

z/OS



MVS System Messages

Volume 10 (IXC - IZP)

z/OS



MVS System Messages

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Note

Before using this information and the product it supports, be sure to read the general information under "Notices" on page 429.

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This edition applies to Version 1 Release 8 of z/OS (5694-A01), and Version 1 Release 8 of z/OS.e (5655-G52), and to subsequent releases and modifications until otherwise indicated in new editions.

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About this document

This document supports z/OS™ (5694-A01) and z/OS.e (5655-G52).

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

- 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 documents indicate the range of message prefixes in the documents:

- *z/OS MVS System Messages, Vol 1 (ABA-AOM)*, SA22-7631
- *z/OS MVS System Messages, Vol 2 (ARC-ASA)*, SA22-7632
- *z/OS MVS System Messages, Vol 3 (ASB-BPX)*, SA22-7633
- *z/OS MVS System Messages, Vol 4 (CBD-DMO)*, SA22-7634
- *z/OS MVS System Messages, Vol 5 (EDG-GFS)*, SA22-7635
- *z/OS MVS System Messages, Vol 6 (GOS-IEA)*, SA22-7636
- *z/OS MVS System Messages, Vol 7 (IEB-IEE)*, SA22-7637
- *z/OS MVS System Messages, Vol 8 (IEF-IGD)*, SA22-7638
- *z/OS MVS System Messages, Vol 9 (IGF-IWM)*, SA22-7639
- *z/OS MVS System Messages, Vol 10 (IXC-IZP)*, SA22-7640

If you do not know which document describes a particular message, try using LookAt (see “Using LookAt to look up message explanations” on page vi). Here are some of the documents on that bookshelf:

- The MVS System Messages documents
- *z/OS MVS Dump Output Messages*, SA22-7590
- *z/OS MVS System Codes*, SA22-7626
- *z/OS and z/VM HCD Messages*, SC33-7986
- *z/OS JES2 Messages*, SA22-7537
- *z/OS JES3 Messages*, SA22-7552
- *z/OS TSO/E Messages*, SA22-7786
- *z/OS UNIX System Services Messages and Codes*, SA22-7807

For a list of message documents sorted by message prefix, see “Message directory” on page x.

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 (see “Message Color” on page 16).

Who should use these MVS System Messages documents

The system messages documents are for all 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 documents contain descriptions of messages, along with the following:

- “Message library” on page ix tells how to create a customized message library
- “Message directory” on page x lists all message prefixes and the documents containing the message descriptions
- Chapter 1, “Introduction,” on page 1 describes how the system issues messages, where it places them, and their formats
- “Routing Codes” on page 11 and “Descriptor Codes” on page 15 contain an introduction to routing and descriptor codes. These sections describe:
 - The meaning of each code
 - How these codes are specified
 - How the system uses these codes

For information on using routing and descriptor codes to route messages, see *z/OS MVS Planning: Operations*.

Message Explanations: Message chapters are arranged alphabetically by the message prefixes. In each chapter, the messages are arranged numerically by the numbers following the prefix. For a general description of message explanations, see “How Messages are Explained in this Book” on page 5.

Using LookAt to look up message explanations

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

You can use LookAt from these locations to find IBM message explanations for z/OS elements and features, z/VM®, VSE/ESA™, and Clusters for AIX® and Linux™:

- The Internet. You can access IBM message explanations directly from the LookAt Web site at www.ibm.com/servers/eserver/zseries/zos/bkserv/lookat/.
- Your z/OS TSO/E host system. You can install code on your z/OS or z/OS.e systems to access IBM message explanations using LookAt from a TSO/E command line (for example: TSO/E prompt, ISPF, or z/OS UNIX® System Services).
- Your Microsoft® Windows® workstation. You can install LookAt directly from the *z/OS Collection* (SK3T-4269) or the *z/OS and Software Products DVD Collection* (SK3T-4271) and use it from the resulting Windows graphical user interface (GUI). The command prompt (also known as the DOS > command line) version can still be used from the directory in which you install the Windows version of LookAt.
- Your wireless handheld device. You can use the LookAt Mobile Edition from www.ibm.com/servers/eserver/zseries/zos/bkserv/lookat/lookatm.html with a handheld device that has wireless access and an Internet browser (for example: Internet Explorer for Pocket PCs, Blazer or Eudora for Palm OS, or Opera for Linux handheld devices).

You can obtain code to install LookAt on your host system or Microsoft Windows workstation from:

- A CD-ROM in the *z/OS Collection* (SK3T-4269).
- The *z/OS and Software Products DVD Collection* (SK3T-4271).
- The LookAt Web site (click **Download** and then select the platform, release, collection, and location that suit your needs). More information is available in the LOOKAT.ME files available during the download process.

Using IBM Health Checker for z/OS

IBM Health Checker for z/OS is a z/OS component that installations can use to gather information about their system environment and system parameters to help identify potential configuration problems before they impact availability or cause outages. Individual products, z/OS components, or ISV software can provide checks that take advantage of the IBM Health Checker for z/OS framework. This book refers to checks or messages associated with this component.

For additional information about checks and about IBM Health Checker for z/OS, see *IBM Health Checker for z/OS: User's Guide*. Starting with z/OS V1R4, z/OS users can obtain the IBM Health Checker for z/OS from the z/OS Downloads page at www.ibm.com/servers/eserver/zseries/zos/downloads/.

SDSF also provides functions to simplify the management of checks. See *z/OS SDSF Operation and Customization* for additional information.

Where to find the most current message information

The MVS System Messages documents are cumulative. As messages are added to the system they are added to the documents. Similarly, when messages are changed on the system, they are changed in the documents. However, when a message is deleted from the system (no longer issued), the message is *not* deleted from the document. This means that users can look in the most recent message documents for the most current descriptions of system messages.

To find the most current edition of a document, you can look on the Web. Point your browser to the z/OS home page and click on Library:

www.ibm.com/servers/eserver/zseries/zos/

When you are in the z/OS library area, use the messages and codes database to search for the message ID you are interested in.

Where to find more information

Many message descriptions refer to:

- **Data areas and control blocks:** See *z/OS MVS Data Areas, Vol 1 (ABEP-DALT)*, *z/OS MVS Data Areas, Vol 2 (DCCB-ITZYRETC)*, *z/OS MVS Data Areas, Vol 3 (IVT-RCWK)*, *z/OS MVS Data Areas, Vol 4 (RD-SRRA)*, and *z/OS MVS Data Areas, Vol 5 (SSAG-XTLST)*.
- **Dumps:** For examples of ABEND, stand-alone, and SVC dumps and how to read them, see *z/OS MVS Diagnosis: Tools and Service Aids*. For examples of component output from dumps and how to read and request it, see *z/OS MVS Diagnosis: Reference*.
- **Identification of a component, subsystem, or product:** See the *z/OS MVS Diagnosis: Reference* to identify the component, subsystem, or product from the name of an IBM module or for a macro. The module prefix and macro tables give the program identifier to be used in a PIDS symptom in a search argument.
- **System completion and wait state codes:** See *z/OS MVS System Codes*.
- **Logrec data set error records:** For the formatted records, see *z/OS MVS Diagnosis: Reference*.

