A

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0301E Global Resource Serialization is in *mode mode*. Global Resource Serialization STAR mode was expected.

Explanation: The check found an unexpected mode when global resource serialization star mode was expected. Use star mode for best performance in a parallel sysplex.

System action: The system might perform significantly worse than if it was in star mode.

Operator response: Contact your system programmer.

System programmer response: See *z/OS MVS Planning: Global Resource Serialization* for more information on converting to global resource serialization star mode.

Problem determination: N/A

Source: Global resource serialization

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0302I Global Resource Serialization is in *mode mode*, which is equal to the installation specification.

Explanation: Check successful.

System action: N/A

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: N/A

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0303E Global Resource Serialization is in *mode mode*. Global Resource Serialization *expected mode mode* was expected.

Explanation: Check found an exception. The installation provided a parameter override for the expected global resource serialization mode, which does not match the current global resource serialization mode. IBM suggests star mode for best performance in a sysplex. If this is not the installation specification review the current installation requirements for serialization.

System action: None.

Operator response: Contact your system programmer.

System programmer response: See *z/OS MVS Planning: Global Resource Serialization* for more information on converting to global resource serialization *expected mode mode*.

Problem determination: N/A

Source: Global resource serialization

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0304I Global Resource Serialization synchronous RESERVE processing is active. This is consistent with the IBM suggestion for Global Resource Serialization synchronous RESERVE processing.

Explanation: Check successful.

System action: N/A

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: N/A

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0305E Global Resource Serialization synchronous RESERVE processing is not active.

Explanation: The SYNCHRES option allows an installation to specify whether the system should obtain a physical hardware RESERVE for a device prior to notifying the requestor that it owns the resource. When the SYNCHRES option is not implemented, the opportunity for a deadlock situation is more likely.

System action: N/A

Operator response: Contact your system programmer.

System programmer response: The SYNCHRES option can be activated through either the GRSCNFxx parmlib or the SETGRS operator command.

Problem determination: N/A

Source: Global resource serialization

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0306I All RESERVEs are being converted while in STAR mode. Converting RESERVEs to global ENQs can help avoid deadlocks and improve reliability, availability, and serviceability. Note that there could be some RESERVEs that should not be converted for your installation. For further information see *z/OS MVS Planning: Global Resource Serialization*.

Explanation: Check successful.

System action: N/A

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: N/A

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0307E Not all RESERVEs are being converted.

Explanation: Check found an exception. No entry such as "RNL(CON) TYPE(PATTERN) QNAME(*)" was found, therefore RESERVEs are not currently being converted by default. For improved performance, availability, and serviceability, IBM suggests that a star complex convert all RESERVEs to global ENQs using the RESERVE conversion RNL. Note that it is not always possible to convert all RESERVEs.

System action: None.

Operator response: Contact your system programmer.

System programmer response: Investigate whether all RESERVEs can be converted to ensure data integrity is maintained. This check should be disabled if certain RESERVEs cannot be converted, for example when the volume is being shared outside of the sysplex. For further information on converting RESERVEs and for suggestion on what RESERVEs should or should not be converted see z/OS MVS Planning: Global Resource Serialization. Also check with individual applications and components to see if the RESERVEs they issue can safely be converted.

The global resource serialization ENQ/DEQ/RESERVE Monitor can help determine what RESERVEs are being issued on the system. See z/OS MVS Planning: Global Resource Serialization for more information on the global resource serialization ENQ/DEQ/RESERVE Monitor.

Problem determination: N/A

Source: Global resource serialization

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0308I No exit performance issues were detected.

Explanation: Check successful.

System action: N/A

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: N/A

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0309E The ISGNQXIT exit point is in use. This could negatively impact system performance.

Explanation: Check found an exception. The ISGNQXIT exit point is in use. This could negatively impact system performance. global resource serialization has introduced a better version of the exit called ISGNQXITFAST that offers the same function.

System action: None.

Operator response: Contact your system programmer.

System programmer response: Investigate if the current users of the ISGNQXIT exit point can use ISGNQXITFAST. Use D PROG,EXIT,EXITNAME=ISGNQXIT,DIAG to determine what modules are using the ISGNQXIT exit point.

Problem determination: N/A

Source: Global resource serialization

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0310E Both the ISGNQXIT and ISGNQXITFAST exit points are in use. This could negatively impact system performance.

Explanation: Check found an exception: Both the ISGNQXIT and ISGNQXITFAST exits points are in use. The ISGNQXITFAST exit point offers improved performance over ISGNQXIT, but when modules are installed at both exit points it will offer no performance improvements.

System action: None.

Operator response: Contact your system programmer.

System programmer response: Investigate if the current users of the ISGNQXIT exit point can use ISGNQXITFAST. Use D PROG,EXIT,EXITNAME=ISGNQXIT,DIAG to determine what modules are using the ISGNQXIT exit point.

Problem determination: N/A

Source: Global resource serialization

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0311E The ISGNQXITBATCH exit point is in use. This could negatively impact system performance.

Explanation: Check found an exception. The ISGNQXITBATCH exit point is in use. This could negatively impact system performance. For exits that do not need to get control for every batch request, the ISGNQXITBATCHCND and ISGNQXITPREBATCH exit points offer a way to provide the same function with improved performance.

System action: None.

Operator response: Contact your system programmer.

System programmer response: Investigate if the current users of the ISGNQXITBATCH exit point can use ISGNQXITBATCHCND and ISGNQXITPREBATCH. Use D PROG,EXIT,EXITNAME=ISGNQXITBATCH,DIAG to determine what modules are installed to the ISGNQXITBATCH exit point. Note that alternative serialization products can use the batch exits to manage serialization beyond the global resource serialization complex.

Problem determination: N/A

Source: Global resource serialization

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0312E Both the ISGNQXITBATCH and ISGNQXITBATCHCND exit points are points are in use. This could negatively impact system performance.

Explanation: Check found an exception. Both the ISGNQXITBATCH and ISGNQXITBATCHCND exit points are in use. Use the ISGNQXITBATCHCND and ISGNQXITPREBATCH exit points, which offer improved performance over the ISGNQXITBATCH. Note that when modules are also installed at the ISGNQXITBATCH exit point no performance improvement is provided.

System action: None.

Operator response: Contact your system programmer.

System programmer response: Investigate if the current users of the ISGNQXITBATCH exit point can use ISGNQXITBATCHCND and ISGNQXITPREBATCH. Use D PROG,EXIT,EXITNAME=ISGNQXITBATCH,DIAG to determine what modules are installed to the ISGNQXITBATCH exit point. Note that alternative serialization products can use the batch exits to manage serialization beyond the global resource serialization complex.

Problem determination: N/A

ISGH0313E • ISGH0315E

Source: Global resource serialization

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0313E The Global Resource Serialization ENQ/DEQ/RESERVE Monitor is in use. This could negatively impact system performance.

Explanation: Check found an exception. The global resource serialization ENQ/DEQ/RESERVE Monitor is in use. This could negatively impact system performance.

The monitor's intent is to assist with planning and tuning of RNLs for the implementation of global resource serialization. The monitor uses system resources to collect data. IBM recommends that you do not run the monitor continuously during normal production work because you might observe high CPU in address spaces that issue many ENQ/RESERVE/DEQ requests.

System action: None.

Operator response: Contact your system programmer.

System programmer response: If the global resource serialization ENQ/DEQ/RESERVE Monitor is not needed, turn it off.

Problem determination: N/A

Source: Global resource serialization

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0314I GRSQ=CONTENTION in global resource serialization STAR mode matches the IBM recommendation.

Explanation: Check successful.

System action: Processing continues.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Global resource serialization

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0315E GRS dump setting not ideal: GRSQ=*currentGRSQ*.

Explanation: The current setting of GRSQ is *currentGRSQ* while in global resource serialization star mode. IBM recommends that you use GRSQ=CONTENTION to collect all local and global ENQ resources that are in contention. This might also significantly reduce the amount of time and space required for the dump.

In the messages text:

currentGRSQ

ALL

The target system has GRSQ setting of ALL

LOCAL

The target system has GRSQ setting of LOCAL.

System action: Processing continues.

Operator response: Notify the system programmer.

System programmer response: Change the GRSQ setting to CONTENTION by issuing SETGRS
GRSQ=CONTENTION on all affected systems and update GRSCNFxx GRSQ(x) for subsequent IPL.

Problem determination: N/A

Source: Global resource serialization

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0316I None of the entries in the RESERVE Conversion RNL are ignored. The check was successful.

Explanation: Check successful.

System action: Processing continues.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Global resource serialization

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0317E One or more entries in the RESERVE Conversion RNL are ignored.

Explanation: One or more entries in the RESERVE conversion RNL are superseded by an entry in the SYSTEMS exclusion RNL. Examine the report below for details.

System action: Processing continues

Operator response: Notify the system programmer.

System programmer response: See ISGH319I for more information on the entry in the RESERVE conversion RNL and the entry in the SYSTEMS exclusion RNL that supersedes it. To correct the exception, review the RNL entries.

If the installation requires the affected resource to be serialized by a global ENQ, make the entry in RESERVE conversion RNL only.

If the installation requires the affected resource to be serialized by a RESERVE and local ENQ, make the entry in the SYSTEMS exclusion RNL only.

Problem determination: N/A

Source: N/A

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0318E The check has detected more than *max* ignored entries on the RESERVE Conversion RNL, but will only report on the first *max* detected.

Explanation: The check contains a limit to the number of ignored entries it will detect and report on — that limit is reached.

In the message text:

ISGH0319I

max

A number in decimal, representing the maximum number of ignored entries the check can detect.

System action: Processing continues

Operator response: Notify the system programmer.

System programmer response: To correct the exception, review the RNL entries and update accordingly.

If the installation requires the affected resource to be serialized by a global ENQ, make the entry in the RESERVE conversion RNL only.

If the installation requires the affected resource to be serialized by a RESERVE and local ENQ, make the entry in the SYSTEMS exclusion RNL only.

After the ignored entries are corrected, rerun the check. Evaluate any newly reported entries.

Problem determination: N/A

Source: N/A

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0319I Entry RNL (CONV) TYPE (*RNLEType*)
QNAME (*QNAME*) RNAME (*RNAME*)
is ignored because of entry
Entry RNL (EXCL) TYPE (*RNLEType*)
QNAME (*QNAME*) RNAME (*RNAME*)

Explanation: The entry described in the RESERVE conversion RNL is ignored because it is superseded by the entry that is described in the SYSTEMS exclusion RNL.

In the message text:

RNLEType

S a specific entry

G a generic entry

P a pattern entry

QNAME

A 1-8 character string representing the resource.

RNAME

A 1-255 character string representing the resource RNAME.

System action: Processing continues

Operator response: Notify the system programmer.

System programmer response: To correct the exception, review the RNL entries.

If the installation requires the affected resource to be serialized by a global ENQ, make the entry in the RESERVE conversion RNL only. If the installation requires the affected resource to be serialized by a RESERVE and local ENQ, make the entry in the SYSTEMS exclusion RNL only.

Problem determination: N/A

Source: N/A

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0320I No GRS exits are installed.

Explanation: Check successful.

System action: N/A

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: N/A

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0321I Global Resource Serialization is currently running with the appropriate AUTHQLVL.

Explanation: Check successful.

System action: N/A

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: N/A

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0322E Global Resource Serialization AUTHQLVL is not set to the maximum.

Explanation: The AUTHQLVL option allows an installation to specify what level of authorized QNAME protection to provide. When the value is not at the maximum, there is opportunity for authorized programs to be blocked by unauthorized programs when attempting to obtain resources that are protected at higher levels.

System action: N/A

Operator response: Contact your system programmer.

System programmer response: The AUTHQLVL option can be updated through the GRSCNFxx parmlib member.

Problem determination: N/A

Source: IBM Global Resource Serialization

Module: ISGHCGRS, ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

ISGH0323E Global Resource Serialization is running with an AuthQLvl value of *authqlvl*. Global Resource Serialization AuthQLvl value of *expectedlvl* was expected.

Explanation: Check found an exception. The installation provided a parameter override for the expected AuthQLvl, which does not match the current AuthQLvl. IBM suggests to run with an AuthQLvl value of 2 for the best protection. If this is not the installation specification review the current installation requirements for serialization.

System action: None.

Operator response: Contact your system programmer.

System programmer response: See *z/OS MVS Planning: Global Resource Serialization* for more information on the AuthQLvl parameter for Global Resource Serialization.

Problem determination: N/A

Source: IBM Global Resource Serialization

Module: ISGHCGRS,ISGHCMMSG

Routing code: N/A

Descriptor code: N/A

Chapter 22. ISN messages

ISN000E THE SERVICE PROCESSOR HAS FAILED. SOME CRITICAL SYSTEM FUNCTIONS ARE INOPERATIVE. AN ORDERLY SHUTDOWN OF THE ENTIRE SYSTEM SHOULD BE PLANNED IN ORDER TO MINIMIZE THE POSSIBLE IMPACT OF THIS FAILURE.

Explanation: The Service Processor has malfunctioned and MVS cannot communicate with it. Certain MVS functions are inoperative, including CONFIG, some D M, and some operator-communication facilities. Hardware error logging is also inoperative.

MVS might remain functional for an indeterminate period of time, but an attempt to use any of the above functions or any other functions that use the Service Processor can result in a system hang or outage.

System action: The operating system continues running in degraded mode to allow for an orderly shutdown.

System programmer response: If MVS is still responding to commands, plan an orderly shutdown of the system in accordance with the procedures of your installation. Contact hardware support.

Source: Service Processor Interface

Module: ISNDAMAG

Routing code: 1,10

Descriptor code: 11

ISN001E THE SERVICE PROCESSOR INTERFACE TASK IS NOT OPERATIONAL

Explanation: The Service Processor Interface has failed. MVS will not be able to do the following:

- Accept messages sent from the service processor.
- Detect alterations in the state of the service processor.
- Notify subsystems about service processor damage.

System action: The operating system continues running in degraded mode to allow for an orderly shutdown.

Operator response: Perform an immediate shutdown.

System programmer response: Look in the logrec data set error record for problem-related data. If the problem cannot be resolved, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Service Processor Interface

Routing code: 1,10

Descriptor code: 11

ISN002W THE SERVICE PROCESSOR INTERFACE INITIALIZATION FAILED [-- UNABLE TO ESTABLISH ESTAE]

Explanation: The Service Processor Interface detected an unrecoverable error or could not establish a recovery environment. As a result, system initialization cannot complete.

System action: System initialization stops. The system enters nonrestartable wait state X'A7A'.

Operator response: Notify the system programmer.

System programmer response: See the system programmer response for wait state X'A7A'.

Source: Service Processor Interface

Module: ISNATACH

Routing code: 1,10

Descriptor code: 11

ISN003I MVS IS UNABLE TO ACCEPT MESSAGES FROM THE SERVICE PROCESSOR.

Explanation: The system attempted to establish a Message Data Block (MDB) listener exit but was unsuccessful.

System action: The operating system continues running in degraded mode. The system will not accept messages sent from the service processor.

Operator response: Notify the system programmer.

System programmer response: Look in the logrec data set error record for problem-related data. For a hardware problem, contact hardware support. Otherwise, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM support center.

Source: Service Processor Interface

ISN004W SERVICE PROCESSOR DAMAGE IS DETECTED DURING SYSTEM INITIALIZATION. INITIALIZATION IS TERMINATED.

Explanation: Service processor damage occurred during system initialization.

System action: The system enters nonrestartable wait state X'A7A'.

Operator response: Contact hardware support.

Source: Service Processor Interface

Module: ISNDAMAG

Routing code: 1,10

Descriptor code: 11

ISN005I SUBSYSTEMS COULD NOT BE NOTIFIED ABOUT THE SERVICE PROCESSOR FAILURE

Explanation: The system could not notify the subsystems about service processor failure.

System action: The system continues running in degraded mode to allow for an orderly shutdown.

Operator response: Perform an orderly shutdown of the subsystems and of MVS.

System programmer response: Determine why the Subsystem Interface (SSI) was unable to notify the subsystems about the failure.

Otherwise, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Service Processor Interface

Module: ISNDAMAG

Routing code: 2,10

Descriptor code: 4

ISN006I THE SERVICE PROCESSOR INTERFACE IS INCAPABLE OF HANDLING THE SERVICE PROCESSOR STATE CHANGES

Explanation: The system detected an error while processing information about a service processor change of state.

System action: The operating system continues running in degraded mode. The system will not detect or handle alterations of the service processor state.

Operator response: Notify the system programmer.

System programmer response: Look in the logrec data set error record for problem-related data. For a hardware problem, contact hardware support. Otherwise, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Service Processor Interface

Routing code: 1,10

Descriptor code: 11

ISN007I COMPONENT SPECIFIC OPTIONS ARE NOT SUPPORTED BY THE SERVICE PROCESSOR INTERFACE COMPONENT TRACE

Explanation: The TRACE CT command specified options that the Service Processor Interface does not support.

System action: The system does not process the TRACE command.

Operator response: Enter the TRACE CT command with the correct options.

Source: Service Processor Interface

Module: ISNMSI

Routing code: 2

Descriptor code: 5

ISN008I THE SERVICE PROCESSOR INTERFACE CANNOT ACCEPT OCF PARAMETER MESSAGES

Explanation: The system detected an error while establishing support for Operations Command Facility (OCF) Parameter messages.

System action: System initialization continues in degraded mode. No Operations Command Facility (OCF) Parameter messages will be processed.

Operator response: Contact the system programmer.

System programmer response: Search the problem reporting data bases for a fix. If no fix exists, contact the IBM Support Center.

Source: Service Processor Interface

Module: ISNAINIT

Routing code: 2,10

Descriptor code: 1

ISN009I THE SERVICE PROCESSOR INTERFACE CANNOT ACCEPT OPSAPI MESSAGES

Explanation: The system detected an error while establishing Application Programming Interface (OPSAPI) support for service processor messages.

System action: System initialization continues in degraded mode. No OPSAPI messages will be processed.

Operator response: Contact the system programmer.

System programmer response: Search the problem reporting data bases for a fix. If no fix exists, contact the IBM Support Center.

Source: Service Processor Interface

Module: ISNAINIT

Routing code: 2,10

Descriptor code: 1

ISN010I THE SERVICE PROCESSOR INTERFACE IS INCAPABLE OF HANDLING THE CPC CONFIGURATION CHANGES

Explanation: The system detected an error while processing information about a central processing complex (CPC) configuration change.

System action: The operating system continues running. The system will not detect or handle alterations of the central processing complex (CPC) configuration.

Operator response: Notify the system programmer.

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System programmer response: Look in the logrec data set error record for problem-related data. For a hardware problem, contact hardware support. Otherwise, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Service Processor Interface

ISN011I CPU *nn* HAS BEEN ADDED

Explanation: A CPU has been added dynamically to this LPAR. In the message text:

nn The hexadecimal ID of the CPU

System action: The operating system continues running.

Operator response: Issue the DISPLAY M=CPU command to determine the state of the processor. Notify the system programmer.

System programmer response: If DISPLAY M=CPU shows the newly added CPU as NOT AVAILABLE, you should (depending on your logical partition definitions) be able to change it to OFFLINE by one of the following methods:

- Deconfigure one or more CPUs offline from one or more other logical partitions
- Perform a physical machine upgrade to add more physical processors to the machine configuration

After it is OFFLINE, have the operator use the CONFIG CPU command to bring the processor online.

Source: Service Processor Interface

Module: ISNEVENT

Routing code: 2,10

Descriptor code: 4

ISN012E HIPERDISPATCH MUST BE ENABLED TO CONFIGURE CPU IDS GREATER THAN 3F ONLINE

Explanation: A CPU ID greater than 3Fx has been dynamically added to the system while HiperDispatch mode is disabled. To successfully add a CPU ID greater than 3Fx HiperDispatch mode must be enabled.