- **Trace output:** For the formats and the meaning of the information in the generalized trace facility (GTF) trace, instruction address trace, master trace, system trace, and component trace, see *z/OS MVS Diagnosis: Tools and Service Aids*.

The following tables list documents that contain information related to the information contained in the MVS System Messages documents. For the titles and order numbers of documents not in the tables, see *z/OS Information Roadmap*.

Use the appropriate *Principles of Operation* document for the hardware you have installed.

When the MVS System Messages documents reference information in other documents, the shortened version of the document title is used. The following tables show the complete titles and order numbers of the documents that you might need while you are using the MVS System Messages documents.

Information updates on the web

For the latest information updates that have been provided in PTF cover letters and Documentation APARs for z/OS and z/OS.e, see the online document at:

publibz.boulder.ibm.com/cgi-bin/bookmgr_OS390/BOOKS/ZIDOCMST/CCONTENTS.

This document is updated weekly and lists documentation changes before they are incorporated into z/OS publications.

Subsystem, product, and hardware documents

Title	Order Number
<i>ACF/TCAM Base Installation Guide</i>	SC30-3132
<i>Asynchronous Adapter Device Driver Table</i>	N/A
<i>C/370™ Programming Guide</i>	N/A
<i>CICS Family: General Information</i>	N/A
<i>CICS Recovery and Restart Guide</i>	SC34-6246
<i>Common I/O-Device Commands</i>	SA22-7204
<i>CPI Communications Reference</i>	SC26-4399
<i>DATABASE 2 Application Programming Guide</i>	SC26-4293
<i>DB2® Application Programming Guide for TSO and Batch Users</i>	SC26-4081
<i>DATABASE 2 General Information Manual</i>	GC26-4073
<i>IBM DATABASE 2 Messages</i>	SC23-0592
<i>IBM DATABASE 2 Version 2 Messages and Codes</i>	SC26-4113
<i>IBM DATABASE 2 Version 2 Release 3 Messages and Codes</i>	SC26-4379
<i>IBM Graphics Access Method/SP Messages and Codes</i>	SC33-0143
<i>ES/9000®: Operating Your System</i>	SA24-4350
<i>FileNet OSAR Library Unit Product Description</i>	PN9000102
<i>IBM 3290 Information Panel Description and Reference</i>	SR23-6155
<i>IBM 3990/9390 Operations and Recovery Guide</i>	GA32-0253
<i>IBM 3990/9390 Storage Control Planning, Installation, and Storage Administration Guide</i>	GA32-0100
<i>IBM 3990 Storage Control Reference for Model 6</i>	GA32-0099
<i>IBM 9340 Direct Access Storage Subsystems Reference</i>	GC26-4647
<i>LASERDRIVE** 1200 Engineering Specification</i>	N/A

Title	Order Number
LASERDRIVE** 1200 Intelligent Digital Optical Disk Drive with SCSI Engineering Specification	N/A
Maintaining IBM Storage Subsystem Media	GC26-4495
Maintenance Information for the 9037 Sysplex Timer®	SY27-2605
Maintaining IBM Storage Subsystem Media	GC26-4495
OS/2® Programming Tools and Info V-1.3 Manage Macro Assembler/2™	Z91F-9269
OS/2 WARP® Control Program Programming Reference	N/A
Portable Netware System Messages	SC23-2424
Print Services Access Facility/MVS User's Guide and Reference	S544-3100
z/Architecture™ Principles of Operation	SA22-7832
Remote Copy Administrator's Guide and Reference	SC35-0169
SCSI Adapter Completion Code Table	N/A
RT SCSI Adapter Device Driver Table	N/A
Sysplex Timer 9037 Maintenance	SY27-2605
VM/ESA® CP Command and Utility Reference	SC24-5519
VM/ESA General User Command Reference	SC24-5433

Message library

The message library is designed so that operators and programmers in an installation can build their own libraries of the message and code information that fits their specific needs. Each person can place into binders the chapters and documents containing only the messages and codes he or she could receive.

Basic documents

Each installation requires at least one copy of each of the MVS System Messages documents and of z/OS *MVS Dump Output Messages*. Regardless of your specific system's options, you will receive at the console or in listings some subset of the messages in these documents.

Each installation also requires at least one copy of z/OS *MVS System Codes*, which contains the 3-digit hexadecimal system completion codes (abend codes) and the wait state codes produced by all the components of the system.

Note: 4-digit decimal user completion codes appear in documents for the component, subsystem, or product that produces the codes. Codes produced by installation-provided programs do not appear in IBM documents.

All programming and operations personnel need access to the basic documents, although application programmers might not need to have their own copies.

Optional documents

For information about message changes for multiple z/OS elements including JES2, JES3, RACF®, TCP/IP, and others, see *z/OS Summary of Message and Interface Changes*.

CD-ROM collection

A comprehensive source of messages for IBM products is contained in the *IBM Online Library Productivity Edition: Messages and Codes Collection, SK2T-2068*.

Message directory

To use a message prefix to locate the document containing a specific message, see the following table.

Prefix	Component	Document title - order number
ABA	DFSMShsm™	<i>z/OS MVS System Messages, Vol 1 (ABA-AOM)</i> , SA22-7631
ACP	LANRES	<i>z/OS MVS System Messages, Vol 1 (ABA-AOM)</i> , SA22-7631
ADF	Time Sharing Option Extensions (TSO/E) session manager	<i>z/OS TSO/E User's Guide</i> , SA22-7794 <i>z/OS TSO/E Command Reference</i> , SC28-1881 <i>z/OS TSO/E Messages</i> , SA22-7786
ADM	Graphical data display manager	<i>GDDM® Messages</i> , SC33-0869
ADR	DFDSS	<i>z/OS MVS System Messages, Vol 1 (ABA-AOM)</i> , SA22-7631
ADRY	DFDSS	<i>z/OS MVS System Messages, Vol 1 (ABA-AOM)</i> , SA22-7631
ADY	Dump analysis and elimination (DAE)	<i>z/OS MVS System Messages, Vol 1 (ABA-AOM)</i> , SA22-7631
AEM	Graphical data display manager	<i>GDDM Messages</i> , SC33-0869
AFB	VSFORTRAN	<i>VSFORTRAN Version 2 Language and Library Reference</i> , SC26-4221
AHL	Generalized trace facility (GTF)	<i>z/OS MVS System Messages, Vol 1 (ABA-AOM)</i> , SA22-7631 <i>z/OS MVS Dump Output Messages</i> , GC28-1749
AMA	SPZAP service aid	<i>z/OS MVS System Messages, Vol 1 (ABA-AOM)</i> , SA22-7631
AMB	LIST service aid	<i>z/OS MVS System Messages, Vol 1 (ABA-AOM)</i> , SA22-7631
AMD	Stand-alone dump	<i>z/OS MVS System Messages, Vol 1 (ABA-AOM)</i> , SA22-7631
AMS	Availability manager	<i>z/OS MVS System Messages, Vol 1 (ABA-AOM)</i> , SA22-7631 <i>z/OS RMF Messages and Codes</i> , SC33-7993
ANT	Remote Copy	<i>z/OS MVS System Messages, Vol 1 (ABA-AOM)</i> , SA22-7631
ANF	Starting with Release 8: Infoprint® Server	<i>z/OS Infoprint Server Messages and Diagnosis</i> , G544-5747
AOF	System Automation for OS/390®	<i>IBM Tivoli System Automation for z/OS Messages and Codes</i> , SC33-8264
AOM	Administrative operations manager	<i>z/OS MVS System Messages, Vol 1 (ABA-AOM)</i> , SA22-7631
AOP	Infoprint server	<i>z/OS Infoprint Server Messages and Diagnosis</i> , G544-5747
API	Starting with Release 8: Infoprint Server	<i>z/OS Infoprint Server Messages and Diagnosis</i> , G544-5747
APS	Print services facility (PSF)	<i>Print Services Facility™ Messages</i> , S544-3675
ARC	DFSMShsm	<i>z/OS MVS System Messages, Vol 2 (ARC-ASA)</i> , SA22-7632
ARRP	System Control Program (SCP)	See message 52099 in <i>Enterprise System/9000® Models 190, 210, 260, 320, 440, 480, 490, 570, and 610 Messages Part 2</i> for a complete message explanation and appropriate responses; see GA23-0378
ASA	MVS Reuse	<i>z/OS MVS System Messages, Vol 2 (ARC-ASA)</i> , SA22-7632
ASB	Advanced Program-to-Program Communications/MVS (APPC/MVS)	<i>z/OS MVS System Messages, Vol 3 (ASB-BPX)</i> , SA22-7633 <i>z/OS MVS Dump Output Messages</i> , SA22-7590

Prefix	Component	Document title - order number
ASD	LANRES	<i>z/OS MVS System Messages, Vol 3 (ASB-BPX)</i> , SA22-7633
ASM	Auxiliary storage manager (ASM)	<i>z/OS MVS Dump Output Messages</i> , SA22-7590
ASMA	High Level Assembler for MVS & VM & VSE	<i>HLASM Programmer's Guide</i> , SC26-4941
ASR	Symptom record (SYMREC)	<i>z/OS MVS Dump Output Messages</i> , SA22-7590
ATB	Advanced Program-to-Program Communications/MVS (APP/C/MVS)	<i>z/OS MVS System Messages, Vol 3 (ASB-BPX)</i> , SA22-7633 <i>z/OS MVS Dump Output Messages</i> , SA22-7590
ATR	Resource recovery services (RRS)	<i>z/OS MVS System Messages, Vol 3 (ASB-BPX)</i> , SA22-7633 <i>z/OS MVS Dump Output Messages</i> , SA22-7590
I ATRH	Resource recovery services (RRS)	<i>z/OS MVS System Messages, Vol 3 (ASB-BPX)</i> , SA22-7633
AVM	Availability manager	<i>z/OS MVS System Messages, Vol 3 (ASB-BPX)</i> , SA22-7633
BFS	IBM LAN server for MVS	<i>OS/390 MVS System Messages, Vol. 2</i> , GC28-1785
BLG	Information System, Information Management	<i>The Information/Management Library Messages and Codes</i> , SC34-4459
BLM	Information System, Information Management	<i>The Information/Management Library Messages and Codes</i> , SC34-4459
BLS	Interactive problem control system (IPCS)	<i>z/OS MVS System Messages, Vol 3 (ASB-BPX)</i> , SA22-7633 <i>z/OS MVS Dump Output Messages</i> , SA22-7590
BLX	Information System, Information Management	<i>The Information/Management Library Messages and Codes</i> , SC34-4459
BLW	Loadwait/Restart	<i>z/OS MVS System Messages, Vol 3 (ASB-BPX)</i> , SA22-7633
BNH	Network Problem Determination Application (NPDA)	<i>NPDA Messages</i> , SC34-2115
BPX	z/OS UNIX System Services	<i>z/OS MVS System Messages, Vol 3 (ASB-BPX)</i> , SA22-7633 <i>z/OS MVS Dump Output Messages</i> , SA22-7590
CBDA	Hardware configuration definition (HCD)	<i>z/OS MVS System Messages, Vol 4 (CBD-DMO)</i> , SA22-7634 <i>z/OS and z/VM HCD Messages</i> , SC33-7986
CBR	Object access method (OAM)	<i>z/OS MVS System Messages, Vol 4 (CBD-DMO)</i> , SA22-7634
CEE	Language Environment®	<i>z/OS Language Environment Debugging Guide</i> , GA22-7560
CHS	MVSSERV messages for the user and system programmer	<i>z/OS TSO/E Messages</i> , SA22-7786
CIM	Managed System Infrastructure for Setup (msys for Setup)	<i>z/OS MVS System Messages, Vol 4 (CBD-DMO)</i> , SA22-7634
CMP	Compression management services	<i>z/OS MVS System Messages, Vol 4 (CBD-DMO)</i> , SA22-7634
CLB	C/C++ class library runtime messages	<i>z/OS MVS System Messages, Vol 4 (CBD-DMO)</i> , SA22-7634