System action: The system continues processing.

Operator response: Notify the system programmer.

System programmer response: Enable HiperDispatch mode on the system to bring online CPU IDs greater than 3Fx.

Source: z/OS

Module: ISNEVENT

Routing code: 2,10

Descriptor code: 11

| ISN013I CPU *id* CANNOT BE ADDED. SYSTEM LIMITED TO CPU ID *id2* DUE TO *reason*

| **Explanation:** A new CPU was defined to z/OS after IPL processing had completed, but z/OS was unable to dynamically add that CPU to z/OS. In the message text:

| *id* The CPU ID that could not be added.

| *id2* The highest CPU ID that can be dynamically added.

| *reason* One of the following values:

| **OS RELEASE**

| Indicates the CPU ID could not be dynamically added because the CPU ID being added was larger than the maximum CPU ID the z/OS release supports.

| **LOADXX DYNCPADD**

| Indicates the CPU ID could not be dynamically added because the system is unable to dynamically add that CPU ID for the life of the IPL.

- | **System action:** The system continues processing.
- | **Operator response:** Notify the system programmer.
- | **System programmer response:** For a reason of **LOADXX DYNCPADD**, define more CPUs to the image before IPL and specify a more appropriate value for **LOADxx DYNCPADD nnnn**.
- | See the description of **LOADxx** in *z/OS MVS Initialization and Tuning Reference* for more information.
- | **Source:** z/OS
- | **Module:** ISNEVENT
- | **Routing code:** 2,10
- | **Descriptor code:** 11

Chapter 23. ITT messages

ITT001I TRACE *name* IS NOT DEFINED.

Explanation: The operator issued a TRACE CT command for the specified trace, but the name is not recognized by component trace. In the message text:

name The name of the trace, which is one of the following:

- COMP=componentname
- COMP=headname SUB=subname

System action: The system ignores the operator command.

Operator response: Enter the DISPLAY TRACE command to list defined and preset traces. Check the SUB name and HEAD name for spelling errors. If errors are found, correct them. Reenter the command.

System programmer response: If the problem recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Component trace

Module: ITTOC

Routing code: -

Descriptor code: 5

ITT002I TRACE *name* IS ALREADY {OFF | LIKEHEAD}.

Explanation: The operator attempted either to stop the specified trace when the trace was already off, or to make a trace LIKEHEAD when it was already LIKEHEAD. In the message text:

name The name of the trace, which is one of the following:

- COMP=componentname
- COMP=headname SUB=subname

System action: The system ignores the operator command.

Operator response: Use the DISPLAY TRACE command to determine the status of the component trace.

Source: Component trace

Module: ITTOC

Routing code: -

Descriptor code: 5

ITT003I TRACE *name* DOES NOT ALLOW SPECIFYING {ASIDS | JOB NAMES | BUFFER SIZE}.

Explanation: The operator attempted to start the specified trace specifying one of the following:

- Address space identifiers (ASIDs)
- Jobnames
- A buffer size

This trace does not allow specification of these parameters. In the message text:

name The name of the trace, which is one of the following:

- COMP=componentname
- COMP=headname SUB=subname

System action: The system ignores the operator command.

Operator response: Restart the trace specifying the appropriate parameters.

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Source: Component trace

Module: ITTOC

Routing code: -

Descriptor code: 5

ITT004I {START|STOP} FAILED FOR TRACE *name*, RETURN=*return-code*, REASON=*reason-code*

Explanation: The operator attempted to start or stop the specified trace, but it failed. A previous message may have been issued that describes the error in more detail. In the message text:

name The name of the trace, which is one of the following:

- COMP=componentname
- COMP=headname SUB=subname

return-code

The return code.

reason-code

The reason code.

System action: The system ignores the start or stop request.

Operator response: Notify the system programmer.

System programmer response: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Component trace

Module: ITTPF

Routing code: -

Descriptor code: 5

ITT005I TRACE MAXIMUM NUMBER OF PARAMETERS EXCEEDED FOR KEYWORD
{ASIDS|JOBNAME|OPTIONS}.

Explanation: The operator attempted to start a component trace, specifying too many address space identifiers (ASID), job names, or options. In the message text:

ASIDS The operator specified more than 16 ASIDs.

JOBNAMES

The operator specified more than 16 job names.

OPTIONS

The operator exceeded 1024 bytes on the options string.

System action: The system ignores the operator command.

Operator response: Correct the parameter(s). Reenter the command.

System programmer response: If the problem recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Component trace

Module: ITTOP

Routing code: -

Descriptor code: 5

ITT006A SPECIFY OPERAND(S) FOR TRACE CT COMMAND.

Explanation: This message is issued in response to the TRACE CT operator command.

System action: The system waits for the operator to enter the trace operands. The system will continue to prompt for more operands until the operator enters 'END'.

Operator response: Enter the TRACE operands or 'END'.

Source: Component trace

Module: ITTOP

Routing code: -

Descriptor code: 2

ITT007I TRACE CT FAILED, INSUFFICIENT STORAGE FOR {FILTER OPTIONS|PARMLIB BUFFER} SPECIFIED.

Explanation: The system could not obtain storage needed to process a TRACE CT command. No further processing is possible.

System action: The TRACE CT command.

Operator response: Notify the system programmer.

System programmer response: Ensure that there is enough storage for the system to process the TRACE CT command.

Source: Component trace

Module: ITTAA, ITTOC

Routing code: -

Descriptor code: 5

ITT008I COMPONENT TRACE COULD NOT ESTABLISH A RECOVERY ENVIRONMENT

Explanation: Component trace could not set up a recovery environment.

Operator response: Re-issue the command.

System programmer response: If the problem recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Component trace

Routing code: -

Descriptor code: 5

ITT009I JOBNAME OR ASID SPECIFIED AS SUBNAME IS NOT ACTIVE FOR TRACE: *name*.

Explanation: The operator specified a job name or address space identifier (ASID) in the subname of the trace, but the job name or ASID is not active. In the message text:

name The name of the trace, which is one of the following:

- COMP=componentname
- COMP=headname SUB=subname

System action: The system ignores the operator command.

Operator response: Notify the system programmer.

System programmer response: Identify and correct the error before telling the operator to reenter the command. A display of active traces will show what traces are currently active. A display of active jobs will show if the jobname or ASID specified is active.

Source: Component trace

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Module: ITTSB

Routing code: -

Descriptor code: 5

ITT010I **COMPONENT TRACE PROCESSING FAILED FOR PARMLIB MEMBER=xxxxxxx: reason.**

Explanation: *reason* is one of the following:

- PARMLIB MEMBER NOT FOUND.
- PARMLIB I/O ERROR.
- SYNTAX ERROR - MESSAGE(S) FOLLOW.
- OTHER PARMLIB ERROR
- PARMLIB BUFFER IS FULL
- PARMLIB CANNOT BE READ
- DYNAMIC ALLOCATION OF PARMLIB FAILED

Information needed to process the TRACE CT command could not be obtained from the PARMLIB member specified. In the message text:

xxxxxxx

The parmlib member

System action: The system ignores the operator command.

Operator response: Do the following:

- If the parmlib member could not be found, then verify that the member exists before reentering the command.
- If there was an I/O error, have the system programmer correct the error.
- If there was a syntax error, then see the operator response for the error message following this message. Also, an attempt will be made to continue parsing beyond the error point to try to elicit all syntax error messages that may apply. If multiple subs are specified, the system recovers from this error and continues with the next sub.

System programmer response: Identify and correct the error before telling the operator to reenter the command.

Source: Component trace

Module: ITTPP

Routing code: -

Descriptor code: 5

ITT011I **MODIFICATION OF AN ACTIVE TRACE IS NOT ALLOWED FOR TRACE *name*.**

Explanation: The operator attempted to specify the ON option with the TRACE CT command to modify a trace that is currently ON. The specified trace does not allow modification of an active trace. To modify options, the trace must first be turned off. In the message text:

name The name of the trace, which is one of the following:

- COMP=componentname
- COMP=headname SUB=subname

System action: The system ignores the operator command.

Operator response: Issue a TRACE CT command specifying a state of 'OFF'. Then reenter the original command.

Source: Component trace

Module: ITTOC

Routing code: -

Descriptor code: 5

ITT012I HEAD *name* WAS DEFINED TO HAVE NO OPTIONS. IT CANNOT BE MODIFIED.

Explanation: The operator attempted to modify or turn on or off a HEAD trace using the TRACE CT command, but the HEAD was defined to have no options. In the message text:

name The name of the trace, which is one of the following:

- COMP=componentname
- COMP=headname SUB=subname

System action: The system ignores the operator command.

Operator response: The trace must be deleted and defined again allowing options.

Source: Component trace

Module: ITTOC

Routing code: -

Descriptor code: 5

ITT013I SINCE THE TRACE IS ALREADY DEFINED, PRESET CANNOT BE USED FOR TRACE *name*.

Explanation: The operator attempted to define or delete preset options using the TRACE CT command, but the trace is already defined. In the message text:

name The name of the trace, which is one of the following:

- COMP=componentname
- COMP=headname SUB=subname

System action: The system ignores the operator command.

Source: Component trace

Module: ITTPC

Routing code: -

Descriptor code: 5

ITT014I BUFFER SIZE SPECIFIED IS NOT BETWEEN *mm1* AND *mm2* FOR TRACE *name*.

Explanation: The operator specified a buffer size on a TRACE CT command that is either larger than the maximum or smaller than the minimum buffer size specified when the trace was defined. The buffer size is specified in either kilobyte (for example, 10K) or megabyte (for example, 16M) form. In the message text:

name The name of the trace, which is one of the following:

- COMP=componentname
- COMP=headname SUB=subname

mm1 The minimum possible buffer size.

mm2 The maximum possible buffer size.

System action: The system ignores the operator command.

Operator response: Specify a buffer size greater than or equal to the minimum and less than or equal to the maximum allowed by the component.

Source: Component trace

Module: ITTBU

Routing code: -

Descriptor code: 5

ITT015I A TRACE CT COMMAND CANNOT BE ISSUED AGAINST TRACE *name* WITHOUT THE PARMLIB PRESET KEYWORD.

Explanation: The operator entered a TRACE CT command against a trace which is PRESET without specifying the PRESET keyword in the parmlib member. In the message text:

name The name of the trace, which is one of the following:

- COMP=componentname
- COMP=headname SUB=subname

System programmer response: Specify PRESET(DEFINE) on the parmlib member to replace a PRESET, or PRESET(DELETE) to remove the PRESET from the system.

Source: Component trace

Module: ITTOC

Routing code: -

Descriptor code:

ITT016I SYNTAX ERROR IN PARMLIB MEMBER=*xxxxxxx* LINE *number*; *symbol1* EXPECTED BEFORE *symbol2*. INPUT LINE: *inputline*

Explanation: A syntax error was found in the specified parmlib member on the named line. The message describes what symbol was expected before the error symbol. In the message text:

xxxxxxx

The parmlib member.

number The line number.

symbol1 The symbol that was expected before the error symbol.

symbol2 The error symbol.

inputline

The input line.

System action: The system ignores the parmlib member. Syntax checking may continue so as to elicit all error messages.

Operator response: Notify the system programmer.

System programmer response: Correct the syntax error in the parmlib member before reissuing the command.

Source: Component trace

Module: ITTGP

Routing code: -

Descriptor code: 5

ITT017I SYNTAX ERROR IN PARMLIB MEMBER=*xxxxxxx* ON LINE *number* POSITION *position*; *yyyyy* WAS SEEN, WHERE ONE OF (*a, b, c, d, e, f*) WOULD BE CORRECT. INPUT LINE: *inputline*

Explanation: A syntax error was found in the specified parmlib member on the named line. The message describes what symbols were expected before the error symbol. In the message text:

xxxxxxx

The parmlib member.

number The line number.

position The position in the specified line.

yyyyy The error symbol.

a, b, c, d, e, f

The correct symbols.

inputline

The input line.

System action: The system ignores the parmlib member. Syntax checking may continue so as to elicit all error messages.

Operator response: Notify the system programmer.

System programmer response: Correct the syntax error in the parmlib member. Ask the operator to reenter the command.

Source: Component trace

Module: ITTGP

Routing code: -

Descriptor code: 5

ITT018I **PARSING OF PARMLIB MEMBER=xxxxxxx CONTINUED AT NEXT *symbol*, LINE *number*. INPUT LINE: *inputline*.**

Explanation: A syntax error was found in the specified parmlib member. Some of the parmlib input was found inappropriate for its context. To be able to continue to check the parmlib syntax, it was necessary to skip all input up to the point described in the message. In the message text:

xxxxxxx

The parmlib member.

symbol The symbol.

number The line number.

inputline

The input line.

System action: The system ignores the parmlib member.

Operator response: Notify the system programmer.

System programmer response: Correct all syntax errors in the parmlib member. Ask the operator to reenter the command.

Source: Component trace

Module: ITTGE

Routing code: -

Descriptor code: 5

ITT019I ***symbol* SHOULD BE DELETED FROM PARMLIB MEMBER=xxxxxxx, LINE *number*. INPUT LINE: *inputline*.**

Explanation: The named symbol should be deleted from the specified parmlib member to correct a syntax problem. Message ITT016I or message ITT017I will have already been issued to describe the problem. In the message text:

xxxxxxx

The parmlib member.

symbol The symbol that should be deleted.

number The line number.

inputline

The input line.

System action: The system ignores the parmlib member.

Operator response: Notify the system programmer.

System programmer response: Delete the named symbol. Correct all syntax errors in the parmlib member. Consult

ITT020I • ITT022I

message ITT016I or ITT017I for more information, if necessary. Ask the operator to reenter the command.

Source: Component trace

Module: ITTGE

Routing code: -

Descriptor code: 5

ITT020I *symbol* **WAS ASSUMED BEFORE THE ERROR POINT IN PARMLIB MEMBER=xxxxxxx, LINE number. INPUT LINE: inputline.**

Explanation: The named symbol was assumed before the error point as described in message ITT016I or message ITT017I. This information gives an indication of how the syntax checking will proceed, as well as being helpful in determining the cause of the syntax problem. In the message text:

symbol The symbol.

xxxxxxx

 The parmlib member.

number The line number.

inputline

 The input line.

System action: The system ignores the parmlib member.

Operator response: Notify the system programmer.

System programmer response: Correct all syntax errors in the parmlib member. Ask the operator to reenter the command.

Source: Component trace

Module: ITTGE

Routing code: -

Descriptor code: 5

ITT021I **TRACE *name* CANNOT BE MADE LIKEHEAD BECAUSE ITS ATTRIBUTES DO NOT MATCH THE ATTRIBUTES OF ITS HEAD.**

Explanation: Attributes for a trace are established at DEFINE time. If a SUB trace does not have the same attributes as its HEAD, it cannot be changed to LIKEHEAD. In the message text:

name The name of the trace, which is one of the following:

- COMP=componentname
- COMP=headname SUB=subname

System action: The system ignores the operator command.

Operator response: Delete the subtrace and redefine it with attributes matching its head.

Source: Component trace

Module: ITTPC

Routing code: -

Descriptor code: 5

ITT022I **THE BUFFER SIZE CANNOT BE CHANGED FOR TRACE *name*. PROCESSING OF THE COMMAND CONTINUES.**

Explanation: The buffer size for this trace can only be set when the trace is defined. The buffer size cannot be changed after it is defined. The command was processed but the specification of a buffer size was ignored. In the message text:

name The name of the trace, which is one of the following:

- COMP=componentname
- COMP=headname SUB=subname

System action: Processing continues, but the system does not change the buffer size.

Source: Component trace

Module: ITTOC

Routing code: -

Descriptor code: 5

ITT023I DEFINE FAILED FOR PRESET SUB TRACE *name* SINCE THE TRACE DOES NOT EXIST OR IS NOT A HEAD.

Explanation: A head must be defined (not PRESET) for a PRESET SUB to be defined beneath that HEAD.

In the message text:

name The name of the trace.

System action: The system does not process the command.

Operator response: Check that the trace name was specified correctly.

System programmer response: If the problem recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Component trace

Module: ITTPR

Routing code: -

Descriptor code: 5

ITT024I A REQUEST TO MAKE TRACE *name* LIKEHEAD FAILED SINCE THERE IS NO HEAD WITH OPTIONS TO BE LIKE.

Explanation: To make a trace LIKEHEAD the trace must be a SUB (must have a validly defined HEAD) and its HEAD must have been defined with HEADOPTS=YES. In the message text:

name The name of the trace.

System action: The system does not process the command.

Operator response: Check that the trace name was specified correctly and that the head was defined with HEADOPTS=YES.

Source: Component trace

Module: ITTPC

Routing code: -

Descriptor code: 5

ITT025I LOAD OR LINK OF {START|STOP} ROUTINE *name* FAILED FOR TRACE *name*.

Explanation: A LOAD or LINK failed for the specified start/stop routine. In the message text:

name The name of the start or stop routine.

System action: The system does not process the command.

Operator response: Notify the system programmer.

System programmer response: Ensure that the specified start/stop routine resides somewhere in the search order used by program management.

ITT026I • ITT027I

Source: Component trace

Module: ITTPD

Routing code: -

Descriptor code: 5

ITT026I INVALID SUBNAME SPECIFIED

Explanation: The subname specified on a TRACE CT or DISPLAY TRACE command was incorrect for one of the following reasons:

- The subname is longer than 18 characters.
- The subname did not start with an alphanumeric or national character.
- ASID used as a subname and it was either not a valid hex number or more than 4 digits long.
- Range of ASIDs used as a subname and either one was incorrect for the previous reason or the first ASID specified was not lower than the second ASID specified.
- Jobname was used as a subname and the jobname was longer than 8 characters.

System action: The system does not process the command.

Operator response: Notify the system programmer.

System programmer response: Correct the error. Reenter the command.

Source: Component trace

Module: ITTAA

Routing code: -

Descriptor code: 5

ITT027I INVALID OPTIONS SPECIFIED IN PARMLIB MEMBER=xxxxxxx: *reason*.

Explanation: *reason* will be one of the following:

- ADDRESS SPACE IDENTIFIER (ASID) IS NOT A VALID HEX NUMBER
- ASID IS LONGER THAN 4 CHARACTERS
- ASID OF ZERO IS NOT VALID
- MORE THAN 16 ASIDS WERE SPECIFIED
- JOBNAME IS LONGER THAN 8 CHARACTERS
- MORE THAN 16 JOBNAMEs WERE SPECIFIED
- BUFFER SIZE STRING IS LONGER THAN 5 CHARACTERS
- BUFFER DOES NOT HAVE K OR M SPECIFIED AS THE UNIT
- BUFFER SIZE IS NOT A VALID DECIMAL NUMBER
- OPTION STRING IS LONGER THAN 1024 CHARACTERS
- INVALID WRITER NAME SPECIFIED

Incorrect options were specified on a parmlib member.

In the message text:

xxxxxxx

 The parmlib member.

System action: The system did not process the command.

Operator response: Notify the system programmer.

System programmer response: Inspect the parmlib member used and make necessary corrections.

Source: Component trace

Module: ITTAJ

Routing code: -

Descriptor code: 5

ITT028I DEFINE OF PRESET WAS ATTEMPTED WITH HEAD NOT YET DEFINED.

Explanation: A TRACE CT command was issued to define a PRESET. The previous node has to be defined with a ?CTRACE (DEFINE) before a PRESET subtrace can be defined.

System action: The system does not process the command.

Operator response: Notify the system programmer.

System programmer response: Display the current traces. Ask the operator to reenter the command with any necessary corrections.

Source: Component trace

Module: ITTPC

Routing code: -

Descriptor code: 5

ITT029I DEFINE OF PRESET WAS ATTEMPTED BUT THE PREVIOUS NODE IS NOT A HEAD.