Prefix	Component	Document title - order number
CNL	MVS message service (MMS)	<i>z/OS MVS System Messages, Vol 4 (CBD-DMO)</i> , SA22-7634 <i>z/OS MVS Dump Output Messages</i> , SA22-7590
CNZ	Console Services	<i>z/OS MVS System Messages, Vol 4 (CBD-DMO)</i> , SA22-7634
COF	Virtual lookaside facility (VLF)	<i>z/OS MVS System Messages, Vol 4 (CBD-DMO)</i> , SA22-7634 <i>z/OS MVS Dump Output Messages</i> , SA22-7590 <i>z/OS TSO/E Messages</i> , GC28-1885
CRG	Context Services	<i>z/OS MVS System Messages, Vol 4 (CBD-DMO)</i> , SA22-7634
CRU	Integrated catalog forward recovery utility (ICFRU)	<i>z/OS MVS System Messages, Vol 4 (CBD-DMO)</i> , SA22-7634
CSQ	MQSeries®	<i>MQSeries for OS/390 V2R1 Messages and Codes</i> , GC34-5375
CSR	Callable services requests (CSR)	<i>z/OS MVS System Messages, Vol 4 (CBD-DMO)</i> , SA22-7634 <i>z/OS MVS Dump Output Messages</i> , SA22-7590
CSV	Contents supervision, virtual fetch, fetch	<i>z/OS MVS System Messages, Vol 4 (CBD-DMO)</i> , SA22-7634 <i>z/OS MVS Dump Output Messages</i> , SA22-7590
CSY	OPC/A Production Control System	<i>OPC/A Messages</i> , SH19-6448
CSZ	OPC/A Network Event Communicator	<i>OPC/A Messages</i> , SH19-6448
CTX	Context Services	<i>z/OS MVS System Messages, Vol 4 (CBD-DMO)</i> , SA22-7634
DFH	Customer Information Control System/Virtual Storage (CICS/VS)	<i>CICS/ESA® Messages and Codes</i> , SC33-0672
DFQ	Interactive storage management facility (ISMF)	Online only. To display the message explanation and suggested action, press the HELP key (PF1) twice when the message is currently displayed. Otherwise, go to ISPF option 7.2 Display Panel, enter the message ID in the message ID field, then press the HELP key (PF1) twice to show the message explanation. For more information, see the "Using Help Panels for Error Messages" topic in the <i>z/OS DFSMS Using the Interactive Storage Management Facility</i> , SC26-7411.
DGT	Interactive storage management facility (ISMF)	Online only. To display the message explanation and suggested action, press the HELP key (PF1) twice when the message is currently displayed. Otherwise, go to ISPF option 7.2 Display Panel, enter the message ID in the message ID field, then press the HELP key (PF1) twice to show the message explanation. For more information, see the "Using Help Panels for Error Messages" topic in the <i>z/OS DFSMS Using the Interactive Storage Management Facility</i> , SC26-7411.
DLX	DLF installation exit COFXDLF2	These messages are issued by the sample DLF installation exit, COFXDLF2, whose source can be found in SYS1.SAMPLIB. Because the issuing module is a "sample", which can be modified by the customer, the messages are not described in an IBM document.
DMO	Device Manager	<i>z/OS MVS System Messages, Vol 4 (CBD-DMO)</i> , SA22-7634 <i>z/OS MVS Dump Output Messages</i> , SA22-7590
DQD	Cache RMF™ Reporter (CRR)	<i>Cache RMF Reporter Program Description/Operations Manual</i> , SH20-6295
DRK	OPC/A Event Manager Subsystem	<i>OPC/A Messages</i> , SH19-6448

Prefix	Component	Document title - order number
DSI	NetView®	<i>TME 10™ NetView for OS/390 Messages</i> , SC31-8237
DSM	Document Composition Facility	<i>DCF: Messages</i> , SH35-0048
DSM	Document Library Facility	<i>DCF: Messages</i> , SH35-0048
DSN	Database 2™	<i>DB2 Universal Database™ for OS/390 Messages and Codes</i> , GC26-9011
DZI	Overlay Generation Language	<i>IBM Overlay Generation Language/370 User's Guide and Reference</i> , S544-3702
DZJ	Print Management Facility	<i>Print Management Facility User's Guide and Reference</i> , SH35-0059
EDC	C/C++ Run-time Library	<i>z/OS Language Environment Debugging Guide</i> , GA22-7560
EDG	DFSMSrmm™	<i>z/OS MVS System Messages, Vol 5 (EDG-GFS)</i> , SA22-7635
ELM	IBM Communications Server — SNA	<i>z/OS Communications Server: SNA Messages</i> , SC31-8790
EQQ	OPC/ESA	<i>OPC/ESA Messages and Codes</i> , SH19-6719
ERB	Resource Measurement Facility (RMF)	<i>z/OS MVS System Messages, Vol 5 (EDG-GFS)</i> , SA22-7635 <i>z/OS RMF Messages and Codes</i> , SC33-7993
ERX	Graphical data display manager	<i>GDDM Messages</i> , SC33-0869
EWX	LANRES	<i>z/OS MVS System Messages, Vol 5 (EDG-GFS)</i> , SA22-7635
EZA	IBM Communication Server — IP	<i>z/OS Communications Server: IP Messages Volume 1 (EZA)</i> , SC31-8783
EZB	IBM Communication Server — IP	<i>z/OS Communications Server: IP Messages Volume 2 (EZB, EZD)</i> , SC31-8784
EZM	Application Enabling Technology (AET)/Auto UNIX System	<i>OS/390 Application Enabling Technology: Administration and Programming</i> , GC28-1993 <i>OS/390 Application Enabling Technology: Customization Guide</i> , GC28-1994 <i>OS/390 MVS System Messages (EWX-IEB)</i> , GC28-1786
EZY	z/OS Communication Server — IP	<i>z/OS Communications Server: IP Messages Volume 3 (EZY)</i> , SC31-8785
EZZ	z/OS Communication Server — IP	<i>z/OS Communications Server: IP Messages Volume 4 (EZZ, SNM)</i> , SC31-8786
FAN(G)	REXX/370 compiler	<i>IBM Compiler and Library for SAA REXX/370 User's Guide and Reference</i> , SH19-8160
FDBX	UNIX System Services	<i>z/OS UNIX System Services Messages and Codes</i> , SA22-7807
FLM	Software configuration and library manager	<i>z/OS ISPF Messages and Codes</i>
FOMC	UNIX System Services	<i>z/OS UNIX System Services Messages and Codes</i> , SA22-7807
FOMF	UNIX System Services	<i>z/OS UNIX System Services Messages and Codes</i> , SA22-7807
FOMI	UNIX System Services	<i>z/OS UNIX System Services Messages and Codes</i> , SA22-7807
FOMM	UNIX System Services	<i>z/OS UNIX System Services Messages and Codes</i> , SA22-7807
FOMO	UNIX System Services	<i>z/OS UNIX System Services Messages and Codes</i> , SA22-7807
FOMOA	UNIX System Services	<i>z/OS UNIX System Services Messages and Codes</i> , SA22-7807
FOMOG	UNIX System Services	<i>z/OS UNIX System Services Messages and Codes</i> , SA22-7807
FOMOH	UNIX System Services	<i>z/OS UNIX System Services Messages and Codes</i> , SA22-7807

Prefix	Component	Document title - order number
FSUM	UNIX System Services	<i>z/OS UNIX System Services Messages and Codes</i> , SA22-7807
FSUMA	UNIX System Services	<i>z/OS UNIX System Services Messages and Codes</i> , SA22-7807
FSUMB	UNIX System Services	<i>z/OS UNIX System Services Messages and Codes</i> , SA22-7807
FSUMF	UNIX System Services	<i>z/OS UNIX System Services Messages and Codes</i> , SA22-7807
FOR	LE FORTRAN Library	<i>IBM Language Environment for MVS & VM FORTRAN Run-Time Migration Guide</i> , SC26-8499
GDE	Distributed FileManager/MVS (DFM/MVS)	<i>z/OS MVS System Messages, Vol 5 (EDG-GFS)</i> , SA22-7635
I GFSA	Network File System Server	<i>z/OS Network File System Guide and Reference</i> , SC26-7417
I GFSC	Network File System Server Client Messages	<i>z/OS Network File System Guide and Reference</i> , SC26-7417
GIM	SMP/E	<i>SMP/E Messages, Codes, and Diagnosis</i> ,
GQD	Graphical data display manager	<i>GDDM Messages</i> , SC33-0869
GQF	Graphical data display manager	<i>GDDM Messages</i> , SC33-0869
HASP	JES2, network job entry facility for JES2	<i>z/OS JES2 Messages</i> , SA22-7537
I HZS	IBM Health Checker for z/OS	<i>z/OS MVS System Messages, Vol 6 (GOS-IEA)</i> , SA22-7636
IAR	Real storage manager (RSM)	<i>z/OS MVS System Messages, Vol 6 (GOS-IEA)</i> , SA22-7636 <i>z/OS MVS Dump Output Messages</i> , SA22-7590
I IARH	Real storage manager (RSM)	<i>z/OS MVS System Messages, Vol 6 (GOS-IEA)</i> , SA22-7636
IAT	JES3	<i>z/OS JES3 Messages</i> , SA22-7552
I IAZ	JES Common	<i>z/OS MVS System Messages, Vol 6 (GOS-IEA)</i> , SA22-7636
ICE	DFSORT™ sort program	<i>z/OS DFSORT Messages, Codes and Diagnosis Guide</i> , SC26-7525
ICH	Resource Access Control Facility (RACF)	<i>z/OS Security Server RACF Messages and Codes</i> , SA22-7686
ICK	Device Support Facilities	<i>Device Support Facilities User's Guide and Reference</i> , GC35-0033
ICN	NCP/SSP/EP	<i>NCP/SSP/EP Messages and Codes</i> , SC30-3169
ICP	Input/Output Configuration Program (IOCP)	<i>z/OS MVS System Messages, Vol 6 (GOS-IEA)</i> , SA22-7636 <i>Input/Output Configuration Program User's Guide and Reference</i> , GC28-1027
ICQA	Information Center Facility administrator messages	<i>z/OS TSO/E Messages</i> , SA22-7786
ICQC	Information Center Facility user messages	<i>z/OS TSO/E Messages</i> , SA22-7786
ICT	Programmed Cryptographic Facility	<i>z/OS MVS System Messages, Vol 6 (GOS-IEA)</i> , SA22-7636
ICU	Cryptographic Unit Support	<i>z/OS MVS System Messages, Vol 6 (GOS-IEA)</i> , SA22-7636
IDA	Virtual storage access method (VSAM) control block expansion	<i>z/OS MVS System Messages, Vol 6 (GOS-IEA)</i> , SA22-7636
IDC	Access method devices	<i>z/OS MVS System Messages, Vol 6 (GOS-IEA)</i> , SA22-7636

Prefix	Component	Document title - order number
IEA	<ul style="list-style-type: none"> • Allocation/unallocation • Auxiliary storage manager (ASM) • Contents supervision • Communications task (COMMTASK) • Data Facility Product (DFP) components • Generalized trace facility (GTF) • Initial program load (IPL) • Input/output supervisor (IOS) • Master scheduler • Nucleus initialization program (NIP) • Program Call authorization (PC/AUTH) service routines • Reconfiguration • Recovery termination manager (RTM) • Supervisor control • System resources manager • System trace • Timer supervision • Virtual storage management (VSM) 	<i>z/OS MVS System Messages, Vol 6 (GOS-IEA)</i> , SA22-7636 <i>z/OS MVS Dump Output Messages</i> , SA22-7590
IEB	Data Facility Product (DFP) utilities	<i>z/OS MVS System Messages, Vol 7 (IEB-IEE)</i> , SA22-7637
IEC	Data Facility Product (DFP) components	<i>z/OS MVS System Messages, Vol 7 (IEB-IEE)</i> , SA22-7637 <i>z/OS DFSMSdfp Diagnosis</i> , GY27-7618

Prefix	Component	Document title - order number
IEE	<ul style="list-style-type: none"> • Auxiliary storage manager (ASM) • Communications task (COMMTASK) • Data Facility Product (DFP) components • JES2 • JES3 • Master scheduler • Reconfiguration • Recovery termination manager (RTM) • Supervisor control • System management facilities (SMF) • System resources manager (SRM) • System trace • Task management • Timer supervision 	<p><i>z/OS MVS System Messages, Vol 7 (IEB-IEE)</i>, SA22-7637</p> <p><i>z/OS MVS Dump Output Messages</i>, SA22-7590</p>
IEF	<ul style="list-style-type: none"> • Allocation/unallocation • Converter/interpreter • Data Facility Product (DFP) components • Initial program load (IPL) • Initiator/terminator • JES/scheduler services • JES2 • Master scheduler • Master subsystem/subsystem interface (MSI) • Reconfiguration • Scheduler JCL facilities (SJF) • Scheduler restart • Scheduler services (ENF) • System management facilities (SMF) 	<p><i>z/OS MVS System Messages, Vol 8 (IEF-IGD)</i>, SA22-7638</p> <p><i>z/OS MVS Dump Output Messages</i>, SA22-7590</p>
IEFC	Converter	<i>z/OS MVS System Messages, Vol 8 (IEF-IGD)</i> , SA22-7638
IEFI	Converter/interpreter	<i>z/OS MVS System Messages, Vol 8 (IEF-IGD)</i> , SA22-7638
IEH	Data Facility Product (DFP) utilities	<i>z/OS MVS System Messages, Vol 8 (IEF-IGD)</i> , SA22-7638
IEV	Assembler H	<i>Assembler H Version 2 Application Programming: Guide</i> , SC26-4036