Explanation: A TRACE CT command was issued to define a PRESET. The previous node is defined with HEAD(NO) which means it cannot have any subtraces below it, whether it be a PRESET or a defined trace.

System action: The command was not processed.

Operator response: Notify the system programmer.

System programmer response: Display the current traces. Ask the operator to reenter the command with any necessary corrections.

Source: Component trace

Module: ITTPC

Routing code: -

Descriptor code: 5

ITT030I SUBNAME CANNOT BE SPECIFIED IN BOTH THE TRACE CT COMMAND AND A PARMLIB MEMBER.

Explanation: A TRACE CT command was issued with the SUB=(subname) and the PARM=parmlib member keywords and parmlib member specified also contains the keyword SUB.

System action: The system does not process the command.

Operator response: Notify the system programmer.

System programmer response: Ensure that the parmlib member is the correct member or that the subname in the parmlib member is correct. Ask the operator to reenter the TRACE CT without the SUB=(sub) keyword.

Source: Component trace

Module: ITTAA

Routing code: -

Descriptor code: 5

ITT031I TRACE COMMAND REJECTED, STATE OPERAND REQUIRED.

Explanation: The operator entered a TRACE CT command, but did not specify a state (ON, OFF or BUFFSIZE) or PARM keyword.

System action: The system does not process the command.

ITT032I • ITT034I

Operator response: Notify the system programmer.

System programmer response: Insure that the command specifies a state or PARM keyword indicating a PARMLIB member containing a valid state. Ask the operator to reenter the command.

Source: Component trace

Module: ITTOP

Routing code: -

Descriptor code: 5

ITT032I PRESET DELETE CANNOT BE SPECIFIED IN PARMLIB MEMBER WHEN EITHER ON OR OFF IS SPECIFIED ON THE TRACE CT COMMAND.

Explanation: The operator specified the ON or OFF option with the PARM option on a TRACE CT command. The parmlib member contains PRESET(DELETE). The ON or OFF must be omitted in order to delete the PRESET.

System action: The system does not process the command.

Operator response: Notify the system programmer.

System programmer response: Reenter the command without the ON or OFF keyword.

Source: Component trace

Module: ITTPR

Routing code: -

Descriptor code: 5

ITT033I NUMBER OF TRACES TO BE DISPLAYED 'N=' *reason*.

Explanation: *reason* can be one of the following:

- CANNOT BE LONGER THAN 3 CHARACTERS.
- IS NOT A DECIMAL NUMBER.
- CANNOT BE ZERO.

The system detected incorrect input for the number of traces to be displayed.

System action: The system does not process the command.

Operator response: Reenter the command with the correct number.

Source: Component trace

Module: ITTOA

Routing code: -

Descriptor code: 5

ITT034I TRACE COMPONENT NAME CANNOT BE LONGER THAN 8 CHARACTERS.

Explanation: The operator entered a DISPLAY TRACE command and the component specified for the COMP keyword was more than 8 characters long.

System action: The system does not process the command.

Operator response: Verify the component name and reenter the command.

Source: Component trace

Module: ITTOA

Routing code: -

Descriptor code: 5

ITT035I **SYNTAX ERROR IN DISPLAY TRACE COMMAND.** *xxxxxxx* EXPECTED WHERE *yyyyyyyyy* WAS SEEN.

Explanation: A syntax error was found in the parmlib member. The message describes what symbols were expected before the error symbol. In the message text:

xxxxxxx

The symbols expected before the error symbol.

yyyyyyyyy

The incorrect symbol.

System action: The system does not process the command.

Operator response: Notify the system programmer.

System programmer response: Inspect the parmlib member and make the required corrections. Ask the operator to reenter the command.

Source: Component trace

Module: ITTCP

Routing code: -

Descriptor code: 5

ITT036I **SYNTAX ERROR IN DISPLAY TRACE COMMAND.** *xxxxxxx* WAS SEEN, WHERE ONE OF (*aaaa, bbbb, cccc, dddd*) WOULD BE CORRECT.

Explanation: A syntax error was found in the specified parmlib member. The message describes what symbols were expected before the error symbol. In the message text:

xxxxxxx

The error symbol.

aaaa, bbbb, cccc, dddd

The correct symbols.

System action: The system does not process the command.

Operator response: Notify the system programmer.

System programmer response: Inspect the parmlib member and make any required corrections.

Source: Component trace

Module: ITTCP

Routing code: -

Descriptor code: 5

ITT037I **TRACE COMMAND REJECTED. PARMLIB MEMBER NAME MUST BEGIN WITH 'CT'**

Explanation: The component trace parmlib member name must begin with 'CT'. The documented naming convention for the component trace parmlib member name is 'CTxcccnn' where:

CT Stands for component trace and will be verified by component trace.

x 'I' for IBM supplied names or any other valid character for non-IBM supplied names.

ccc The name of the component.

nm Any two valid characters.

System action: The system does not process the command.

Operator response: Notify the system programmer.

System programmer response: Rename the parmlib member following documented naming conventions. Ask the operator to reenter the TRACE CT command specifying the new parmlib member name.

ITT038I • ITT102I

Source: Component trace

Module: ITTOP

Routing code: -

Descriptor code: 5

ITT038I {ALL | SOME | NONE} OF THE TRANSACTIONS REQUESTED VIA THE TRACE CT COMMAND WERE SUCCESSFULLY EXECUTED.

Explanation: The operator entered a TRACE CT command, and the initial insert indicates the success of the changes requested for one or more traces which were the target of this command.

System action: The system processed the command as indicated.

Operator response: Notify the system programmer.

System programmer response: If SOME or NONE of the transactions were successfully executed, prior messages will indicate the cause of the problems with these traces. Use the prior messages to determine any necessary action to correct the problems. Then ask the operator to reenter the TRACE CT command with the traces which were not processed as the target of the command.

Source: Component trace

Module: ITTOC

Routing code: -

Descriptor code: 5

ITT101I TRACE COMP=*name* DOES NOT SUPPORT THE EXTERNAL WRITER.

Explanation: Component trace received a request to connect a trace to a component trace external writer, but the trace does not support the component trace external writer.

In the message text:

name The name of the trace.

System action: The system rejects the operator command.

Operator response: If the trace data is needed, enter the DUMP command for the desired trace data buffer(s).

Programmer response: If the trace data is needed for an installation supplied application, modify the CTRACE macro to allow connection to a component trace external writer.

Source: Component trace

Module: ITTOP

Routing code: -

Descriptor code: 5

ITT102I CTRACE WRITER *jobname* IS ALREADY ACTIVE.

Explanation: Component trace received a request to start a component trace external writer that has already been started.

In the message text:

jobname The component trace external writer that is already started.

System action: The system rejects the operator command.

Operator response: To determine which component trace external writers are active, enter the DISPLAY TRACE,WTR=ALL system command.

Source: Component trace

Module: ITTTA

Routing code: -

Descriptor code: 5

ITT103I CTRACE WRITER *jobname* IS NOT ACTIVE.

Explanation: Component trace received a request to stop the specified component trace external writer. The component trace external writer is not active and therefore cannot be stopped.

In the message text:

jobname The component trace external writer that is not active.

System action: The system rejects the operator command.

Operator response: To determine which component trace external writers are active, enter the DISPLAY TRACE,WTR=ALL system command.

Source: Component trace

Module: ITTTA

Routing code: -

Descriptor code: 5

ITT104I CTRACE WRITER NAME *jobname* IS NOT VALID.

Explanation: Component trace received a request to start, stop, connect, or display a component trace external writer. The specified name is not valid. Valid names start with characters A-Z, \$, @, or #, contain alphanumeric characters (A-Z, 0-9, \$, @, #), and are 1 to 7 characters long.

In the message text:

jobname The incorrect component trace external writer name.

System action: The system rejects the operator command.

Operator response: Use a valid component trace external writer name.

System programmer response: If the component trace external writer name is contained within a parmlib member, modify the parmlib member to use a valid component trace external writer name.

Source: Component trace

Module: ITTAD

Routing code: -

Descriptor code: 5

ITT105I INITIALIZATION OF CTRACE WRITER *jobname* FAILED. DYNAMIC ALLOCATION FAILED FOR DD STATEMENT *nn*.

Explanation: The initialization of a component trace external writer failed. Component trace received a bad return code from dynamic allocation (SVC 99) for a DD statement defined in the procedure for this component trace external writer. The procedure is found in SYS1.PROCLIB.

In the message text:

jobname The name of the component trace external writer whose initialization failed. This name is the same as the name of the procedure in SYS1.PROCLIB.

nn The relative position of a DD statement in relation to the first DD statement in the procedure.

System action: The system does not initialize the component trace external writer.

Operator response: Notify the system programmer. When the problem has been resolved, submit the request to start the component trace external writer again.

System programmer response: Correct the procedure in SYS1.PROCLIB.

ITT106I • ITT108I

Source: Component trace

Module: ITTTR

Routing code: -

Descriptor code: 5

ITT106I **INITIALIZATION OF CTRACE WRITER *jobname* FAILED. SEE PRECEDING AHL MESSAGE(S).**

Explanation: The system could not initialize a component trace external writer.

In the message text:

jobname The name of the component trace external writer whose initialization failed. This name is the same as the name of the procedure in SYS1.PROCLIB.

System action: The system does not initialize the component trace external writer. The system issued AHLxxx messages prior to this message.

Operator response: Notify the system programmer. When the problem has been resolved, submit the request to start the component trace external writer again.

System programmer response: See the system programmer responses for the AHLxxx messages that preceded this message.

Source: Component trace

Module: ITTTR

Routing code: -

Descriptor code: 5

ITT107I **CTTRACE WRITER *jobname* TERMINATED. SEE PRECEDING AHL MESSAGE(S).**

Explanation: The system abnormally ended a component trace external writer.

In the message text:

jobname The name of the component trace external writer that abnormally ended.

System action: The system abnormally ends the component trace external writer. The system issued AHLxxx messages prior to this message.

Operator response: Notify the system programmer. When the problem has been resolved, restart the component trace external writer if appropriate.

System programmer response: See the system programmer responses for the AHLxxx messages that preceded this message.

Source: Component trace

Module: ITTTT

Routing code: -

Descriptor code: 5

ITT108I **INITIALIZATION OF CTRACE WRITER *jobname* FAILED. NO VALID DD NAMES WERE FOUND IN CTRACE WRITER PROC.**

Explanation: The system could not initialize a component trace external writer. The PROC for the component trace external writer did not have any valid DD statements. The data set organization specified on the DD DCB parameter must be acceptable to BSAM. It must be either PS (physical sequential) or PSU (physical sequential that contains location dependent information). ddnames must be of the form TRCOU xx where xx is a decimal number from 01 through 16.

In the message text:

jobname The name of the component trace external writer whose initialization failed. This name is the same as the name of the procedure in SYS1.PROCLIB.

System action: The system does not initialize the component trace external writer.

Operator response: Notify the system programmer. When the problem has been resolved, submit the request to start the component trace external writer again.

System programmer response: Correct the procedure in SYS1.PROCLIB.

Source: Component trace

Module: ITTTR

Routing code: -

Descriptor code: 5

ITT109I **INITIALIZATION OF CTRACE WRITER *jobname* FAILED. ADDRESS SPACE CREATION FAILED, RC=ccccccc, REASON=rrrrrrrr.**

Explanation: The system could not initialize a component trace external writer.

In the message text:

jobname The name of the component trace external writer that the system could not initialize. This name is the same as the name of the procedure in SYS1.PROCLIB.

ccccccc The address space creation services (ASCRE) return code.

rrrrrrrr The ASCRE reason code.

System action: Initialization of the component trace external writer fails.

Operator response: Notify the system programmer. When the problem is resolved, submit the request to start the component trace external writer again.

System programmer response: If the return code is X'30' and the reason code is 8, then the problem is in the name of the procedure. Otherwise, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Component trace

Module: ITTTA

Routing code: -

Descriptor code: 5

ITT110I **INITIALIZATION OF CTRACE WRITER *jobname* COMPLETE.**

Explanation: Initialization of the indicated component trace external writer successfully completed.

In the message text:

jobname The name of the component trace external writer whose initialization completed.

System action: The system successfully initializes the component trace external writer.

Source: Component trace

Module: ITTTR

Routing code: -

Descriptor code: 5

ITT111I • ITT121I

ITT111I CTRACE WRITER *procname* TERMINATED BECAUSE OF A WTRSTOP REQUEST.

Explanation: The indicated component trace external writer ended because of a WTRSTOP request. This is considered a normal ending.

In the message text:

procname

The name of the component trace external writer that ended.

System action: The system ends the component trace external writer.

Source: Component trace

Module: ITTTT

Routing code: -

Descriptor code: 5

ITT120I SOME CTRACE DATA LOST, LAST *nnn* BUFFER(S) NOT WRITTEN.

Explanation: While the component trace entries were being written to the trace data set, a problem occurred in writing the buffers remaining after the trace was stopped.

In the message text:

nnn

The number of buffers not written to the trace data set.

System action: The system continues processing.

Operator response: Tell the system programmer.

System programmer response: Send to the IBM Support Center the logrec symptom record and the trace data set.

Source: Component trace

Module: ITTTD

Routing code: 5

Descriptor code: -

ITT121I TURN OFF OR DISCONNECT TRACE(S) CONNECTED TO CTRACE WRITER *jobname*

Explanation: A TRACE CT command specifies that an external writer should be stopped; however, one or more component traces are connected to the writer.

In the message text:

jobname

The name of the component trace external writer that the command wants to stop.

System action: The system issues this message twice before allowing the command to stop the writer. At a third command, the system allows the writer with connected traces to be stopped, in case there is a problem disconnecting a trace or turning a trace off.

Source: Component trace

Module: ITTTA

Routing code: 5

Descriptor code: -

ITT122I CTRACE WRITER *jobname* IS NOT STARTED. ISSUE COMMAND TRACE CT,WTRSTART=*jobname*.

Explanation: A component trace is connected to an external writer that is not started. The component may be attempting to write trace data to the external data set.

In the message text:

jobname

The name of the component trace external writer.

System action: The system continues processing.

Operator response: Enter a TRACE CT,WTRSTART=*jobname* command to start the external writer.

Source: Component trace

Module: ITTTC

Routing code: 5

Descriptor code: -

ITT123I TRACE COMP=*name* IS NOT CONNECTED TO WRITER *jobname1* BECAUSE IT IS ALREADY CONNECTED TO WRITER *jobname2*.

Explanation: The operator entered a TRACE CT command to connect a component trace to an external writer. The component trace was already connected to another writer.

In the message text:

name

The name of the trace.

jobname1

The name of the component trace external writer specified in the TRACE CT command.

jobname2

The name of the component trace external writer that the trace is currently connected to.

System action: The system continues processing, but does not connect the component trace to the writer specified in the TRACE CT command.

Operator response: Leave the component trace connected to its current external writer. Or, to connect the component trace to a different writer, do one of the following first:

- Disconnect the component trace from its current writer
- Turn the component trace off

Then you can enter the TRACE CT command again to connect the component trace to the new writer.

Source: Component trace

Module: ITTPC

Routing code: 5

Descriptor code: -

ITT200I SYSnnnn COMPONENT TRACE HAS LOST AN ENTRY BECAUSE ALL BUFFERS WERE FULL. THE DETECTING MODULE IS nnnnnnnnn.

Explanation: Explanation: The component trace named SYSnnnn did not record an entry because there was no buffer available to put the entry in.

System action: The current trace entry is not recorded. Subsequent trace entries may also be lost. This message will not be reissued.

Operator response: Report the problem to the system programmer.

System programmer response: If the component supports buffer size changes, increase the size of the trace buffers.

ITT201I • ITT202I

Source: Component trace

Module: is named in the message.

Routing code: 2

Descriptor code: 4

ITT201I **SYSnnnn COMPONENT TRACE HAS WRAPPED AN ALREADY FULL BUFFER. THE
DETECTING MODULE IS nnnnnnnn.**

Explanation: The component trace named SYSnnnn wrote a trace entry into a buffer that has already been used. The trace is not being copied to a dataspace or an external dataset so the oldest trace entries are being overwritten by the newest trace entries.

System action: System processing continues. This message will not be reissued.

Operator response: None.

System programmer response: None.

Module: is named in the message.

Routing code: 2

Descriptor code: 4

ITT202I **SYSnnnn COMPONENT TRACE EXTERNAL WRITER MAY HAVE LOST ENTRIES. THE
DETECTING MODULE IS nnnnnnnn.**

Explanation: The component trace named SYSnnnn is writing trace entries to an external dataset. It is possible that the external writer is not writing buffers out to the dataset as quickly as the buffers are being filled with trace data.

System action: A second attempt is made to record the current entry in an available buffer. This message will not be reissued.

Operator response: Notify the system programmer.

System programmer response: Look at the output from the trace with IPCS. If the output contains the dump output message ITT0020I with the reason text 'Trace buffer not marked available by CTRACE. Symrec written', then the external writer was not writing to the external dataset as quickly as the component trace was recording entries. Make sure that the external writer is running with a dispatching priority at least as high as the component being traced. Increase the number of datasets specified in the cataloged procedure for the external writer and/or increase the NCP parameter on each DD statement specified in the cataloged procedure. Follow the rules for a writer procedure as documented in *z/OS MVS Diagnosis: Tools and Service Aids*.

Module: The module is named in the message.

Routing code: 2

Descriptor code: 4

Chapter 24. ITV messages

ITV001I DATA-IN-VIRTUAL TRACING TERMINATED DUE TO LACK OF STORAGE

Explanation: The system could not obtain storage for data-in-virtual tracing. The system failed to obtain the correct amount of storage from the system queue area (SQA) and extended SQA (ESQA), subpool 245.

System action: If the specified storage is greater than 10 pages, the system tried but failed to obtain a 10-page trace table. Data-in-virtual processing continues, with tracing turned off.

System programmer response: If you need data-in-virtual, determine why storage was not available. Ask the operator to reIPL the system to activate tracing.

If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Data-in-virtual

Module: ITVRX

Routing code: 2

Descriptor code: 4

ITV002I DATA-IN-VIRTUAL TRACING IS USING A TABLE SIZE SMALLER THAN REQUESTED

Explanation: Data-in-virtual requested data-in-virtual trace table size greater than 10 pages. The system queue area (SQA) and extended SQA (ESQA), subpool 245, did not have enough storage to meet the request.

System action: The system obtained a smaller, 10-page table. Data-in-virtual processing continues.

System programmer response: If data-in-virtual requests an SVC dump as the table is about to wrap, the smaller trace table size will cause the SYS1.DUMPxx data sets to fill up faster, because the trace table will wrap more frequently and cause more dumps to be taken.

If you need a larger table size, determine why storage was not available. Change the trace table size. Then ask the operator to reIPL the system.

If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Data-in-virtual

Module: ITVRX

Routing code: 2

Descriptor code: 4

Chapter 25. ITZ messages

ITZ001I TRANSACTION TRACE IS NOW ACTIVE WITH FILTER SET nn

Explanation: The specified filter set (nn) is now active for transaction trace. This message is issued on each system in the sysplex in which transaction trace is active.

System action: The system initiates transaction trace processing for the specified filter set.

Operator response: None.

Source: Transaction trace

Module: ITZCCAC

Routing code: -

Descriptor code: 5

ITZ002I 'BUFSIZ' IS SET TO *nnnK* | *nnM*

Explanation: The BUFSIZ parameter is set as indicated. This message is issued on each system in the sysplex in which transaction trace is active.

System action: The BUFSIZ parameter is set as indicated.

Operator response: None.

Source: Transaction trace

Module: ITZTTMN when the command is received as a result of sysplex processing, ITZOPCMD when the command is entered on this system.

Routing code: -

Descriptor code: 5

ITZ002I 'LATENT' IS SET TO YES | NO

Explanation: The LATENT parameter is set as indicated. This message is issued on each system in the sysplex in which transaction trace is active.

System action: The LATENT parameter is set as indicated.

Operator response: None.

Source: Transaction trace

Module: ITZCCAC

Routing code: -

Descriptor code: 5

ITZ003I TRANSACTION TRACE IS ALREADY OFF

Explanation: The operator attempted to stop transaction trace when transaction trace is already off.

System action: The system ignores the operator command.

Operator response: None.

Source: Transaction trace

Module: ITZOPCMD

Routing code: -

ITZ004I • ITZ007I

Descriptor code: 5

ITZ004I INCORRECT BUFFER SIZE SPECIFIED

Explanation: The length of the operator-specified buffer size is not between 16K and 32M.

System action: The system ignores the operator command.

Operator response: Reenter the command with a correct buffer size.

Source: Transaction trace

Module: ITZOPCMD

Routing code: -

Descriptor code: 5

ITZ005I MAXIMUM TRACE FILTER SETS ALREADY DEFINED

Explanation: The operator-specified Transaction Trace command is valid, but can not be honored because the maximum number of trace filter sets are already being used.

System action: The system ignores the operator command.

Operator response: Issue the TRACE TT,OFF=nn command to remove a specific trace filter set (nn) or TRACE TT,OFF=ALL to remove all trace filter sets. Reenter the command to set the new trace filter set.

Source: Transaction trace

Module: ITZOPCMD, ITZCCAC

Routing code: -

Descriptor code: 5

ITZ006I INCORRECT TRACE FILTER SET

Explanation: The operator attempted to remove a trace filter set that is not defined or may be turned off.

System action: The system ignores the operator command.

Operator response: Use the DISPLAY TRACE,TT command to determine the status of transaction trace. Reenter the command with a correct filter set identifier.

Source: Transaction trace

Module: ITZCCAC

Routing code: -

Descriptor code: 5

ITZ007I TRANSACTION TRACE IS NO LONGER ACTIVE. A DUMP COMMAND MAY BE ISSUED TO DUMP THE TRANSACTION TRACE DATASPACE

Explanation: This is an informational message issued in response to ending transaction trace processing.

System action: Transaction trace is turned off.

Operator response: Use the DUMP command to dump the transaction trace dataspace. For example, enter 'DUMP COMM=(TTrace for JOB=PAYTRAN2)' followed by 'Rx,DSPNAME='TRACE'.SYSTTRC'.

Source: Transaction trace

Module: ITZCCAC

Routing code: -

Descriptor code: 5

ITZ008I 'LU' REQUIRED WITH 'NET' KEYWORD

Explanation: The NET keyword must be used only when the LU keyword is specified.

System action: The system ignores the operator command.

Operator response: Specify the LU name for the network environment to be traced using the LU keyword on the Transaction Trace command if the NET keyword is to be used.

Source: Transaction trace

Module: ITZOPCMD

Routing code: -

Descriptor code: 5

ITZ009I KEYWORDS NOT VALID WITH THE 'OFF' KEYWORD

Explanation: No other keyword/parameter specification is valid when OFF=nn|ALL is specified.

System action: The system ignores the operator command.

Operator response: If OFF is intended, specify OFF=nn|ALL without the specification of other keywords/parameters.

Source: Transaction trace

Module: ITZOPCMD

Routing code: -

Descriptor code: 5

ITZ010I TRACE MUST BE STARTED TO SPECIFY 'BUFSIZE', 'WTR' OR 'LATENT'

Explanation: An attempt was made to change dataspace size, start an external writer, or specify LATENT when trace was not active.

System action: The system ignores the operator command.

Operator response: Start transaction trace with a valid filter. BUFSIZ, WTR, or LATENT may be specified while starting trace or any time thereafter.

Source: Transaction trace

Module: ITZOPCMD

Routing code: -

Descriptor code: 5

ITZ011I EXTERNAL WRITER ALREADY STARTED

Explanation: The external writer was started with the WTR=nnnnnnn parameter when the writer had already been started.

System action: The system ignores the operator command.

Operator response: Ensure the proper external writer is running via the DISPLAY TRACE,TT command.

Source: Transaction trace

Module: ITZOPCMD, ITZCCAC

Routing code: -

Descriptor code: 5

ITZ012I • ITZ015I

ITZ012I EXTERNAL WRITER ALREADY STOPPED

Explanation: The Transaction Trace command is issued with the WTR=STOP parameter when the writer is already stopped.

System action: The system ignores the operator command.

Operator response: None.

Source: Transaction trace

Module: ITZOPCMD

Routing code: -

Descriptor code: 5.

ITZ013I TRANSACTION TRACE DISABLED. RSNCD=

Explanation: Transaction trace was not able to successfully complete initialization. Transaction trace is not functional. Transaction trace cannot be used on this system until the next IPL. The reason code indicates the reason for disabling transaction trace. The following reason codes are associated with this message:

- 0200 - The ATTACHX for the TTrace task failed.
- 0400 - The TTrace task ESTAE could not be established.
- 0600 - Control block storage could not be obtained.
- 08xx - Exit routine not found
 - 0801 - Filter exit address not obtained
 - 0802 - Event exit address not obtained.
 - 0803 - Query exit address not obtained.
- 1000 - TTrace anchor control block not available.

System action: None.

Operator response: None.

Source: Transaction trace

Module: ITZOPCMD

Routing code: -

Descriptor code: 5

ITZ014I SYNTAX ERROR IN DISPLAY TRANSACTION TRACE COMMAND

Explanation: The command requesting a display of transaction trace information was not entered properly.

System action: None.

Operator response: Reissue the 'DISPLAY TRACE,TT' command.

Source: Transaction trace

Module: ITZDTCMD

Routing code: -

Descriptor code: 5

ITZ015I TRANSACTION TRACE COMMAND REJECTED ON THIS SYSTEM. RSNCD=xxxx

Explanation: The Transaction Trace command was rejected on this system due to an internal processing error. The reason code indicates the reason for rejecting the command. The following reason codes are associated with this message:

- 0200 - System is currently processing a transaction trace command.
- 0400 - The global ENQ could not be obtained.

- 0600 - Command recovery environment could not be established.
- 08xx - Dataspace allocation failure
 - 0801 - DSPSERV Create failure.
 - 0802 - ALESERV failure.
 - 0803 - Timeout waiting for dataspace create.

System action: None.

Operator response: Reissue the 'TRACE TT,...' command.

Source: Transaction trace

Module: ITZDTCMD, ITZOPCMD

Routing code: -

Descriptor code: 5

ITZ016I TRANSACTION TRACE FILTER SET TURNED OFF

Explanation: The requested filter set was turned off on this system.

System action: None.

Operator response: None.

Source: Transaction trace

Module: ITZCCAC

Routing code: -

Descriptor code: 5

ITZ017I TRANSACTION TRACE COMMAND ACCEPTED

Explanation: The Transaction Trace command was accepted for processing.

System action: None.

Operator response: None.

Source: Transaction trace

Module: ITZCCAC

Routing code: -

Descriptor code: 5

ITZ018I TRANSACTION TRACE EXTERNAL WRITER INTERFACE DISABLED

Explanation: The external writer interface is disabled. Transaction trace uses the CTRACE external writer interface and the CTRACE DEFINE was not successful. The external writer interface will remain disabled for this system and all trace records will be recorded in the dataspace only until the next system IPL.

System action: None.

Operator response: Issue the command again without the WTR parameter.

Source: Transaction trace

Module: ITZOPCMD, ITZCCAC

Routing code: -

Descriptor code: 5

ITZ019I TRANSACTION TRACE FILTER SET MAY BE LOST

Explanation: There was a mismatch of the trace filter set sequence numbers in the sysplex and a filter set may have been overlaid to keep the filter sets in sync.

System action: None.

Operator response: Issue D TRACE,TT to check the currently active trace filter sets.

Source: Transaction trace

Module: ITZCCAC

Routing code: -

Descriptor code: 5

ITZ020I TTRACE INVOCATION OF sysreq SERVICE FAILED, RC=rc, RSN=rsn

Explanation: Transaction trace requested a system service, but the request failed. In the message text:

- sysreq - is the name of the system service invoked by TTrace.
- rc - is the return code from the sysreq service.
- rsn - is the reason code from the sysreq service.

System action: The system continues processing.

Operator response: Notify your system programmer.

Source: Transaction trace

Module: ITZCMIN, ITZCMOT, ITZMBJN

Routing code: -

Descriptor code: 12

ITZ021I 'LVL' IS VALID ONLY WHEN A FILTER SET IS BEING DEFINED

Explanation: The LVL keyword was used without the specification of a filter set keyword (for example, TRAN= or COR=).

System action: None.

Operator response: Issue a 'TRACE,TT,...' command to define a filter set to be associated with the level indicator.

Source: Transaction trace

Module: ITZOPCMD

Routing code: -

Descriptor code: 5

Chapter 26. IWM messages

IWM001I WORKLOAD MANAGEMENT POLICY *policy-name* NOW IN EFFECT

Explanation: The request to activate the named WLM policy completed successfully. The WLM policy *policy-name* is now in effect. In the message text:

policy-name

The name of the service policy in effect on the system.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Source: Workload manager (WLM)

Module: IWMO2VRY

Routing code: 2,10

Descriptor code: 5

IWM002I {VARY|DISPLAY|MODIFY} WLM SYNTAX ERROR, *text*

Explanation: The system could not obtain the required information to process the command.

In the message text:

{VARY|DISPLAY|MODIFY}

The name of the command that contains the syntax error.

text

One of the following phrases:

PARAMETER MISSING

You did not specify a required parameter.

PARAMETER LENGTH ERROR

A keyword is not valid.

UNIDENTIFIABLE KEYWORD

The system found an unidentifiable keyword.

POLICY NAME NOT VALID

The specified policy name is not valid. The name must be between 1 and 8 characters in length.

SYSTEM NAME NOT VALID

The specified system name is not valid. The name must be between 1 and 8 characters in length.

ACTION NOT VALID. ONE OF THE FOLLOWING WAS EXPECTED: QUIESCE Q RESUME REFRESH

The specified application environment action is not valid. Valid parameters are REFRESH, RESUME, and QUIESCE(Q).

AM COMPONENT STATE NOT VALID. ONE OF THE FOLLOWING EXPECTED: ENABLE DISABLE

An operator has issued the MODIFY WLM,AM=option command, but the option was neither ENABLE or DISABLE

APPLENV NAME NOT VALID

The specified application environment name is not valid. The name must be between 1 and 32 characters in length.

SCHEDULING ENVIRONMENT NAME NOT VALID

The specified scheduling environment name is not valid. The name must be between 1 and 16 characters in length.

IWM003I

RESOURCE NAME NOT VALID

The specified resource name is not valid. The name must be between 1 and 16 characters in length.

RESOURCE STATE NOT VALID. ONE OF THE FOLLOWING EXPECTED: ON OFF RESET

The resource state is not valid. Valid states are ON, OFF, and RESET.

GPMP TRACE MUST BE: "LOW", "MEDIUM" OR "HIGH"

The operator issued a MODIFY WLM,GPMP,TRACE= command, but specified a TRACE value other than the allowed values of LOW, MEDIUM, or HIGH.

GPMP TRACE DESTINATION MUST BE EITHER "FILE" or "MEMORY"

The operator issued a MODIFY WLM,GPMP,TRACE=xxxx,DEST=yyyy command, but the specified value for the DEST option was none of the allowed values FILE or MEMORY.

System action: The command is not processed.

Operator response: Enter the command again, specifying the correct syntax. If POLICY NAME NOT VALID appears in the message text, make sure you specified a service policy name that matches the name contained in the service definition installed on the workload manager (WLM) couple data set. The most likely cause of this error is that either the policy name was not specified when you issued the command or the length of the policy name is greater than 8 characters. Make sure the name of the service policy is typed correctly.

If APPLENV NAME NOT VALID appears in the message text, either the application environment name was missing or it had a length greater than 32 characters.

Source: Workload manager (WLM)

Module: IWMO2DIS

Routing code: 2

Descriptor code: 5

IWM003I {VARY|DISPLAY} WLM FAILED, *text*

Explanation: The command failed for one of the reasons described in *text*.

In the message text:

{VARY|DISPLAY}

The name of the command that failed.

policy-name

The name of the service policy specified on the command.

system-name

The name of the system where the service policy is being activated.

text

text is one of the following:

NO INSTALLED SERVICE DEFINITION

There is no service definition installed on the WLM couple data set.

WLM SERVICE DEFINITION LEVEL (xxxxxxx)

MUST BE LESS THAN OR EQUAL TO WLM VERSION LEVEL (yyyyyyy)

The service definition is at a higher level than what the system is running.

WLM COUPLE DATA SET NOT AVAILABLE

The WLM couple data set is not available.

WLM COUPLE DATA SET TOO SMALL

The WLM couple data set is too small to hold the service policy.

POLICY NAME *policy-name* NOT DEFINED

The policy you have specified is not defined.

SERVICE POLICY ACTIVATION IN PROGRESS BY SYSTEM *system-name*

The service policy is in the process of being activated on the named system.

SYSTEM *system-name* NOT DEFINED

The named system is not defined to the sysplex.

System action: The system does not process the command.

Operator response: Notify the system programmer.

System programmer response: If **NO INSTALLED SERVICE DEFINITION** appears in the message text, make sure you have installed a service definition on the WLM couple data set.

If **WLM SERVICE DEFINITION LEVEL (xxxxxxx) MUST BE LESS THAN OR EQUAL TO WLM VERSION LEVEL (yyyyyyy)** appears in the message text, and you have a mixed sysplex with another system at level xxxxxx or higher, then you must issue the command on that system. If you have a mixed sysplex and *no* system at level xxxxxx or higher, then you must use a service definition that is at the same level or lower than the WLM version level yyyyyyy.

If **WLM COUPLE DATA SET NOT AVAILABLE** appears in the message text, make sure you have defined a WLM couple data set and installed a service definition containing at least one policy.

If **WLM COUPLE DATA SET NOT AVAILABLE** appears in the message text, and you have defined a WLM couple data set, check whether you have connectivity to the data set with the command **DISPLAY XCF,COUPLE,TYPE=WLM**. If you do have connectivity, issue the command again. If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM support center.

If **WLM COUPLE DATA SET TOO SMALL** appears in the message text, first, allocate a new WLM couple data set that is large enough to hold the service policy. Next, make it the new alternate WLM couple data set using the **SETXCF COUPLE,TYPE=WLM,ACOUPL=** command. Third, switch from the primary to the secondary couple data set by using the **SETXCF COUPLE,TYPE=WLM,PSWITCH** command. Issue the **VARY** command again. Repeat this process until the WLM couple data set is large enough. If the maximum size has been allocated, and the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM support center.

If **POLICY NAME *policy name* NOT DEFINED** appears in the message text, check whether you have spelled the policy name correctly. If you did, then notify the system programmer and provide the policy name. If you did not spell it correctly, then correct the name and issue the command again.

If **SYSTEM *system-name* NOT DEFINED** appears in the message text, check whether you have spelled the system name correctly. To find out the names of all the defined systems, issue the command **DISPLAY WLM,SYSTEMS**. If you did not spell it correctly, then correct the name and issue the command again.

If **SERVICE POLICY ACTIVATION IN PROGRESS BY SYSTEM *system-name*** appears in the message text, wait until the activation in progress is complete before reissuing the command. If the message persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM support center.

Source: Workload manager (WLM)

Module: IWMO2CMD

Routing code: 2,10

Descriptor code: 5

IWM004E *VARY|MODIFY* **WLM FAILED, INTERNAL WLM COMPONENT ERROR, RC = xx RSN = yyyyyyy**

Explanation: The system encountered an internal WLM error.

In the message text:

xx The return code from the WLM command processing. This is for IBM internal use only.

yyyyyy

The reason code from the WLM command processing. This is for IBM internal use only.

System action: The system does not execute the command.

Operator response: Notify the system programmer.

System programmer response: Re-enter the command, if the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM support center.

Routing code: 2,10

IWM005W

Descriptor code: 5

IWM005W WORKLOAD MANAGER (COMP/SCWLM) CATASTROPHIC FAILURE: WAIT STATE CODE
WS/nnn REASON CODE RSN/rcc ENTRYPOINT EP/ep reasonwhere reasonwhy

Explanation: Workload management (WLM) encountered severe error.

In the message text:

nnn

The wait state code.

rcc

The reason code describing the error.

ep The entry point.

reasonwhere

One of the following:

REASON IS GENERIC/UNKNOWN WLM FAILURE

No reason code was provided.

UNKNOWN ROUTINE WAS REQUESTED TO BE STARTED AS A WLM SUBTASK

EP/IWMLTATT only attaches known WLM subtasks.

SUBTASK IWDMTSK FAILED

Subtask failed prior to complete re/initialization.

SUBTASK IWMPMTSK FAILED

Subtask failed prior to complete re/initialization.

SUBTASK IWMDCTSK FAILED

Subtask failed prior to complete re/initialization.

SUBTASK IWMRTSK FAILED

Subtask failed prior to complete re/initialization.

SUBTASK IWMENTSK FAILED

Subtask failed prior to complete re/initialization.

SUBTASK IWMDVTSK FAILED

Subtask failed prior to complete re/initialization.

SUBTASK IWMWBTSK FAILED

Subtask failed prior to complete re/initialization.

SUBTASK IWMWMTSK FAILED

Subtask failed prior to complete re/initialization.

SUBTASK IWMOPTSK FAILED

Subtask failed prior to complete re/initialization.

SUBTASK IWMSETSK FAILED

Subtask failed prior to complete re/initialization.

SUBTASK IWMCMTSK FAILED

Subtask failed prior to complete re/initialization.

SUBTASK IWMLMTSK FAILED

Subtask failed prior to complete re/initialization.

SUBTASK IWMRTTSK FAILED

Subtask failed prior to complete re/initialization.

RESTART OF WLM SUBTASK NOT POSSIBLE, CANNOT IDENTIFY FAILING TCB

Restart of WLM subtask was not possible.

reasonwhy

One of the following:

ATTACH OF SUBTASK FAILED

Attach of the WLM subtask failed.

SUBTASK COULD NOT BE MADE DISPATCHABLE

Attach successful, but task not made dispatchable.

SUBTASK IS NOT RESTARTABLE

This WLM subtask does not support reattachment.

SUBTASK EXCEEDED RESTART LIMIT

This WLM subtask exceeded its restart limit.

NO ADDITIONAL WLM SPECIFIC INFORMATION AVAILABLE

No additional WLM specific information is available.

System action: The system enters a nonrestartable wait state. The system issues other messages prior to the wait state explaining the problem.

Operator response: If the system programmer requests it, obtain a stand-alone dump, specifying:

```
DUMP RANGE(ALL) IN ASID('WLM')
```

ReIPL the system.

System programmer response: See the system programmer response for the wait state code and other messages preceding this message.

Format the stand-alone dump with the IPCS WLMDATA command, including the exception parameters.

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the stand alone dump formatted with the IPCS WLMDATA subcommand.

Source: Workload manager (WLM)

Module: IWML2LWT

Routing code: 1,2,10

Descriptor code: 1

**IWM008I MODIFY WLM REJECTED, SYSTEM *system-name* ALREADY IN WORKLOAD MANAGEMENT
 {GOAL | COMPATIBILITY} MODE**

Explanation: The request to change the workload management mode in effect was not processed because the system *system-name* is already in the requested mode.

In the message text:

system-name

The name of the system on which the MODIFY WLM command was issued.

{GOAL | COMPATIBILITY}

The workload management mode in effect.

System action: The system does not process the command.