Prefix	Component	Document title - order number
IEW	<ul style="list-style-type: none"> • DFSMS • Linkage editor • Binder • Transport utility • Loader 	<i>z/OS MVS System Messages, Vol 8 (IEF-IGD)</i> , SA22-7638
IFA	System management facilities (SMF)	<i>z/OS MVS System Messages, Vol 8 (IEF-IGD)</i> , SA22-7638 <i>z/OS MVS Dump Output Messages</i> , SA22-7590
IFB	Input/output environment recording routines: OBR and SVC 76	<i>z/OS MVS System Messages, Vol 8 (IEF-IGD)</i> , SA22-7638
IFC	IFCDIP00 service aid for the logrec data set IFCEREP0 and IFCEREP1 service aids	<i>z/OS MVS System Messages, Vol 8 (IEF-IGD)</i> , SA22-7638 <i>Environmental Record Editing and Printing Program (EREP) User's Guide and Reference</i> , GC28-1378
IFD	Online test executive program (OLTEP)	<i>OS/390 MVS System Messages, Vol. 4</i> , GC28-1787
IFL	Network Control Program (NCP) Advanced Communications Function (ACF) for Network Control Program (NCP)	<i>3704 and 3705 Control Program Generation and Utilities Guide and Reference Manual</i> , GC30-3008 <i>Network Control Program/System Support Programs/Emulation Programs Messages and Codes</i> , SC30-3169
IFO	MVS Assembler	<i>OS/VS - VM/370 Assembler Programmer's Guide</i> , GC33-4021
IGD	Storage management subsystem (SMS) of Data Facility Product (DFP)	<i>z/OS MVS System Messages, Vol 8 (IEF-IGD)</i> , SA22-7638 <i>z/OS MVS Dump Output Messages</i> , SA22-7590
IGF	Dynamic device reconfiguration (DDR) Machine check handler (MCH)	<i>z/OS MVS System Messages, Vol 9 (IGF-IWM)</i> , SA22-7639
IGGN	Data Facility Product (DFP)	<i>z/OS MVS System Messages, Vol 9 (IGF-IWM)</i> , SA22-7639
IGV	Virtual storage management (VSM)	<i>z/OS MVS System Messages, Vol 9 (IGF-IWM)</i> , SA22-7639
IGW	Data Facility Product (DFP) Storage management subsystem (SMS)	<i>z/OS MVS System Messages, Vol 9 (IGF-IWM)</i> , SA22-7639 <i>z/OS MVS Dump Output Messages</i> , SA22-7590
IGY	VS COBOL II	<i>VS COBOL II Application Programming Guide</i> , SC26-4045
IGZ	VS COBOL II	<i>VS COBOL II Application Programming: Debugging</i> , SC26-4049, <i>z/OS Language Environment Debugging Guide</i> , GA22-7560
IHJ	Data Facility Product (DFP) checkpoint/scheduler restart	<i>z/OS MVS System Messages, Vol 9 (IGF-IWM)</i> , SA22-7639
IKF	VS COBOL II	<i>VS COBOL II Application Programming: Debugging</i> , SC26-4049
IKJ	Time Sharing Option Extensions (TSO/E)	<i>z/OS TSO/E Messages</i> , SA22-7786 <i>z/OS MVS System Messages, Vol 9 (IGF-IWM)</i> , SA22-7639 <i>z/OS MVS Dump Output Messages</i> , SA22-7590
IKM	Programming Language/I (PL/I) syntax checker	<i>z/OS MVS System Messages, Vol 9 (IGF-IWM)</i> , SA22-7639

Prefix	Component	Document title - order number
IKT	Time Sharing Option Extensions (TSO/E) IBM Communications Server — SNA	<i>z/OS TSO/E Messages</i> , SA22-7786, SC27-0614, SC27-0470, SC23-0114 <i>z/OS Communications Server: SNA Messages</i> , SC31-8790
ILM	IBM License Manager	<i>z/OS MVS System Messages, Vol 9 (IGF-IWM)</i> , SA22-7639
ILR	Auxiliary storage manager (ASM)	<i>z/OS MVS System Messages, Vol 9 (IGF-IWM)</i> , SA22-7639
ILX	VS FORTRAN Compiler	<i>VS FORTRAN Version 2 Programming Guide for CMS and MVS</i> , SC26-4222
IHV	System Automation for OS/390	<i>IBM Tivoli System Automation for z/OS Messages and Codes</i>
ING	System Automation for OS/390	<i>IBM Tivoli System Automation for z/OS Messages and Codes</i> , SC33-8264
INM	Interactive Data Transmission Facility (IDTF) TRANSMIT and RECEIVE commands	<i>z/OS TSO/E Messages</i> , SA22-7786
IOAC	Open Systems Adapter-Express (OSA-Express)	<i>System z9 and zSeries OSA-Express Customer's Guide and Reference</i> , SA22-7935
IOP	Input/output configuration program (IOCP)	<i>z/OS MVS System Messages, Vol 9 (IGF-IWM)</i> , SA22-7639
IOS	Input/output supervisor (IOS)	<i>z/OS MVS System Messages, Vol 9 (IGF-IWM)</i> , SA22-7639 <i>z/OS MVS Dump Output Messages</i> , SA22-7590
IPD	FORTRAN syntax checker	<i>z/OS MVS System Messages, Vol 9 (IGF-IWM)</i> , SA22-7639
IRA	System resources manager (SRM)	<i>z/OS MVS System Messages, Vol 9 (IGF-IWM)</i> , SA22-7639 <i>z/OS MVS Dump Output Messages</i> , SA22-7590
IRD	ESCON® Director Device Support (EDDS)	<i>z/OS MVS System Messages, Vol 9 (IGF-IWM)</i> , SA22-7639
IRR	Resource Access Control Facility (RACF)	<i>z/OS Security Server RACF Messages and Codes</i> , SA22-7686
IRX	Time Sharing Option Extensions (TSO/E) restructured extended executor language (REXX)	<i>z/OS TSO/E Messages</i> , SA22-7786
ISG	Global resource serialization	<i>z/OS MVS System Messages, Vol 9 (IGF-IWM)</i> , SA22-7639 <i>z/OS MVS Dump Output Messages</i> , SA22-7590
ISN	Service Processor Interface	<i>z/OS MVS System Messages, Vol 9 (IGF-IWM)</i> , SA22-7639
ISP	Interactive system productivity facility	<i>z/OS ISPF Messages and Codes</i>
ISQ	System Automation for OS/390	<i>IBM Tivoli System Automation for z/OS Messages and Codes</i>
ISRB	Interactive system productivity facility	<i>z/OS ISPF Messages and Codes</i>
ISRL	Library management facility	<i>z/OS ISPF Messages and Codes</i>
IST	IBM Communications Server — SNA	<i>z/OS Communications Server: SNA Messages</i> , SC31-8790
ISU	IBM Communications Server — SNA	<i>z/OS Communications Server: SNA Messages</i> , SC31-8790