Source: Workload manager (WLM)

Module: IWMP2TRN

Routing code: 2

Descriptor code: 5

IWM009I STOP COMMAND IS NOT VALID FOR WLM ADDRESS SPACE

Explanation: You cannot issue the STOP command for the WLM address space. You cannot stop the WLM address space.

System action: The system does not process the command.

Operator response: If you want to restart the WLM address space, re-IPL the system.

IWM010I • IWM011I

Source: Workload manager (WLM)

Module: IWMO2MFY

Routing code: 2

Descriptor code: 5

IWM010I VARY WLM COMPLETED, BUT POLICY NOT ACTIVATED ON ALL SYSTEMS

Explanation: The VARY WLM command has been processed, but the policy named on this command is not active on every system in the sysplex.

System action: On systems where the VARY WLM command completed successfully, the policy is active. On systems where the VARY WLM command failed, the previous policy is the active policy.

Operator response: Issue the DISPLAY WLM,SYSTEMS command to view the list of systems and their active policies. Determine which systems are not running with the active policy. Check whether they have connectivity to the WLM couple data set.

If you see a system that is not running with the active service policy, either the system does not have connectivity to the WLM couple data set or an attempt to activate the policy on that system failed. If connectivity to the WLM couple data set has been lost (or does not exist), establish the connection. The DISPLAY XCF,COUPLE,TYPE=WLM command can be used to query the status of the WLM couple data set. If connectivity to the WLM couple data set is established but you still get the error, contact the IBM support center.

Source: Workload manager (WLM)

Module: IWMO2VRY

Routing code: 2

Descriptor code: 5

IWM011I WLM CROSS SYSTEM RECOVERY IN PROGRESS BY SYSTEM *system-name1* FOR SYSTEM *system-name2*

Explanation: Cross system recovery is in progress on another system.

In the message text:

system-name1

The name of the system performing the cross system recovery.

system-name2

The name of the system for which the cross system recovery is being done.

System action: Processing continues.

Operator response: If the message comes up and goes away within a short amount of time, cross-system recovery actions were completed successfully.

If this message persists, a problem may have occurred during cross-system recovery, preventing reinitialization of the failed system. You cannot re-IPL the failed system before cross-system recovery has completed because the system performing the cross-system recovery holds resources belonging to the failed system.

In the case where this message does not go away, you will have to determine how crucial bringing up the failed system is to your installation because in order to bring up the failed system you will have to shut down the system performing the cross-system recovery on behalf of the failed system. Another consideration is the importance of the work running on the system doing the cross-system recovery.

To bring up the failed system, do the following:

- Take a system dump of the WLM address space by specifying SDATA=WLM on the system doing the cross-system recovery and contact the IBM support center.
- Re-IPL the system that was doing the cross-system recovery to free up the resources that belong to the failed system.
- Re-IPL the failed system.

Source: Workload manager (WLM)

Module: IWMS2XRP

Routing code: 2,11

Descriptor code: 3

IWM012E POLICY ACTIVATION FAILED, *text*

Explanation: The policy activation attempt failed.

In the message text:

return-code

The return code describing the error.

reason-code

The reason code describing the error.

text

text is one of the following:

INTERNAL ERROR, RC = *return-code* RSN = *reason-code*

An internal error occurred with the specified return code and reason code.

WLM COUPLE DATA SET NOT AVAILABLE

The WLM couple data set is not available.

System action: Processing continues.

Operator response: Notify the system programmer.

System programmer response: If connectivity to the WLM couple data set has been lost (or does not exist), establish the connection. The DISPLAY XCF,COUPLE,TYPE=WLM command can be used to obtain the status of the WLM couple data set. If connectivity to the WLM couple data set is established but you still get the error, contact the IBM support center.

Source: Workload manager (WLM)

Module: IWMP2ACT

IWMP2CSC

Routing code: 2,10

Descriptor code: 5

IWM014I OPTIONS IGNORED - NOT SUPPORTED BY SYSWLM.

Explanation: Options were specified on the TRACE CT command for SYSWLM but are not supported.

System action: Processing continues.

Source: Workload manager (WLM)

Module: IWMC2SSX

Routing code: -

Descriptor code: 5

IWM025I *hh.mm.ss* WLM DISPLAY [*idr*]*text*

Explanation:

ACTIVE WORKLOAD MANAGEMENT SERVICE POLICY NAME: *policy-name*

ACTIVATED: *yyyy/mm/dd AT: hh:mm:ss:*

BY: *userid* **FROM:** *system-name*

DESCRIPTION: *policy-description*

RELATED SERVICE DEFINITION NAME: *definition_name*

INSTALLED: *yyyy/mm/dd AT: hh:mm:ss:*

BY: *userid* **FROM:** *system-name*

WLM VERSION LEVEL: *wlm-level*

IWM025I

WLM FUNCTIONALITY LEVEL: *wlm-func-level*
WLM CDS FORMAT LEVEL: *wlm-format-level*
STRUCTURE SYSZWLM_:*structname*
STATUS: *strucstatus*
[*WARNING* - A POLICY ACTIVATION IS IN PROGRESS BY SYSTEM *system-name*]
[*WARNING* - SYSTEM CONFIGURATION IS ABNORMAL]
STATE OF GUEST PLATFORM MANAGEMENT PROVIDER (GPMP): *status*
SYSNAME *MODE* *POLICY* *WORKLOAD MANAGEMENT STATUS*
sysname mode policy-name status

The operator issued a DISPLAY WLM command, optionally followed by keyword parameters.

Message information returned:

***WARNING* - A POLICY ACTIVATION IS IN PROGRESS BY SYSTEM** *system-name* indicates that although the listed policy is the active policy at this time, another policy has just been activated and this policy will become the current policy momentarily. Issue the DISPLAY WLM command to see what the new active policy is.

***WARNING* - SYSTEM CONFIGURATION IS ABNORMAL** indicates that when you issued a DISPLAY WLM command by itself, exception conditions were detected in one or more systems in the sysplex. This usually happens when

- In a multiple systems sysplex, if there is at least one system running with the active policy and another system is not synchronized with the active policy that system is abnormal
- A system is inactive and its WLM instance is not inactive.

In the message text:

hh:mm:ss

The time when the DISPLAY WLM command was issued, in hours (00-23), minutes (00-59), and seconds (00-59).

idr

A 3-digit decimal identifier to be used in a CONTROL C,D command to cancel the status display if it is:

- Written on typewriter or printer consoles
- Displayed inline (that is, not in a display area) on a display console

This identifier does not appear when the display is presented in a display area on a display console.

policy-name

The name of the active service policy.

ACTIVATED: *yyyy/mm/dd AT hh:mm:ss BY: userid FROM: actsystem*

yyyy/mm/dd AT hh:mm:ss

The date and time at which the named service policy was activated. This time is based on the time of day (TOD) clock.

userid

Userid of the system operator or service administrator who activated the service policy, if available. Note that the userid of the system operator or administrator is not available in all of the environments in which a policy can be activated. A userid value of *BYPASS* indicates that the userid is unknown. This can happen when the policy is activated from the operator console while the operator is not logged on to the console.

actsysnm

The name of the system on which the service policy activation was initiated.

description

Description of the active service policy.

definition_name

The name of the service definition containing the active service policy.

INSTALLED: *yyyy/mm/dd AT hh:mm:ss BY: userid FROM: actsystem*

yyyy/mm/dd AT hh:mm:ss

The date and time at which the named service definition was installed. This time is based on the time of day (TOD) clock.

userid

Userid of the system operator or service administrator who installed the service definition, if available. Note that the userid of the system operator or administrator is not available in all of the environments in which a policy can be activated. A userid value of *BYPASS* indicates that the userid is unknown. This can happen when the policy is activated from the operator console while the operator is not logged on to the console.

actsysnm

The name of the system on which the service definition was installed.

WLM VERSION LEVEL:*wlm-level*

The version of workload manager that is running.

WLM FUNCTIONALITY LEVEL:*wlm-func-level*

The functionality level of the service policy that is currently in effect. See "Workload Management Migration" in for details on WLM functionality levels.

WLM CDS FORMAT LEVEL:*wlm-format-level*

The WLM CDS format level represents the format of the WLM CDS created via the XCF IXCL1DSU utility.

See "Workload Management Migration" in *z/OS MVS Planning: Workload Management* for details on WLM CDS format levels.

STRUCTURE SYSZWLM_:*structname STATUS: strucstatus*

Displays the status (*strucstatus*) of the WLM coupling facility structure (*structname*). The status will be one of the following:

CONNECTED

Indicates that WLM is connected to the structure.

DISCONNECTED

Indicates that WLM is disconnected from the structure. If the installation requires the structure, then you must define it in the CFRM policy. For more information, see *z/OS MVS Planning: Workload Management*.

STATE OF GUEST PLATFORM MANAGEMENT PROVIDER: *status*

The status of the guest platform management provider on the system.

UNKNOWN

The status of the guest platform management provider cannot be retrieved.

INACTIVE

The guest platform management provider was not started.

UNAVAILABLE

The functionality is not available. The hardware support is missing.

STARTED

The guest platform management provider has been started, but has not connected to the Workload Manager.

ACTIVE

The guest platform management provider is active and connected to the Workload Manager, but has not established a connection to the IBM zEnterprise® Unified Resource Manager.

FAILED

WLM attempted to start the guest platform management provider; however, the agent did not connect to IBM zEnterprise Unified Resource Manager within the timeframe allotted. This state also occurs when WLM is unable to stop the guest platform management provider.

SEVFAILED

WLM attempted to start the guest platform management provider. The request failed twice within 10 minutes, or the guest platform management provider connection unexpectedly terminated twice within 10 minutes.

CONNECTED

The guest platform management provider is active and connected to the Workload Manager and the IBM zEnterprise Unified Resource Manager.

STOPPED

The guest platform management provider (GPMP) was manually stopped using either the MODIFY

IWM025I

WLM,GPMP,STOP command or the MODIFY WLM,AM=DISABLE command. If the Application Response Measurement (ARM) services are disabled, you must enable it before you can restart the GPMP. To enable ARM, issue the MODIFY WLM,AM=ENABLE command. Then, to restart GPMP, issue the MODIFY WLM,GPMP,START command.

DISABLED

The z/OS WLM ARM services are disabled.

EARLY-IPL

z/OS UNIX System Services or TCP/IP is not running.

SHUTDOWNx

Termination of the guest platform management provider is currently in progress, where x is a number between one and three indicating how far the termination progressed.

PGMERROR

Internal error. Contact IBM support.

SYSNAME *sysname*

The name of the system being displayed.

MODE *mode*

WLM mode in effect. A value of GOAL means that the system is operating in WLM GOAL mode. No other values are supported.

POLICY *policy-name*

The name of the service policy in effect on this system. DEFAULT if running with the default service policy.

* WORKLOAD MANAGEMENT STATUS * *status*

Workload management status which is one of the following:

INITIALIZING

There is no workload management function available because WLM is initializing.

ACTIVE

The system is processing towards the active service policy.

ACTIVE, NOT RUNNING WITH ACTIVE POLICY

WLM is active, but the active service policy is not available due to one of the following:

- There is no couple data set for WLM.
- This system lost connectivity to the couple data set for WLM.
- The system is connected to the couple data set for WLM but a service policy has not been activated. To activate a service policy, issue a VARY WLM,POLICY=*policy-name*.
- Activation of the active service policy failed on this system.
- The service definition has over 100 service classes defined.

QUIESCE IN PROGRESS

WLM is in the process of an orderly shutdown.

CLEANUP INITIATED BY SYSTEM *system-name*

WLM is inactive. Termination was not orderly and another system running WLM is performing recovery actions on behalf of this system where

system-name

The name of the system performing the recovery.

WLM INACTIVE, CLEANUP COMPLETE

WLM is inactive. It either terminated through an orderly shutdown or cross-system recovery actions have been completed successfully.

WLM STATE UNKNOWN

A system running WLM has detected that another system running WLM contains unreliable information. When this happens the system with the unreliable information is isolated and its WLM state is set to unknown. Error processing is started to determine the true WLM state for that system.

SYSTEM INACTIVE, CLEANUP PENDING

The system is not currently part of the sysplex. Cross system recovery is scheduled to be performed on this system.

SYSTEM INACTIVE, CLEANUP COMPLETE

The system is not currently part of the sysplex. However, before the system became inactive cross-system recovery actions were completed successfully.

SYSTEM STATE UNKNOWN

Actions have been initiated to determine what the state of the system is.

STATUS NOT AVAILABLE

Either this is a system running a release prior to SP 5.1. or a system is in the process of coming up.

System action: Processing continues.

Operator response: If you see *WARNING* - SYSTEM CONFIGURATION IS ABNORMAL issue a DISPLAY WLM,SYSTEMS to view status information for all systems in the sysplex.

Source: Workload manager (WLM)

Module: IWMO2DIS

Routing code: 2

Descriptor code: 5

IWM026I WLM WORKLOAD REPORTING RECOVERY - text

Explanation: WLM Workload reporting suffered a severe error. Recovery was attempted.

In the message text:

text

text is one of the following:

STARTED

WLM Workload Reporting recovery has started.

SUCCESSFUL

WLM Workload Reporting recovery was successful.

FAILED

WLM Workload Reporting recovery failed.

System action: The system attempts to recover WLM Workload Reporting.

Operator response: If recovery failed, enter a VARY WLM,POLICY=*policy-name* command to try to recover the WLM Workload Reporting function.

Source: Workload manager (WLM)

Module: IWMW3RBD

Routing code: -

Descriptor code: -

IWM027I TRACE BUFFER SIZE CHANGE FAILED FOR SYSWLM

Explanation: The operator tried to change the CTRACE buffer size and storage was not available.

System action: Processing continues.

Operator response: Specify a smaller size and issue the command again.

Source: Workload manager (WLM)

Module: IWMC2SSX

IWM028I **WLM UNABLE TO JOIN THE SYSPLEX, XCF ERROR, RC = *return-code* RSN = *reason-code***

Explanation: WLM is unable to join the SYSPLEX because of a failure in the XCF join service (IXCJOIN).

In the message text:

return-code

The IXCJOIN return code, as documented in *z/OS MVS Programming: Sysplex Services Reference*.

reason-code

The IXCJOIN reason code, as documented in *z/OS MVS Programming: Sysplex Services Reference*.

System action: WLM system takes an Abend. If the XCFJOIN fails at NIP time or the Abend happens more than five times, the system enters into a non-restartable wait state.

Operator response: Notify the system programmer.

System programmer response: If a dump is produced, save it. Otherwise, if the system went into a wait state, take a stand alone dump. Save the hardcopy log. Search problem reporting data bases for a fix to the problem. If no fix exists, contact the IBM support center.

Source: Workload manager

Module: IWMS2TIS

Routing code: 2,10

Descriptor code: 4

IWM029I *text*

Explanation: In the message, *text* is:

APPLICATION ENVIRONMENT NAME	STATE	STATE DATA
<i>applenv-name</i>	<i>state</i>	<i>state-data</i>
ATTRIBUTES: <i>attributes</i>	SUBSYSTEM TYPE: <i>subsystem-type</i>	
SUBSYSTEM NAME: <i>subsystem name</i>	NODENAME: <i>nodename</i>	

The operator issued a DISPLAY WLM command. In the message text:

hh:mm:ss

The time when the DISPLAY WLM command was issued, in hours(00-23), minutes(00-59), and seconds(00-59).

idr

A 3-digit decimal identifier to be used in a CONTROL C,D command to cancel the status display if it is:

- Written on typewriter or printer consoles
- Displayed inline (that is, not in a display area) on a display console

This identifier does not appear when the display is presented in a display area on a display console.

Application Environment Name *applenv-name*

The name of the application environment being displayed.

State *state*

Specifies the state the application environment is in. For a full discussion of operational considerations for application environments, see "Managing Application Environments" in *z/OS MVS Planning: Workload Management*. Any one of the following states is displayed:

AVAILABLE

This is the default state that exists when a policy is activated. This state indicates that an application environment is available for processing.

REFRESHING

Indicates WLM is in the process of replacing server address spaces for one of the following reasons:

- You entered a system command to refresh the application environment (VARY WLM,APPLENV=*applenv-name*,REFRESH)
- You installed a service definition that changed the JCL procedure name, start parameters, or server limit of the application environment, and then activated a service policy from the changed service definition.

The system stops all server address spaces and re-starts them.

The VARY WLM command to refresh does not affect server address spaces on systems running in compatibility mode. If you want to refresh those server address spaces, you must cancel and start them with the CANCEL and START operator commands. The application environment remains in the **refreshing** state until all servers on the compatibility mode system are cancelled.

QUIESCING

Indicates WLM is in the process of stopping server address because you entered a system command to quiesce the application environment. (VARY WLM,APPLENV=*applenv-name*,QUIESCE). If server address spaces are active on systems running in compatibility mode, you must cancel them. The application environment remains in the **quiescing** state until all the servers on the compatibility mode system are cancelled.

WLM continues to queue work requests. If you want to stop queueing work, check with the subsystem documentation on how to stop queueing work requests.

To resume processing and undo the quiesce, specify VARY WLM,APPLENV=*applenv-name*,RESUME

QUIESCED

Indicates WLM has stopped server address spaces because of a VARY WLM,APPLENV=*applenv-name*,QUIESCE command.

When an application environment is quiesced, you can make changes to server libraries, the JCL procedure, or other changes which require an inactive server.

WLM continues to queue work requests. If you want to stop queueing work, check with the subsystem documentation on how to stop queueing work requests.

To resume processing and undo the quiesce, specify VARY WLM,APPLENV=*applenv-name*,RESUME

STOPPING

Indicates WLM has stopped starting server address spaces because of one or more of the following:

- JCL errors in the procedure to be started for the application environment,
- Coding errors in the server code being run for the application environment
- Reached the internal limit of unexpected server address space terminations.

WLM does not start any new server address spaces. If any server address spaces are running for the application environment, they continue to run and process any incoming work requests.

To resume processing after correcting the error, issue the VARY WLM,APPLENV=*applenv-name*,RESUME command.

STOPPED

Indicates WLM has stopped starting server address spaces because of one or more of the following:

- JCL errors in the procedure to be started for the application environment,
- Coding errors in the server code being run for the application environment
- Reached the internal limit of unexpected server address space terminations.

WLM does not start any new server address spaces. If any server address spaces are running for the application environment, they continue to run and process any incoming work requests.

To resume processing after correcting the error, issue the VARY WLM,APPLENV=*applenv-name*,RESUME command.

RESUMING

Indicates WLM is resuming processing of the server address spaces because of the VARY WLM,APPLENV=*applenv-name*,RESUME command.

DELETING

Indicates WLM is in the process of stopping server address spaces because you deleted the application environment. You installed a service definition in which the application environment was deleted, and then activated a service policy from that service definition.

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State-data *state-data*

Specifies the systems which have not completed a refresh, quiesce, stop, resume, or delete action. A system completes processing a refresh, quiesce, or delete when all server address spaces terminate. A system completes processing a stop or resume action immediately.

When you specify APPLENV=* on the VARY command, only one line of system names is displayed per application environment. If the application environment has more systems than can fit on one line, the message displays a +. To display all of the systems for the application environment, enter a DISPLAY WLM specifying the application environment name.

Attributes *attributes*

Specifies the following:

PROC=*procedure*

Specifies the JCL procedure WLM uses to start server address spaces.

MANUAL MODE

Indicates that you are manually starting server address spaces for the application environment. You did not specify a JCL procedure name for the application environment in the service definition.

Subsystem-type *subsystem-type*

Specifies the subsystem to which the application environment applies.

Subsystem name *subsystem name*

Only applies to DISPLAY WLM,SYNAPPL. Specifies the subsystem name to which the dynamic application environment applies.

Nodename name *node name*

Only applies to DISPLAY WLM,DYNAPPL. Specifies the node to which the dynamic application environment applies.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Source: Workload manager

Module: IWME2AID

Routing code: -

Descriptor code: 5,8,9

IWM030I *VARY|DISPLAY action FOR application-environment REJECTED, text*

Explanation: The vary or display command against an application environment could not be processed for some reason. The rejection text is provided.

In the message text:

VARY|DISPLAY

The command name that is being rejected.

action

For a display command there is no action provided (action field is blank).

For a vary command the action is what was being performed against the application environment.

If the command is a vary command the action is one of the following:

REFRESH

Specifies that a REFRESH action is being performed against the application environment.

QUIESCE

Specifies that a QUIESCE action is being performed against the application environment.

RESUME

Specifies that a RESUME action is being performed against the application environment.

applenv-name

The name of the application environment specified on the command.

text

text is one of the following:

NOT RUNNING WITH ACTIVE POLICY

The active service policy is not available due to one of the following:

- WLM is initializing.
- There is no couple data set for WLM.
- This system lost connectivity to the couple data set for WLM.
- The system is connected to the couple data set for WLM but a service policy has not been activated. To activate a service policy, issue a VARY WLM,POLICY=policy-name.
- Activation of the active service policy failed on this system.
- The current service definition has over 100 service classes defined.

UNABLE TO SEND MESSAGES TO SYSTEM xxxx

The system attempted to send the vary or display request to system *xxxx* to handle the request. The system was unable to send the request because the system was either down and in recovery, or XCF message traffic was busy.

ACTION ALREADY IN EFFECT

The vary request is not accepted because workload management is already performing the requested action for the application environment.

ACTION NOT ALLOWED

The vary request is not accepted for the current state of the application environment. For example if an application environment is in a QUIESCED state, then you cannot issue a VARY WLM,APPLENV=*xxxx*,REFRESH.

APPLICATION ENVIRONMENT NOT DEFINED

The vary or display request is not accepted because an application environment does not exist.

NO APPLICATION ENVIRONMENTS DEFINED

The vary or display request is not accepted because no application environments exist.

WLM COUPLE DATA SET HAS NOT BEEN FORMATTED TO SUPPORT APPLICATION ENVIRONMENTS

The VARY or DISPLAY request is not accepted because the WLM couple data set has not been formatted to support a LEVEL003 service definition. To format a WLM couple data set, see *z/OS MVS Planning: Workload Management*.

WLM COUPLE DATA SET NOT AVAILABLE

The vary or display request is not accepted because the current system does not have connectivity to the WLM couple data set.

DYNAMIC APPLICATION ENVIRONMENT COULD NOT BE UNIQUELY IDENTIFIED. USE DISPLAY COMMAND TO LIST ALL AVAILABLE ENVIRONMENTS

The vary request is not accepted because multiple dynamic application environments with the same name have been defined to the system and WLM cannot uniquely identify the target of the command.

System action: The system does not process the command.

Operator response: Notify the system programmer.

System programmer response: If **NOT RUNNING WITH ACTIVE POLICY** appears in the message text and the system has completed initialization, check to see if you have access to the WLM couple data set using the DISPLAY XCF,COUPLE,TYPE=WLM command. If you do not have access to the WLM couple data set then determine what has caused the problem of lost WLM couple data set connectivity and fix it. Once that problem is resolved reissue the command. If you do have connectivity, issue the command again. If the problem persists, search problem reporting data bases for fix for the problem.. If no fix exists, contact the IBM support center.

If **UNABLE TO SEND MESSAGES TO SYSTEM** appears in the message text then the current system attempted to send the vary or display request to a system that is coordinating an application environment action, such as a previously entered VARY or DISPLAY command, or some sort of recovery processing (such as cross-system recovery). Try issuing the request again at a later time. However if this message appears over a long time period, a problem

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may exist, so you should search the problem reporting data bases for a fix for the problem. If no fix is found, contact the IBM support center.

If **ACTION ALREADY IN EFFECT** appears in the message text, then the system has already completed the requested action, and no further action is required.

If **ACTION NOT ALLOWED** appears in the message text then the current state of the application environment does not allow the action. For example, the system cannot process a REFRESH action if the application environment is quiescing or is quiesced. You must issue a RESUME command to undo a quiesce.

If **APPLICATION ENVIRONMENT NOT DEFINED** appears in the message text then the application environment is not defined. Make sure that you typed the name exactly as it appears in the active service policy.

If **NO APPLICATION ENVIRONMENTS DEFINED** appears in the message text then no application environments are defined. If you need an application environment, use the WLM ISPF application to add it to the WLM couple data set. Once the application environment is added to the WLM couple data set a policy must be activated to add the application environment to the active policy.

If **WLM COUPLE DATA SET HAS NOT BEEN FORMATTED TO SUPPORT APPLICATION ENVIRONMENTS** appears in the message text then a WLM couple data set exists but it does not contain definitions for application environments. You must have a definition for the application environment in the active service policy. To format a WLM couple data set, see *z/OS MVS Planning: Workload Management*.

If **WLM COUPLE DATA SET NOT AVAILABLE** appears in the message test and the system has completed initialization, then check to see if you have access to the WLM couple data set using the DISPLAY XCF,COUPLE,TYPE=WLM command. If you do not have access to the WLM couple data set then determine what has caused the problem of lost WLM couple data set connectivity and fix it. Once that problem is resolved reissue the command. If you do have connectivity, issue the command again. If the problem persists, search problem reporting data bases for fix for the problem.. If no fix exists, contact the IBM support center.

If **DYNAMIC APPLICATION ENVIRONMENT COULD NOT BE UNIQUELY IDENTIFIED. USE DISPLAY COMMAND TO LIST ALL AVAILABLE ENVIRONMENTS** appears in the message text, use the DISPLAY command to list all available environments with the application environment name used in the VARY command. Identify *nodename, subsystem name name* and *type* of the intended target application environment of the VARY command. Reissue the VARY command with the *snode, sname* or *stype* keywords to specifically target the intended target application environment.

Source: Workload manager (WLM)

Module: IWME2CNM

Routing code: 2,10

Descriptor code: 5

IWM031I *VARY|INTERNAL action FOR applenv-name IN PROGRESS. [TEMPORAL AFFINITIES EXIST ON sys1, sys2, ...]*

Explanation: A vary command or an internal system action is currently in progress on an application environment. On the specified systems, *sys1, sys2, ...*, there are temporal affinities between the client and the server region where the server instance is running. The completion of the vary command is delayed until all temporal affinities on all specified systems are released.

Note: TEMPORAL AFFINITIES EXIST ON *sys1, sys2 ...* only appears when affinities exist.
In the message text:

VARY|INTERNAL

VARY indicates the V WLM,APPLENV command and INTERNAL indicates an internal WLM action.

action

One of the following actions:

REFRESH

Specifies that the system is performing a REFRESH against the application environment because of either VARY command processing, or internal processing. WLM issues an internal refresh when a procedure name or start parameters are changed.

QUIESCE

Specifies that the system is performing a QUIESCE against the application environment.

RESUME

Specifies that the system is performing a RESUME against the application environment.

STOP

Specifies that the system is stopping the creation of new server address spaces because of repeated JCL errors in the start procedure, or failures in the server address spaces.

applenv-name

The name of the application environment specified on the command.

sys1, sys2, ...

The systems where temporal affinities exist for the application environment.

System action: The system is currently performing a vary command or WLM internal action against an application environment.

Operator response: None.

System programmer response: If STOP appears as the action, then you should check the job log for your server address spaces. If you cannot locate a JCL error, then check whether the server address space is encountering other processing errors.

Source: Workload manager (WLM)

Module: IWME2CCO

Routing code: 2

Descriptor code: 2,7

IWM032I *VARY|INTERNAL action* **FOR** *applenv-name* **COMPLETED**

Explanation: WLM has completed processing a vary command or an internal WLM action.

In the message text:

VARY|INTERNAL

Vary indicates an action from the V WLM,APPLENV command and INTERNAL indicates an internal WLM action.

action

The following lists the possible actions shown:

REFRESH

Specifies that a REFRESH action has completed. All server address spaces in the application environment are terminated and re-started.

QUIESCE

Specifies that a QUIESCE action has completed. The server address spaces have ended. You must do a VARY WLM command specifying RESUME to start the server address spaces again.

RESUME

Specifies that a RESUME action has completed. Workload management starts server address spaces when they are needed.

applenv-name

The name of the application environment specified on the command.

System action: The system has completed performing a vary command or WLM internal action against an application environment.

The following descriptor codes are associated with the IWM032I message:

- 4 - INTERNAL variation of this message.
- 5 - VARY variation of this message.

Operator response: None.

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System programmer response: None.

Source: Workload manager (WLM)

Module: IWME2CCO

Routing code: 2

Descriptor code: 4,5

IWM033I ERROR FOUND ON WLM COUPLE DATA SET. QUIESCE, RESUME OR REFRESH ACTIONS MAY HAVE BEEN LOST.

Explanation: The system found a corrupted application environment record in the service definition (IWMSVCAE) on the WLM couple data set.

System action: WLM takes a dump to record the problem, reinitializes the application environment record (IWMSVCAE) in the WLM couple data set, and displays message IWM033I to indicate that the WLM application environment information was reinitialized.

Any information including state information in the corrupted application environment record is lost. For example, if the application environment was in a QUIESCED state, any state data is cleared during reinitialization, and the application environment may go back to an AVAILABLE state.

Operator response: None.

System programmer response: Collect the dump and search the problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM support center.

Source: Workload manager (WLM)

Module: IWME2CSC

Routing code: 2,10

Descriptor code: 12

IWM034I PROCEDURE *procname* STARTED FOR SUBSYSTEM *subsysname* APPLICATION ENVIRONMENT *applenv-name* PARAMETERS *start-parameters*

Explanation: WLM has started a procedure for the specified subsystem on behalf of the specified application environment.

In the message text:

procname

The name of the procedure that is being started.

subsysname

The name of the subsystem that the procedure is being started on behalf.

applenv-name

The name of the application environment that the procedure is being started on behalf.

Note: In some cases, *applenv-name* may be SYSBATCH, which is an internal application environment name for batch initiators.

start-parameters

The start parameters that are being passed to the procedure that is being started.

System action: None.

Operator response: None.

System programmer response: None.

Source: Workload manager (WLM)

Module: IWME2CRE

Routing code: Note 13

Descriptor code: -

IWM035I **PROCEDURE** *procname* **NOT STARTED FOR SUBSYSTEM** *subsysname* **APPLICATION ENVIRONMENT** *applenv-name* **PARAMETERS** *start-parameters*

Explanation: WLM attempted to start a server address space but the system was unable to create the address space.

In the message text:

procname

The name of the JCL procedure that is being started.

subsysname

The name of the subsystem for which WLM attempted to start the server.

applenv-name

The application environment to which the server belonged.

Note: In some cases, *applenv-name* may be SYSBATCH, which is an internal application environment name for batch initiators.

System action: WLM retries after 30 seconds.

Operator response: None.

System programmer response: None.

Source: Workload manager (WLM)

Module: IWME2CRE

Routing code: Note 13

Descriptor code: -

IWM036I *hh.mm.ss* **WLM DISPLAY** [*idr*] *text*

Explanation: Where *text* is:

SCHEDULING ENVIRONMENT: *schenvname*

DESCRIPTION: *description*

[AVAILABLE ON SYSTEMS *:sysname sysname sysname*]

[NOT AVAILABLE ON ANY SYSTEM]

The operator issued a DISPLAY WLM,SCHENV command.

In the message text:

hh:mm:ss

The time when the DISPLAY WLM command was issued, in hours(00-23), minutes(00-59), and seconds(00-59).

idr

A 3-digit decimal identifier to be used in a CONTROL C,D command to cancel the status display if it is:

- Written on typewriter or printer consoles
- Displayed inline (that is, not in a display area) on a display console

This identifier does not appear when the display is presented in a display area on a display console.

SCHEDULING ENVIRONMENT: *schenvname*

The name of the scheduling environment being displayed.

DESCRIPTION: *description*

The description of the scheduling environment.

AVAILABLE ON SYSTEMS: *sysname sysname sysname*

The systems on which the scheduling environment is available. If a system is not listed then one or more resources are not in the state required by the scheduling environment.

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NOT AVAILABLE ON ANY SYSTEM

Indicates the scheduling environment is not available on any system.

System action: Processing continues.

Operator response: None.

Source: Workload manager (WLM)

Module: IWMO2DSE

Routing code: -

Descriptor code: 5,8,9

IWM037I *hh.mm.ss* **WLM DISPLAY** [*idr*]*text*

Explanation:

SCHEDULING ENVIRONMENT: *schenvname*

DESCRIPTION: *description*

SYSTEM: *sysname*:

STATUS: {AVAILABLE|NOT AVAILABLE}

{AVAILABLE | NOT AVAILABLE}

[REQUIRED CURRENT

RESOURCE NAME STATE STATE

resourcereqstate

curstate]

[INCLUDES NO RESOURCES]

The operator issued a DISPLAY WLM,SCHENV command with the SYSTEM= keyword.

In the message text:

hh:mm:ss

The time when the DISPLAY WLM command was issued, in hours(00-23), minutes(00-59), and seconds(00-59).

idr

A 3-digit decimal identifier to be used in a CONTROL C,D command to cancel the status display if it is:

- Written on typewriter or printer consoles
- Displayed inline (that is, not in a display area) on a display console

This identifier does not appear when the display is presented in a display area on a display console.

SCHEDULING ENVIRONMENT: *schenvname*

The name of the scheduling environment being displayed.

DESCRIPTION: *description*

The description of the scheduling environment.

SYSTEM: *systemname*

The name of the system being displayed.

STATUS:&tab;{AVAILABLE | NOT AVAILABLE}

Indicates whether the scheduling environment is available.

resource

Represents a resource name that exists in the scheduling environment.

If the resource name is preceded by an asterisk (*) then the current state of the resource does not match the required state.

reqstate

Indicates the required state of the resource in order for the scheduling environment to be available. The required state has the following possible values:

- ON - indicates that the resource state setting must be ON for the resource requirement to be satisfied

- OFF - indicates that the resource state setting must be OFF for the resource requirement to be satisfied

curstate

Indicates the current state of the resource on the system being displayed. The current state has the following possible values:

- ON - if the resource requirement is ON, then this setting will satisfy it
- OFF - if the resource requirement is OFF, then this setting will satisfy it
- RESET - indicates that resource is in an undefined state (this setting will satisfy neither an ON nor an OFF resource requirement)

INCLUDES NO RESOURCES

Indicates there are no resources defined in this scheduling environment.

System action: Processing continues.

Operator response: None.

Source: Workload manager (WLM)

Module: IWMO2DSE

Routing code: -

Descriptor code: 5,8,9

IWM038I *hh.mm.ss* **WLM DISPLAY** [*idr*]text

Explanation:**RESOURCE:**

resourcename

DESCRIPTION:

description

SYSTEM

STATE [SYSTEM STATE]

[SYSTEM STATE]

sysname

state

The operator issued a DISPLAY WLM,RESOURCE command. In the message text:

hh:mm:ss

The time when the DISPLAY WLM command was issued, in hours(00-23), minutes(00-59), and seconds(00-59).

idr

A 3-digit decimal identifier to be used in a CONTROL C,D command to cancel the status display if it is:

- Written on typewriter or printer consoles
- Displayed inline (that is, not in a display area) on a display console

This identifier does not appear when the display is presented in a display area on a display console.

RESOURCE: *resourcename*

The name of the resource being displayed.

DESCRIPTION: *description*

Description of the resource

sysname

The name of the system being displayed. If the SYSTEMS keyword was specified, each active system is displayed.

state

The current state of the resource for the specified system. The state has the following possible values:

- ON - if the resource requirement is ON, then this setting will satisfy it
- OFF - if the resource requirement is OFF, then this setting will satisfy it

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- RESET - indicates that resource is in an undefined state (this setting will satisfy neither an ON nor an OFF resource requirement)

System action: Processing continues.

Operator response: None.

Source: Workload manager (WLM)

Module: IWMO2DRS

Routing code: -

Descriptor code: 5,8,9

IWM039I RESOURCE *resourcename* IS NOW IN THE *resourcestate* STATE

Explanation: The request to change the resource state has completed successfully. The resource *resourcename* is now in the *resourcestate* state. The fields in the message text are:

resourcename

The name of the resource which the MODIFY WLM command has changed.

resourcestate

The new resource state.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Source: Workload manager (WLM)

Module: IWMS4ANP

Routing code: 2,10

Descriptor code: 5

IWM040I MODIFY FOR *resourcename* REJECTED, *text*

Explanation: The request to change the resource *resourcename* is not processed due to the specified rejection text. The fields in the message text are:

resourcename

The name of the resource which the MODIFY WLM command was specifying.

text

text is one of the following:

RESOURCE IS NOT DEFINED

The specified resource is not defined to WLM.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Source: Workload manager (WLM)

Module: IWMS4ANP

Routing code: 2,10

Descriptor code: 5

IWM041I WORKLOAD MANAGEMENT ADDRESS SPACE MODIFY COMMAND AVAILABLE

Explanation: The modify command interface for the workload management address space is initialized and can accept modify commands.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Source: Workload manager (WLM)

Module: IWMO2TSK

Routing code: 2

Descriptor code: 4

IWM042I MODIFY WLM REJECTED, SYSTEM *systemname* IS ALREADY PERFORMING A MODE SWITCH

Explanation: The request to change the workload management mode in effect was not processed because the system *systemname* is busy performing a prior request. The fields in the message text are:

systemname

The name of the system on which the MODIFY WLM command was issued.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Source: Workload manager (WLM)

Module: IWMP2MFY

Routing code: 2

Descriptor code: 5

IWM043I DISPLAY WLM REJECTED, *text*

Explanation: A DISPLAY WLM command was rejected for the reason given by *text*. The possible reasons are:

SCHEDULING ENVIRONMENT *name* IS NOT DEFINED

The specified scheduling environment is not defined in the service definition.

RESOURCE *name* IS NOT DEFINED

The specified resource name is not defined in the service definition.

NO SCHEDULING ENVIRONMENTS FOUND THAT MATCH *name*

No scheduling environments are defined that match the specified pattern.

NO RESOURCES FOUND THAT MATCH *name*

No resources are defined that match the specified pattern.

NO SCHEDULING ENVIRONMENTS ARE DEFINED

No scheduling environments are defined in the service definition.

NO RESOURCES ARE DEFINED

No resources are defined in the service definition.

NO DATA IS AVAILABLE FOR SYSTEM *sysname*

No information is available for the specified system.

System action: Processing continues.

Operator response: Check that parameters are specified correctly.

System programmer response: None.

Source: Workload manager (WLM)

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Module: IWMO2DRS, IWMO2DSE

Routing code: -

Descriptor code: 5

IWM044E SCHEDULING ENVIRONMENT DATA ON SYSTEM *system* IS DAMAGED REASON CODES *code1 code2*

Explanation: During recovery from a failure, workload manager detected damage to its scheduling environment data structures. This message is accompanied by message IWM045E or IWM046E, which further describes the error and the action taken by WLM.

In the message text:

system

The name of the system on which the data is damaged.

code1 code2

Diagnostic information for use by IBM.

System action: An SVC dump is taken.

System programmer response: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Workload manager (WLM)

Module: IWMS4VSE

Routing code: 2,10

Descriptor code: 11

IWM045E SCHEDULING ENVIRONMENT SUPPORT ON SYSTEM *system* IS DISABLED

Explanation: During recovery from a failure, workload manager detected damage to its scheduling environment data structures. Workload manager was unable to recover the data. This message is accompanied by message IWM044E which contains diagnostic data about the error.

In the message text:

system

The name of the system on which the data is damaged.

System action: Processing continues with no scheduling environments defined.