Prefix	Component	Document title - order number
ITA	TOLTEP for Advanced Communications Function for Virtual Telecommunications Access Method (ACF/VTAM®)	<i>Advanced Communications Function for VTAM® Messages and Codes</i> , SC27-0614, SC27-0470, SC23-0114
ITT	Component trace	<i>z/OS MVS System Messages, Vol 9 (IGF-IWM)</i> , SA22-7639 <i>z/OS MVS Dump Output Messages</i> , SA22-7590
ITV	Data-in-virtual	<i>z/OS MVS System Messages, Vol 9 (IGF-IWM)</i> , SA22-7639 <i>z/OS MVS Dump Output Messages</i> , SA22-7590
ITZ	Transaction trace	<i>z/OS MVS System Messages, Vol 9 (IGF-IWM)</i> , SA22-7639 <i>z/OS MVS Dump Output Messages</i> , SA22-7590
IST	IBM Communications Server — SNA	<i>z/OS Communications Server: SNA Messages</i> , SC31-8790
IVT	IBM Communications Server — SNA	<i>z/OS Communications Server: SNA Messages</i> , SC31-8790
IWM	Workload manager (WLM)	<i>z/OS MVS System Messages, Vol 9 (IGF-IWM)</i> , SA22-7639 <i>z/OS MVS Dump Output Messages</i> , SA22-7590
IXC	Cross-system coupling facility (XCF)	<i>z/OS MVS System Messages, Vol 10 (IXC-IZP)</i> , SA22-7640 <i>z/OS MVS Dump Output Messages</i> , SA22-7590
IXG	System logger (SCLOG)	<i>z/OS MVS System Messages, Vol 10 (IXC-IZP)</i> , SA22-7640
IXL	Cross System Extended Services® (XES)	<i>z/OS MVS System Messages, Vol 10 (IXC-IZP)</i> , SA22-7640 <i>z/OS MVS Dump Output Messages</i> , SA22-7590
IXP	Input/output configuration program (IOCP)	<i>z/OS MVS System Messages, Vol 10 (IXC-IZP)</i> , SA22-7640 <i>ES/9000 ES/3090™ IOCP User's Guide Volume A04</i> , GC38-0097
IXZ	JES common coupling services (JESXCF)	<i>z/OS MVS System Messages, Vol 10 (IXC-IZP)</i> , SA22-7640 <i>z/OS MVS Dump Output Messages</i> , SA22-7590
IYP	Input/output configuration program (IOCP)	<i>z/OS MVS System Messages, Vol 10 (IXC-IZP)</i> , SA22-7640 <i>zSeries™ 900 IOCP User's Guide for IYP IOCP</i> , SB10-7029
IZP	Input/output configuration program (IOCP)	<i>z/OS MVS System Messages, Vol 10 (IXC-IZP)</i> , SA22-7640 <i>ES/9000 IOCP User's Guide and ESCON CTC Reference Volume A04</i> , GC38-0401
SNM	IBM Communication Server — IP	<i>z/OS Communications Server: IP Messages Volume 4 (EZZ, SNM)</i> , SC31-8786
USS	IBM Communications Server — SNA	<i>z/OS Communications Server: SNA Messages</i> , SC31-8790

Message translation

Through the MVS message service (MMS), you can translate MVS system messages into other languages. Messages that cannot be translated include the following:

- Initialization messages
- DFSMS/MVS messages
- JES3 messages

- Some complicated multiple-line messages

See *z/OS MVS Planning: Operations* and *z/OS MVS Programming: Assembler Services Guide* for information about using the MMS.

Summary of changes

New, changed, or deleted messages can affect your system's automation routines. To ensure that your installation's automation routines are current, review the new, changed, and deleted messages listed in *z/OS Summary of Message and Interface Changes*. *z/OS Summary of Message and Interface Changes* is available on the *z/OS Collection*, SK3T-4269 and in the *z/OS Internet library* at:

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

**Summary of changes
for SA22-7640-15
z/OS Version 1 Release 8
as updated April 2007**

The document contains information previously presented in *z/OS MVS System Messages, Vol 10 (IXC-IZP)*, SA22-7640-14, which supports z/OS Version 1 Release 8.

You may notice changes in the style and structure of some content in this document—for example, headings that use uppercase for the first letter of initial words only, and procedures that have a different look and format. The changes are ongoing improvements to the consistency and retrievability of information in our documents.

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

**Summary of changes
for SA22-7640-14
z/OS Version 1 Release 8**

The document contains information previously presented in *z/OS MVS System Messages, Vol 10 (IXC-IZP)*, SA22-7640-13, which supports z/OS Version 1 Release 7.

This document contains terminology, maintenance, and editorial changes, including changes to improve consistency and retrievability.

**Summary of changes
for SA22-7640-13
z/OS Version 1 Release 7
as updated April 2006**

The document contains information previously presented in *z/OS MVS System Messages, Vol 10 (IXC-IZP)*, SA22-7640-12, which supports z/OS Version 1 Release 7.

This document contains terminology, maintenance, and editorial changes, including changes to improve consistency and retrievability.

**Summary of changes
for SA22-7640-12
z/OS Version 1 Release 7
as updated September 2005**

The document contains information previously presented in *z/OS MVS System Messages, Vol 10 (IXC-IZP)*, SA22-7640-11, which supports z/OS Version 1 Release 7.

This document contains terminology, maintenance, and editorial changes, including changes to improve consistency and retrievability.

**Summary of changes
for SA22-7640-11
z/OS Version 1 Release 7**

The document contains information previously presented in *z/OS MVS System Messages, Vol 10 (IXC-IZP)*, SA22-7640-10, which supports z/OS Version 1 Release 6.

References to OpenEdition have been replaced with z/OS UNIX System Services or z/OS UNIX.

This document contains terminology, maintenance, and editorial changes, including changes to improve consistency and retrievability.

**Summary of changes
for SA22-7640-10
z/OS Version 1 Release 6
as updated March 2005**

The document contains information previously presented in *z/OS MVS System Messages, Vol 10 (IXC-IZP)*, SA22-7640-09, which supports z/OS Version 1 Release 5.

This document contains terminology, maintenance, and editorial changes, including changes to improve consistency and retrievability.

**Summary of changes
for SA22-7640-09
z/OS Version 1 Release 6**

The document contains information previously presented in *z/OS MVS System Messages, Vol 10 (IXC-IZP)*, SA22-7640-08, which supports z/OS Version 1 Release 5.

This document contains terminology, maintenance, and editorial changes, including changes to improve consistency and retrievability.

**Summary of changes
for SA22-7640-07
z/OS Version 1 Release 5**

The document contains information previously presented in *z/OS MVS System Messages, Vol 10 (IXC-IZP)*, SA22-7640-06, which supports z/OS Version 1 Release 4.

This document contains terminology, maintenance, and editorial changes, including changes to improve consistency and retrievability.