System programmer response: To re-enable scheduling environments take one of the following actions:

- IPL
- Re-install the current service definition and activate a policy. If activation is successful, use the MODIFY WLM command to modify each resource to its proper state.

Source: Workload manager (WLM)

Module: IWMS4FIX, IWMS4TSK

Routing code: 2,10

Descriptor code: 11

IWM046E ALL RESOURCES ON SYSTEM *system* ARE PLACED IN THE RESET STATE

Explanation: During recovery from a failure, workload manager detected damage to its scheduling environment data structures. Workload manager was unable to recover resource states for the system named in the message. This message is accompanied by message IWM044E, which contains diagnostic data about the error.

In the message text:

system

The name of the system on which the data is damaged.

System action: Processing continues with all resources on the named system initialized to the reset state. Work that uses scheduling environments cannot be scheduled to the named system until the resources are modified to the proper states.

System programmer response: Use the MODIFY WLM command to modify each resource to its proper state.

Source: Workload manager (WLM)

Module: IWMS4VSE

Routing code: 2,10

Descriptor code: 11

IWM047E WLM NOT RUNNING WITH ACTIVE POLICY, WLM COUPLE DATA SET CANNOT BE USED BY THIS SYSTEM

Explanation: The WLM policy in the WLM couple data set is in use by one or more systems in the sysplex and this system cannot activate it. One of the following conditions exists:

- The system lost connectivity to the WLM couple data set
- Activation of the service policy failed
- The current service definition has over 100 service classes defined.

System action: WLM is active, but the active service policy is not available.

System programmer response: Use D XCF,COUPLE,TYPE=WLM to determine if connectivity to the WLM couple data set exists. If not reestablish connectivity.

If a problem exists with the activation of a service policy, then message IWM012E appears. Re-enter the VARY WLM,POLICY= command. If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM support center.

Source: Workload manager (WLM)

Module: IWMP2TSK

Routing code: 2,10

Descriptor code: 11

IWM048E WLM RUNNING IN GOAL MODE WITH THE DEFAULT POLICY

Explanation: The system is in goal mode and is using the default WLM policy. One of the following conditions exists:

- The system does not have a WLM couple data set, or does not have connectivity to the WLM couple data set.
- A WLM policy has not been activated since the WLM couple data set was formatted.

System programmer response: Use DISPLAY XCF,COUPLE,TYPE=WLM to determine if a WLM couple data set exists. If it does not, check the specification of the WLM couple data set in the COUPLExx parmlib member.

If a WLM couple data set does exist, use the VARY WLM,POLICY= command to activate a policy. If a problem exists with the activation, message IWM012E will appear.

Source: Workload manager (WLM)

Module: IWMP2TSK

Routing code: 2,10

Descriptor code: 11

IWM049I STRUCTURE(*structure-name*), CONNECT FAILED, RC = *return-code* RSN = *reason-code*

Explanation: WLM attempted to connect to structure *structure-name* and XES encountered problems.

In the message text:

return-code

The IXLCONN return code, as documented in *z/OS MVS Programming: Sysplex Services Reference*.

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reason-code

The IXLCONN reason code, as documented in *z/OS MVS Programming: Sysplex Services Reference*.

System action: None

System programmer response: If a dump is produced, save it. Otherwise, if no dump is produced, check LOGREC. Save the hardcopy log. Search problem reporting data bases for a fix to the problem. If no fix exists, contact the IBM support center.

Source: Workload manager (WLM)

Module: IWMC3CST

Routing code: 2,10

Descriptor code: 5

IWM050I **STRUCTURE**(*structure-name*), *text*

Explanation: This message is issued to indicate that for structure *structure-name* the following status information as specified by *text* exists.

In the message text:

structure-name

The structure that has the status information.

text

CONNECTED

WLM has connected to structure *structure-name*.

DISCONNECTED

WLM has disconnected from structure *structure-name*.

NOT AVAILABLE, SYSTEM IN XCF LOCAL MODE

WLM cannot connect to the structure because the system is running in XCF local mode. For the SYSZWLM_WORKUNIT structure this implies that no multisystem enclave support is available.

System action: None

System programmer response:

- CONNECTED

For the SYSZWLM_WORKUNIT structure, applications that require multisystem enclaves can now begin running.

- DISCONNECTED

For the SYSZWLM_WORKUNIT structure this means that while the structure is disconnected, applications using the structure receive an error return code when using the IWMEXPT/IWMIMPT services.

–

- Applications using the structure get successful completions for the IWMUEXP/IWMUIMP services.

For the SYSZWLM_WORKUNIT structure, if the reason it became disconnected is due to a coupling facility becoming unavailable, then do one of the following:

- Fix the problem with the coupling facility and make it available again.
- If the problem with the coupling facility cannot be fixed immediately use SETXCF START,REBUILD to rebuild the SYSZWLM_WORKUNIT structure into another coupling facility that is available on the systems you require. This may involve updating the CFRM policy to identify the new coupling facility if you have specified preference lists in the SYSZWLM_WORKUNIT structure definition.

Source: Workload manager (WLM)

Module: IWMC3CST, IWMC3DST

Routing code: 2,10

Descriptor code: 5

IWM051I STRUCTURE(*structure-name*), FOR SYSTEM *system-name* CLEANED UP

Explanation: For a failed system *system-name*, WLM attempts to clean up any residual information for structure *structure-name*. This message is issued from each active system in the sysplex that has a connection to the structure *structure-name*.

In the message text:

structure-name

The structure that requires clean up.

system-name

The name of the failing system that requires any related information to this system to be cleaned up in the specified structure.

System action: None

System programmer response: None

Source: Workload manager (WLM)

Module: IWMC3SYS

Routing code: 2,10

Descriptor code: 5

IWM052I STRUCTURE(*structure-name*), STRUCTURE IS NOT DEFINED IN THE ACTIVE POLICY

Explanation: The specified *structure-name* has not been defined in the CFRM policy. For the SYSZWLM_WORKUNIT structure, this implies that WLM cannot support multisystem enclaves.

Note: Disregard this message if you do not wish to exploit multisystem enclaves.

System action: None

System programmer response: If multisystem enclave support is desired, run the IXCMIAPU utility to format the CFRM with structure *structure-name* defined. See *z/OS MVS Planning: Workload Management* for more information.

If WLM finds the structure not defined, then the above text is only issued under the following conditions:

- During IPL processing when WLM automatically attempts to connect to the structure defined
- During task reinitialization of the WLM CF Manager task (task reinitialization occurs when the WLM CF task fails and restarts)
- On the first SETXCF START,POLICY request for the CFRM in the installation.

Note that subsequent SETXCF START,POLICY requests will not cause this message to be issued if the structure is not defined.

Source: Workload manager (WLM)

Module: IWMC3MST

Routing code: 2,10

Descriptor code: 5

IWM053I STRUCTURE(*structure-name*), STRUCTURE FULL, ALLOCATE LARGER STRUCTURE VIA SETXCF ALTER OR REBUILD

Explanation: Structure *structure-name* has encountered a full condition. WLM cannot write any more cache entries to the structure.

System action: None

System programmer response: Create a larger structure by doing one of the following:

- Issuing SETXCF alter to define a larger structure (if the structure is not already at its maximum size).
- Issuing SETXCF rebuild to rebuild the structure into an area that is larger.

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Source: Workload manager (WLM)

Module: IWMC3LWP

Routing code: 2,7

Descriptor code: 2

IWM054I FAILURE IN *wlm-component*, PROCESSING DISABLED

Explanation: For the specified *wlm-component*, processing has been disabled due to an unrecoverable error.

This message is issued to indicate that a function (*wlm-component*) of WLM is now unavailable. The MVS system continues to run in a degraded fashion. An IPL is required to enable the function.

The following functions may become unavailable:

wlm-component

ARM COMPLETIONS RECORDING

WLM support for the guest platform management provider , that tracks completions of Application Response Measurement (ARM) instrumented processes.

LPAR CPU MANAGEMENT

For systems in LPAR mode, WLM support for managing LPAR weights and controlling the optimal number of CPUs is disabled.

DYNAMIC CHANNEL PATH MANAGEMENT

WLM support for managing the number of channels through use of dynamically managed channel paths is disabled.

WLM RT TASK

WLM support for switching the MT mode of processors is disabled.

System action: None

System programmer response: Determine how long the system can continue without the WLM function and plan when a reIPL of MVS will cause the *wlm-component* to become available again.

Source: Workload manager (WLM)

Module: IWML4WSA

Routing code: 2,7

Descriptor code: M2

IWM055I WLM LPAR CLUSTER STRUCTURE *text*

Explanation: This message is issued to provide status information for the WLM LPAR cluster structure as specified by *text*.

In the message, *text* can be:

NOT AVAILABLE, SYSTEM IN NON-LPAR MODE

WLM cannot connect to the structure because the system is running in LPAR mode. No WLM LPAR management support is available.

NOT AVAILABLE, SYSTEM IN XCF LOCAL MODE

WLM cannot connect to the structure because the system is running in XCF local mode. No WLM LPAR management support is available.

NOT AVAILABLE, SYSTEM IN MONOPLEX MODE

WLM cannot connect to the structure because the system is running in monoplex mode. No WLM LPAR management support is available.

System action: None

System programmer response: If WLM LPAR management support is required, the system must be reIPLed in LPAR mode and in XCF SYSPLEX mode.

Source: Workload manager (WLM)

Module: IWMC3TSK

Routing code: 2,10

Descriptor code: 5

IWM056I SCHEDULING ENVIRONMENT *schenvname text*

Explanation: This message is issued when scheduling environment *schenvname* becomes available or unavailable on the local system.

In the message text:

IS NOW AVAILABLE

Scheduling environment is now available. Work that specifies this scheduling environment can now execute.

HAS BECOME UNAVAILABLE

Scheduling environment has become unavailable. Work running with the scheduling environment will continue to run to completion. Work that has not been scheduled to execute will not be selected to run.

System action: None

System programmer response: If the scheduling environment becomes unavailable (and should be available), issue the appropriate F WLM,RESOURCE= commands to make the resources the correct state for the scheduling environment. Use D WLM,SCHENV=*schenvname*,SYSTEM=*systemname* to determine which resources exist for the scheduling environment and which ones are not in the correct state.

Source: Workload manager (WLM)

Module: IWMS4ACP

Routing code: 2,10

Descriptor code: 5

IWM061I *text* ON *system*

Explanation: This message is issued after WLM has connected or disconnected to the multisystem enclave (SYSZWLM_WORKUNIT) or IRD (SYSZWLM_XXXXYYYY) structure. This message identifies status information concerning the availability of the multisystem enclave or IRD support on a system.

In the message, *text* can be:

MULTISYSTEM ENCLAVES AVAILABLE

Indicates that WLM has connected to the multisystem enclaves structure (SYSZWLM_WORKUNIT) and that multisystem enclave support can now be performed.

MULTISYSTEM ENCLAVES NOT AVAILABLE

Indicates that WLM is no longer connected to the multisystem enclaves structure (SYSZWLM_WORKUNIT) and that multisystem enclave support is not available.

WLM CPU MANAGEMENT AVAILABLE

Indicates that WLM has connected to the IRD structure (SYSZWLM_XXXXYYYY) and that WLM CPU management can now be performed.

WLM CPU MANAGEMENT NOT AVAILABLE

Indicates that WLM is no longer connected to the IRD structure (SYSZWLM_XXXXYYYY) and that WLM CPU management support is not available.

In the message, *system* represents the system that the function is available or not available on.

System action: None

System programmer response:

MULTISYSTEM ENCLAVES AVAILABLE

Applications that require support can now begin running.

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MULTISYSTEM ENCLAVES NOT AVAILABLE

For the multisystem enclaves support, this means that while the support is not available (due to structure being disconnected) the following occurs:

- applications using the structure should get structure unavailable return codes when using the IWMEPT/IWMIMPT services
- applications using the structure get successful completions for the IWMUEXP/IWMUIMP services

For the SYSZWLM_WORKUNIT structure, if the reason it became disconnected is due to a Coupling Facility becoming unavailable, then one of the following can be done:

- fix the problem with the Coupling Facility and make it available again
- if the problem with the Coupling Facility can not be fixed immediately, use SETXCF START,REBUILD to rebuild the SYSZWLM_WORKUNIT structure into another Coupling Facility that is available on the systems you require. This may involve updating the CFRM policy to identify the new Coupling Facility if you have specified preference lists in the SYSZWLM_WORKUNIT structure definition.

WLM CPU MANAGEMENT AVAILABLE

WLM can be managing weights between systems in the same LPAR Cluster.

WLM CPU MANAGEMENT NOT AVAILABLE

WLM no longer manages weights between systems in the same LPAR cluster.

For the SYSZWLM_XXXXYYYY structure, if the reason it became disconnected is due to a Coupling Facility becoming unavailable, then one of the following can be done:

- fix the problem with the Coupling Facility and make it available again
- if the problem with the Coupling Facility can not be fixed immediately, use SETXCF START,REBUILD to rebuild the SYSZWLM_XXXXYYYY structure into another Coupling Facility that is available on the systems you require. This may involve updating the CFRM policy to identify the new Coupling Facility if you have specified preference lists in the SYSZWLM_XXXXYYYY definition.

Source: Workload manager (WLM)

Module: IWMC3CSK, IWMC3DST

IWM062E INTERNAL STOP FOR *applenv-name* COMPLETED.

Explanation: The system has completed a WLM internal stop action against an application environment.

In the message text:

applenv-name

The name of the application environment that was stopped.

System action: The system has completed a WLM internal stop action against an application environment.

Operator response: None.

System programmer response: After you correct the problem you must issue a VARY WLM command and specify RESUME to start and stop server address spaces.

If you changed the application environment procedure name or its parameters within the service definition to correct the problem, after installing that service definition and activating a service policy, WLM automatically continues to start and stop server address spaces.

Source: Workload Manager (WLM)

Module: IWME2CCO

Routing code: 2,10

Descriptor code: 11,7

IWM063I **WLM POLICY WAS REFRESHED DUE TO A PROCESSOR SPEED CHANGE OR MT MODE CHANGE.**

Explanation: WLM refreshed the active policy because of processor speed change or MT mode change.

The change might be expected, as in the case of a dynamic CPU capacity change or MT mode change for a processor class, or unexpected in the case where a processor goes into cycle steering mode. Beginning with z196, message IWM063I is accompanied by message IWM064I that explains the reason for the change.

System action: Processing continues.

Operator response: None, if this is because of a capacity or MT mode change. When the change is unexpected, contact hardware support and refer to the HMC for additional information.

System programmer response: None.

Source: Workload Manager (WLM)

Module: IWMP2RAC

Routing code: 2,10

Descriptor code: 4

IWM064I *text*

Explanation: Beginning with IBM zEnterprise 196 (z196), this message follows message IWM063I whenever SRM is notified of a processor speed change. Beginning with the IBM z13™, this message also follows message IWM063I whenever SRM is notified of an MT mode change for a processor class. Message IWM064I explains the reason for the change reported by message IWM063I. Message IWM064I will also be issued when the system is IPLed at reduced speed on z196, or follow-on machines.

In the message text: *text* indicates the reason for the change. Possible reasons are:

- THERE WAS A CHANGE OF THE MT MODE FOR A PROCESSOR CLASS.

This message is preceded by message IWM066I, which shows the affected processor class and the change in MT mode.

- THE SYSTEM IS RUNNING AT NOMINAL CAPACITY.

For example, a cooling problem has been resolved and the system is running at nominal capacity again.

- THE SYSTEM IS RUNNING AT NOMINAL CAPACITY; MODEL CONVERSION OCCURRED.

For example, the user may have upgraded or downgraded the capacity and the system is now running at the new nominal capacity.

- AN MSU TABLE UPDATE OCCURRED.

For example, the system's MSU table was updated. In this case, a second IWM064I message follows to report the actual state.

- THE SYSTEM IS RUNNING WITH REDUCED CAPACITY BECAUSE OF A MANUAL CONTROL SETTING.

For example, the user may have initiated Power Saving Mode.

- THE SYSTEM IS RUNNING WITH REDUCED CAPACITY BECAUSE OF A MACHINE EXCEPTION CONDITION.

For example, there may have been a cooling problem.

- THE SYSTEM IS RUNNING WITH REDUCED CAPACITY BECAUSE OF A NON-EXCEPTION MACHINE CONDITION.

For example, there may have been a firmware update.

- THE SYSTEM IS RUNNING WITH REDUCED CAPACITY BECAUSE OF AN EXCEPTION CONDITION EXTERNAL TO THE MACHINE.

For example, the ambient temperature may have exceeded the maximum value.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Source: Workload Manager (WLM)

Module: IWMP2RAC, IWMI2JST

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Routing code: 2,10

Descriptor code: 4

IWM065I IWM065I WLM POLICY WAS REFRESHED DUE TO THE CHANGE OF OPT PARAMETER
opt-parameter-name

Explanation: WLM refreshed the active policy due to OPT parameter change.

In the message text: *opt-parameter-name* specifies the name of the OPT parameter which has caused the policy refresh. Refer to the *z/OS MVS Initialization and Tuning Reference* for a detailed description of the OPT parameters.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Source: Workload Manager (WLM)

Module: IWMP2RAC

Routing code: 2, 10

Descriptor code: 4

| **IWM066I** MT MODE CHANGED FOR PROCESSOR CLASS *processor-class*. MT MODE CHANGED FROM
| *mm* TO *nn*.

| **Explanation:** The system successfully changed the MT mode for the indicated processor class. In the message text:

| *processor-class*

| Specifies the processor class for which the MT mode was changed. Possible values are:

| zIIP

| *mm* Specifies the MT mode that was previously in effect.

| *nn* Specifies the MT mode that is currently in effect.

| **System action:** Processing continues.

| **Operator response:** None.

| **System programmer response:** None.

| **Source:** Workload manager (WLM)

| **Module:** IWMR2TSK

| **Routing code:** 2, 10

| **Descriptor code:** 4

| **IWM067I** SETTING MT MODE FAILED FOR PROCESSOR CLASS *processor-class* DUE TO THE FOLLOWING
| *reason problem*.

| **Explanation:** The system could not change the MT mode for the indicated processor class. In the message text:

| *processor-class*

| Specifies the processor class for which the MT mode was attempting to be changed. Possible values are:

| zIIP

| *reason* Specifies one of the following reason descriptions:

| OPT PARAMETER CANNOT BE HONORED

| INTERNAL ERROR

| *problem* Specifies one of the following problem descriptions:

| SPECIFIED VALUE IS NOT SUPPORTED BY Z/OS

| SPECIFIED VALUE IS NOT SUPPORTED BY HARDWARE

| HIPERDISPATCH FUNCTION IS NOT ACTIVE

| WAITCOMPLETION=YES IS SET

| CONFIGURATION OF PROCESSORS FAILED
| FUNCTIONAL PROBLEM

| **System action:** Processing continues.

| **Operator response:** Inform your systems programmer.

| **System programmer response:** Analyze the problem and contact IBM, as appropriate.

| For the OPT PARAMETER CANNOT BE HONORED reason, along with:

| • SPECIFIED VALUE IS NOT SUPPORTED BY Z/OS

| Verify that you IPLed the LPAR with LOADxx PROCVIEW CORE in effect and that your hardware supports running with more than one thread per core for *processor-class*.

| • SPECIFIED VALUE IS NOT SUPPORTED BY HARDWARE

| Self-explanatory.

| • HIPERDISPATCH FUNCTION IS NOT ACTIVE

| An MT mode greater than 1 is only supported when HD=YES is set in your OPT parameters. Consider specifying HD=YES.

| • WAITCOMPLETION=YES IS SET

| An MT mode greater than 1 is only supported when WAITCOMPLETION=YES is not active (for example: on the HMC Customize/Delete Activation Profile task, "Do not end the time slice if a partition enters a wait state" must not be checked). Consider deactivating this function.

| For the problem CONFIGURATION OF PROCESSORS FAILED and FUNCTIONAL PROBLEM, contact IBM Support.

| **Source:** Workload manager (WLM)

| **Module:** IWMR2TSK

| **Routing code:** 2, 10

| **Descriptor code:** 4

IWM070I GPMP POLICY HAS BEEN ACTIVATED

Explanation: A guest platform management provider policy has been activated.

System action: None.

Operator response: None.

System programmer response: None.

Source: Workload Manager (WLM)

Module: IWMA3EPO

IWM071I ARM SERVICES DISABLED

Explanation: The ARM (Application Response Measurement) component of WLM has been disabled on this z/OS image due to an operator issuing the MODIFY WLM,AM=DISABLE command.

System action: None.

Operator response: None.

System programmer response: None.

Source: Workload Manager (WLM)

Module: IWMA3AED

IWM072I ARM SERVICES ENABLED

Explanation: The ARM (Application Response Measurement) component of WLM has been enabled on this z/OS image due to an operator issuing the MODIFY WLM,AM=ENABLE command.

System action: None.

Operator response: None.

System programmer response: None.

IWM073I MODIFY WLM,AM=DISABLE COMMAND IGNORED, ARM SERVICES ARE ALREADY DISABLED

Explanation: The ARM (Application Response Measurement) component of WLM is already disabled on this z/OS image, because an operator has issued the MODIFY WLM,AM=DISABLE command before.

System action: None.

Operator response: None.

System programmer response: None.

Source: Workload Manager (WLM)

Module: IWMA3AED

IWM074I MODIFY WLM,AM=ENABLE COMMAND IGNORED, ARM SERVICES ARE ALREADY ENABLED

Explanation: The ARM (Application Response Measurement) component of WLM is already enabled on this z/OS image, because an operator has issued the MODIFY WLM,AM=ENABLE command before.

System action: None.

Operator response: None.

System programmer response: None.

Source: Workload Manager (WLM)

Module: IWMA3AED

IWM075I *hh:mm:ss* WLM DISPLAY *idr text*

Explanation: Where *text* is:

ARM SERVICES ARE {ENABLED|DISABLED}

[GUEST PLATFORM MANAGEMENT PROVIDER JOBNAME=*ms_jobname* ASID=*ms_asid*]

[NO GUEST PLATFORM MANAGEMENT PROVIDER IS CURRENTLY CONNECTED]

[NO GPMP POLICY IS CURRENTLY ACTIVE | GPMP POLICY IS ACTIVE]

NUMBER OF REGISTERED PROCESSES=*nprocs*

APPLICATIONS=*nappl*s

[ADDRESS SPACES CURRENTLY REGISTERED WITH ARM:

JOBNAME=*jobname* ASID=*asid*

APPLICATION=*applname*

IDENTITY PROPERTIES=*nprop* CONTEXT NAMES=*nctx*

STARTED APPLICATION INSTANCES:

appl_instance_name

TRAN=*ntrx* GROUP=*appl_group*

:

REGISTERED TRANSACTIONS:

tran_name

]

**[ADDRESS SPACES WITH DISABLED ARM REGISTRATION:
JOBNAME=*jobname* ASID=*asid*]**

The message is issued in response to the DISPLAY WLM,AM command.

In the message:

hh:mm:ss

The time when the DISPLAY WLM command was issued, in hours(00-23), minutes(00-59), and seconds(00-59).

idr

A 3-digit decimal identifier to be used in a CONTROL C,D command to cancel the status display if it is:

- Written on typewriter or printer consoles
- Displayed inline (that is, not in a display area) on a display console

This identifier does not appear when the display is presented in a display area on a display console.

ms_jobname

The job name of the guest platform management provider , if a guest platform management provider is connected. This identifier does not appear when the display is presented in a display area on a display console.

ms_asid

The address space id (ASID) of the guest platform management provider , if a guest platform management provider is connected.

nprocs

The number of processes (address spaces) that are currently registered with the ARM component.

nappls

The number of applications that are currently registered with the ARM component. Each application with a different application name or different application properties is considered as a new application.

ADDRESS SPACES CURRENTLY REGISTERED WITH ARM:

Starts the list of address spaces that are currently registered with the ARM component. Address spaces can register either by using the C or JAVA API of ARM or by calling `arm_register_application`. As an alternative z/OS legacy applications can implicitly register using the IWMCONN service with the EWLM=YES parameter.

jobname

The job name of the address space that is connected to the WLM ARM agent component.

asid

The ASID of the address space (in hexadecimal format).

applname

The name of the application as it was specified when registering with ARM.

For native ARM callers this name is specified when calling `arm_register_application`. For applications using the WLM Enclave services or the WLM Execution Delay Monitoring services the name is taken from the subsystem type (SUBSYS parameter) when connecting to WLM (IWM4CON with EWLM=YES).

nprop

The number of application identity properties that were specified when the application registered with ARM.

nctx

The number of application context names that were specified when the application registered with ARM.

appl_instance_name

The name of the application instance when starting the application instance.

For native ARM callers this name is specified when calling `arm_start_application`. For applications using the WLM Enclave services or the WLM Execution Delay Monitoring services the name is taken from the SUBSYNM parameter when connecting to WLM (IWM4CON with EWLM=YES).

When no application instance name was specified, <name omitted> is displayed.

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nrtr

The number of currently active transactions for the application instance.

appl_group

The name of the application group that was specified when starting the application instance.

For native ARM callers this name is specified when calling `arm_start_application`. For applications using the WLM Enclave services or the WLM Execution Delay Monitoring services the name is taken from the `GROUPNM` parameter when connecting to WLM (IWM4CON with `EWLM=YES`).

When no group name was specified, `<name omitted>` is displayed.

tran_name

The name of a registered transaction type for this application.

For native ARM callers this name is specified when calling `arm_register_transaction`. For applications using the WLM Enclave services or the WLM Execution Delay Monitoring services the name is set to `SYS_DefaultZWLMTransactionName` when connecting to WLM (IWM4CON with `EWLM=YES`).

ADDRESS SPACES WITH DISABLED ARM REGISTRATION:

Starts the list of address spaces that were registered with the ARM component, but lost the registration due to a `MODIFY WLM,AM=DISABLE` command issued from the operator console. To re-register with ARM these address spaces usually have to be recycled (restarted).

jobname

The job name of the address space that was connected to the WLM ARM agent component.

asid

The ASID of the address space (in hexadecimal format).

System action: Processing continues.

Operator response: None.

System programmer response: None.

Source: Workload Manager (WLM)

Module: IWMO2DIS

IWM077E GUEST PLATFORM MANAGEMENT PROVIDER IS ALREADY ACTIVE

Explanation: This message is issued as a response to the `MODIFY WLM,GPMP,START` command, if an instance of a guest platform management provider is already active on this system.

System action: Processing continues. No other guest platform management provider is started in addition to the guest platform management provider that is currently active.

Operator response: Before issuing the `MODIFY WLM,GPMP,START` command, make sure that no guest platform management provider is already running. You can find out the status of the guest platform management provider on every system in the Sysplex by issuing the `DISPLAY WLM,SYSTEMS,GPMP` operator command.

System programmer response: None.

Source: Workload Manager (WLM)

Module: IWMO2MFY

Routing code: 2

Descriptor code: 5

IWM078E GUEST PLATFORM MANAGEMENT PROVIDER CANNOT BE STARTED, *reason*

Explanation: This message is issued as a response to the `MODIFY WLM,GPMP,START` command.

reason can be one of the following:

ARM IS DISABLED

The processing is currently disabled because the `MODIFY WLM,AM=DISABLE` command has been issued before.

TCP/IP OR z/OS UNIX NOT ACTIVE

The TCP/IP subsystem or z/OS UNIX Systems Services is not available.

| **ASCRE FAILED, RC = xx RSN = yy**

| The creation of the guest platform management provider address space has failed. *xx* and *yy* are the decimal
| return and reason code for the MVS service ASCRE.

FUNCTION NOT AVAILABLE

The function is not available. Hardware support is missing.

System action: Processing continues. The guest platform management provider will not be started.

Operator response:

ARM IS DISABLED

Ensure ARM is enabled before the guest platform management provider is started.

TCP/IP OR z/OS UNIX NOT ACTIVE

Make sure that the TCP/IP subsystem and z/OS UNIX Systems Services are available.

ASCRE FAILED

Retry the action by manually starting the guest platform management provider (MODIFY WLM,GPMP,START).
If that fails again, contact the IBM Support Center.

System programmer response: None.

Source: Workload Manager (WLM)

Module: IWMO2MFY, IWMA3SMA

Routing code: 2

Descriptor code: 5

IWM079E GUEST PLATFORM MANAGEMENT PROVIDER IS NOT ACTIVE

Explanation: This message is issued as a response to the MODIFY WLM,GPMP,STOP command or the MODIFY WLM,GPMP,TRACE= command, if no GPMP is currently active.

System action: Processing continues.

Operator response: None.

System programmer response: None.

Source: Workload Manager (WLM)

Module: IWMO2MFY

Routing code: 2

Descriptor code: 5

IWM080E TIMEOUT OCCURRED DURING STARTUP OF GUEST PLATFORM MANAGEMENT PROVIDER

Explanation: This message is issued as a response to the MODIFY WLM,GPMP,START command, or if the guest platform management provider is implicitly started as a result of a policy activation with a valid guest platform management provider (GPMP) configuration in the service definition.

The guest platform management provider address space has been started, but the guest platform management provider has failed to connect to z/OS WLM within a given time range.

System action: Processing continues.

Operator response: None.

System programmer response: Verify that the guest platform management provider address space (HVEMCA) runs with sufficient priority. By default (no rule in the WLM Service Definition that matches HVEMCA started task), the guest platform management provider address space is classified into system service class SYSTEM. Ensure that WLM classification rules in your WLM policy do not direct the HVEMCA address space into another service class.

If the guest platform management provider is classified in the correct service class, check the guest platform

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management provider logs and messages to find out why guest platform management provider has not connected.

Source: Workload Manager (WLM)

Module: IWMA3SMA

Routing code: 2

Descriptor code: 5

IWM081E GUEST PLATFORM MANAGEMENT PROVIDER HAS TERMINATED ABNORMALLY

Explanation: This message is issued when an active guest platform management provider terminates unexpectedly (without calling ewlm_disconnect()).

System action: Processing continues.

Operator response: None.

System programmer response: Consult the guest platform management provider logs and messages for problem determination.

Source: Workload Manager (WLM)

Module: IWMA3SMA

Routing code: 2

Descriptor code: 5

IWM082E GUEST PLATFORM MANAGEMENT PROVIDER HAS FAILED, HEARTBEAT IS MISSING

Explanation: This message is issued when an active guest platform management provider stops communicating with the z/OS operating system and no longer collects transaction completions. This problem might be caused by internal errors in the guest platform management provider, or might be due to insufficient dispatch priority given to the guest platform management provider address space (HVEMCA).

System action: WLM will automatically recycle the guest platform management provider once before the status of the guest platform management provider changes to SEVFAILED.

Operator response: None.

System programmer response: Consult the guest platform management provider logs and messages for problem determination.

Verify that the guest platform management provider address space runs in system service class SYSTEM. Ensure that WLM classification rules in your WLM policy do not direct the guest management provider address space (HVEMCA) into another service class.

Source: Workload Manager (WLM)

Module: IWMA3SMA

Routing code: 2

Descriptor code: 5

IWM083E GUEST PLATFORM MANAGEMENT PROVIDER COULD NOT BE STOPPED, CANCEL COMMAND ISSUED

Explanation: This message is issued when an active guest platform management provider cannot be stopped or restarted through the normal interface. Diagnostics information has been captured, and the guest platform management provider address space (HVEMCA) will be cancelled by WLM.

System action: Processing continues.

Operator response: None.

System programmer response: Consult the guest platform management provider logs and messages for problem determination.

Source: Workload Manager (WLM)

Module: IWMA3SMA

Routing code: 2

Descriptor code: 5

IWM084I MODIFY COMMAND IGNORED, GUEST PLATFORM MANAGEMENT PROVIDER IS BUSY

Explanation: This message is issued when an operator has issued a MODIFY WLM,GPMP,START, STOP or TRACE request. The guest platform management provider is currently busy processing another request and cannot accept additional requests.

System action: Processing continues. The MODIFY WLM,GPMP command is ignored.

Operator response: Retry the command later.

System programmer response: None.

Source: Workload Manager (WLM)

Module: IWMA3SMA

Routing code: 2

Descriptor code: 5

Appendix. Accessibility

Accessible publications for this product are offered through IBM Knowledge Center (<http://www.ibm.com/support/knowledgecenter/SSLTBW/welcome>).

If you experience difficulty with the accessibility of any z/OS information, send a detailed message to the "Contact us" web page for z/OS (<http://www.ibm.com/systems/z/os/zos/webqs.html>) or use the following mailing address.

IBM Corporation
Attention: MHVRCFS Reader Comments
Department H6MA, Building 707
2455 South Road
Poughkeepsie, NY 12601-5400
United States

Accessibility features

Accessibility features help users who have physical disabilities such as restricted mobility or limited vision use software products successfully. The accessibility features in z/OS can help users do the following tasks:

- Run assistive technology such as screen readers and screen magnifier software.
- Operate specific or equivalent features by using the keyboard.
- Customize display attributes such as color, contrast, and font size.

Consult assistive technologies

Assistive technology products such as screen readers function with the user interfaces found in z/OS. Consult the product information for the specific assistive technology product that is used to access z/OS interfaces.

Keyboard navigation of the user interface

You can access z/OS user interfaces with TSO/E or ISPF. The following information describes how to use TSO/E and ISPF, including the use of keyboard shortcuts and function keys (PF keys). Each guide includes the default settings for the PF keys.

- *z/OS TSO/E Primer*
- *z/OS TSO/E User's Guide*
- *z/OS ISPF User's Guide Vol I*

Dotted decimal syntax diagrams

Syntax diagrams are provided in dotted decimal format for users who access IBM Knowledge Center with a screen reader. In dotted decimal format, each syntax element is written on a separate line. If two or more syntax elements are always present together (or always absent together), they can appear on the same line because they are considered a single compound syntax element.

Each line starts with a dotted decimal number; for example, 3 or 3.1 or 3.1.1. To hear these numbers correctly, make sure that the screen reader is set to read out

punctuation. All the syntax elements that have the same dotted decimal number (for example, all the syntax elements that have the number 3.1) are mutually exclusive alternatives. If you hear the lines 3.1 USERID and 3.1 SYSTEMID, your syntax can include either USERID or SYSTEMID, but not both.

The dotted decimal numbering level denotes the level of nesting. For example, if a syntax element with dotted decimal number 3 is followed by a series of syntax elements with dotted decimal number 3.1, all the syntax elements numbered 3.1 are subordinate to the syntax element numbered 3.

Certain words and symbols are used next to the dotted decimal numbers to add information about the syntax elements. Occasionally, these words and symbols might occur at the beginning of the element itself. For ease of identification, if the word or symbol is a part of the syntax element, it is preceded by the backslash (\) character. The * symbol is placed next to a dotted decimal number to indicate that the syntax element repeats. For example, syntax element *FILE with dotted decimal number 3 is given the format 3 * FILE. Format 3* FILE indicates that syntax element FILE repeats. Format 3* * FILE indicates that syntax element * FILE repeats.

Characters such as commas, which are used to separate a string of syntax elements, are shown in the syntax just before the items they separate. These characters can appear on the same line as each item, or on a separate line with the same dotted decimal number as the relevant items. The line can also show another symbol to provide information about the syntax elements. For example, the lines 5.1*, 5.1 LASTRUN, and 5.1 DELETE mean that if you use more than one of the LASTRUN and DELETE syntax elements, the elements must be separated by a comma. If no separator is given, assume that you use a blank to separate each syntax element.

If a syntax element is preceded by the % symbol, it indicates a reference that is defined elsewhere. The string that follows the % symbol is the name of a syntax fragment rather than a literal. For example, the line 2.1 %OP1 means that you must refer to separate syntax fragment OP1.

The following symbols are used next to the dotted decimal numbers.

? indicates an optional syntax element

The question mark (?) symbol indicates an optional syntax element. A dotted decimal number followed by the question mark symbol (?) indicates that all the syntax elements with a corresponding dotted decimal number, and any subordinate syntax elements, are optional. If there is only one syntax element with a dotted decimal number, the ? symbol is displayed on the same line as the syntax element, (for example 5? NOTIFY). If there is more than one syntax element with a dotted decimal number, the ? symbol is displayed on a line by itself, followed by the syntax elements that are optional. For example, if you hear the lines 5 ?, 5 NOTIFY, and 5 UPDATE, you know that the syntax elements NOTIFY and UPDATE are optional. That is, you can choose one or none of them. The ? symbol is equivalent to a bypass line in a railroad diagram.

! indicates a default syntax element

The exclamation mark (!) symbol indicates a default syntax element. A dotted decimal number followed by the ! symbol and a syntax element indicate that the syntax element is the default option for all syntax elements that share the same dotted decimal number. Only one of the syntax elements that share the dotted decimal number can specify the ! symbol. For example, if you hear the lines 2? FILE, 2.1! (KEEP), and 2.1 (DELETE), you know that (KEEP) is the

default option for the FILE keyword. In the example, if you include the FILE keyword, but do not specify an option, the default option KEEP is applied. A default option also applies to the next higher dotted decimal number. In this example, if the FILE keyword is omitted, the default FILE(KEEP) is used. However, if you hear the lines 2? FILE, 2.1, 2.1.1! (KEEP), and 2.1.1 (DELETE), the default option KEEP applies only to the next higher dotted decimal number, 2.1 (which does not have an associated keyword), and does not apply to 2? FILE. Nothing is used if the keyword FILE is omitted.

*** indicates an optional syntax element that is repeatable**

The asterisk or glyph (*) symbol indicates a syntax element that can be repeated zero or more times. A dotted decimal number followed by the * symbol indicates that this syntax element can be used zero or more times; that is, it is optional and can be repeated. For example, if you hear the line 5.1* data area, you know that you can include one data area, more than one data area, or no data area. If you hear the lines 3* , 3 HOST, 3 STATE, you know that you can include HOST, STATE, both together, or nothing.

Notes:

1. If a dotted decimal number has an asterisk (*) next to it and there is only one item with that dotted decimal number, you can repeat that same item more than once.
2. If a dotted decimal number has an asterisk next to it and several items have that dotted decimal number, you can use more than one item from the list, but you cannot use the items more than once each. In the previous example, you can write HOST STATE, but you cannot write HOST HOST.
3. The * symbol is equivalent to a loopback line in a railroad syntax diagram.

+ indicates a syntax element that must be included

The plus (+) symbol indicates a syntax element that must be included at least once. A dotted decimal number followed by the + symbol indicates that the syntax element must be included one or more times. That is, it must be included at least once and can be repeated. For example, if you hear the line 6.1+ data area, you must include at least one data area. If you hear the lines 2+, 2 HOST, and 2 STATE, you know that you must include HOST, STATE, or both. Similar to the * symbol, the + symbol can repeat a particular item if it is the only item with that dotted decimal number. The + symbol, like the * symbol, is equivalent to a loopback line in a railroad syntax diagram.

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for service, and current service activity will cease if a problem is determined to be associated with out-of-support devices. In such cases, fixes will not be issued.

Minimum supported hardware

The minimum supported hardware for z/OS releases identified in z/OS announcements can subsequently change when service for particular servers or devices is withdrawn. Likewise, the levels of other software products supported on a particular release of z/OS are subject to the service support lifecycle of those products. Therefore, z/OS and its product publications (for example, panels, samples, messages, and product documentation) can include references to hardware and software that is no longer supported.

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