Chapter 1. Introduction

The z/OS operating system issues messages from z/OS elements and features, and from program products and application programs running on the system. The system issues messages in different ways and to different locations:

- Most messages are issued through WTO and WTOR macros to one of the following locations:
 - Console
 - Hard-copy log
 - Job log
 - SYSOUT data set
- Routing codes determine where the messages are displayed or printed. The routing codes for messages issued by the operating system are included with each message.
- Other messages are issued through the WTL macro or the LOG operator command to the system log (SYSLOG).
- Dump messages are issued through the dumping services routines and can appear in:
 - SVC dumps, stand-alone dumps, or SYSMDUMP ABEND dumps formatted by the interactive problem control system (IPCS)
 - Trace data sets formatted by the interactive problem control system (IPCS)
 - ABEND dumps or SNAP dumps produced by the dumping services
- In dump or trace data sets formatted by IPCS, the messages appear interactively on a terminal or in a printed dump.
- Some messages are issued through DFSMS/MVS access methods directly to one of the following locations:
 - Output data set
 - Display terminal

Locations

Console

Messages sent to a multiple console support (MCS) console, an SNA multiple console support (SMCS) console, or an extended MCS (EMCS) console are intended for the operators. Operations can control which messages are displayed. See *z/OS MVS Planning: Operations* for information about controlling message display.

The system writes in the hard-copy log all messages sent to a console, whether the message is displayed or not.

OPERLOG

- | The operations log (OPERLOG) records all message traffic from each system in a sysplex that activates the OPERLOG. The operations log consists of the following data:
 - Messages to and from all consoles
 - Commands and replies entered by the operator

System Log

The system log (SYSLOG) is a SYSOUT data set that stores the messages and commands from the current system. SYSOUT data sets are output spool data sets on direct access storage devices (DASD) provided by the job entry subsystem (either JES2 or JES3). An installation usually prints the system log periodically. The system log consists of:

- All messages issued through WTL macros
- All messages entered by operator LOG commands

- Usually, the hard-copy log
- Any messages routed to the system log from any system component or program

Job Log

Messages sent to the job log are intended for the programmer who submitted a job. The job log is specified in the system output class on the MSGCLASS parameter of the JCL JOB statement.

SYSOUT Data Set

Messages sent to a SYSOUT data set are intended for a programmer. These messages are issued by an assembler or compiler, the linkage editor and loader, and an application program. If the SYSOUT data set and the MSGCLASS parameter on the JCL JOB statement specify the same class, all messages about a program will appear in the same SYSOUT listing.

Messages

A displayed or printed message can appear by itself or with other information, such as a time stamp. The following topic shows the format of the message. Then the topics show the information accompanying the message on the MCS console and on the hard-copy log in a JES2 system and a JES3 system.

Message Format

```
id CCCnnn text
id CCCnnns text
id CCCnnnns text
id CCCnnnnns text
id CCCSnnns text
```

id Reply identifier: It is optional. It appears if an operator reply is required. The operator specifies it in the reply.

CCCNnn, CCCnnns, CCCnnnns, CCCnnnnns, CCCSnnns

Message identifier.

CCC

A prefix to identify the component, subsystem, or product that produced the message. The prefix is three characters.

S The subcomponent identifier, which is an optional addition to the prefix to identify the subcomponent that produced the message. The subcomponent identifier is one character.

nnn, nnnn, nnnnn

A serial number to identify the individual message. The serial number is three, four, or five decimal digits.

s An optional type code, which is one of the following:

A **Action:** The operator must perform a specific action.

D **Decision:** The operator must choose an alternative.

E **Eventual action:** The operator must perform action when time is available.

I **Information:** No operator action is required.

S **Severe error:** Severe error messages are for a system programmer.

W **Wait:** Processing stops until the operator performs a required action.

For messages with the prefix ADR, the type codes depend on whether the message is issued to the operator console or to SYSPRINT. For console messages, the type codes indicate the operator action:

- A** **Action:** Operator must perform a specific action.
- D** **Decision:** Operator must choose an alternative action.
- I** **Information:** No operator action is required.
- W** **Attention:** No operator action is required, but an error occurred.

For SYSPRINT messages, the type code indicates the severity:

- I** Informational message.
- W** Attention message. Task continues, but an error occurred.
- E** Error message. The particular task might end or might continue without completing all requests.
- T** Termination message. DFSMSdss™ ends.

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

- E** **Error.** Operator action is required.
- I** **Information**
- W** **Attention**

For messages with the EWX prefix, an 11-character message exists of the form **EWXffffnnnns**:

- EWX** LANRES product code
- fff** Function (module) identifier
- nnnn** Message number
- s** Severity code. Severity codes can be:
 - E** Error. Action is required.
 - I** Information. Action is not required.
 - S** Severe Error. Action is required.
 - W** Attention. Action may be required.

In the EWX messages, the three-character function identifiers are as follows:

Table 1. EWX Message Module Identifiers

Module ID	Function	Sending Command
ADM	Administration	EWXADMIN commands
COM	Host communications	All commands
DSK	Disk serving	Disk serving commands
DST	Distribution	EWXDS commands
PHL	Host-to-LAN print	EWXHLSRV
PLH	LAN-to-host print	EWXLHSRV
RES	Host session initialization	EWXCONN
SRV	NetWare service	EWXNWSRV

Note: When the term "MMC" is used in the messages, it is also referring to the System/370™ Parallel Channel Adapter feature of the IBM 3172-3 interconnect controller.

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

- E Error**
- I Information**
- S Severe**
- W Attention**

Messages with the prefix IEW and numbered in the range 2000 through 2999 have the following format:

<message number> <internal code> <message text>

The internal codes are not documented because they are used for diagnostic purposes.

The following type codes indicate the severity of the detected error:

- E Error:** Severity 8
- I Information:** Severity 0
- S Severe error:** Severity 12
- T Terminating error:** Severity 16
- W Attention:** Severity 4

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

text

Text: The text provides information, describes an error, or requests an operator action.

Messages with the prefix IDA are preceded by a 2-digit severity code:

- 04 Attention:** Processing may be successful.
- 08 Error:** Processing may fail.
- 12 Serious error:** Processing will probably fail.

Some messages have asterisks (*) before or after the message identifier. Two asterisks after the message identifier for IDC messages indicates a second-level message that further explains a preceding message.

How Messages are Explained in this Book

The following describes the different parts of message explanations in this book:

Explanation

The meaning of the message, including why the system issued the message.

System Action

- What the system did as a result of the system condition reported by the message. A system condition could include running out of storage, a hardware or software failure, an abend, a wait state.
- What the system did as a result of user input. User input can include a system command, a job running on the system, a transaction, a query, or another user-system interaction.

Operator Response

Instructions for the system operator, including, as appropriate, decisions to make and actions to take.

Only provided for messages that could appear at the operator console.

User Response

Instructions for the end user.

Only provided for messages that could appear at an interactive interface such as a TSO/E terminal or ISPF application.

Note: Most user messages are explained in other message books, such as *z/OS TSO/E Messages*.

Application Programmer Response

Instructions for an application programmer.

Only provided for messages that could appear in SYSOUT produced by a job, for example SPZAP.

System Programmer Response

Instructions for the system programmer.

Only provided for messages that require additional action beyond the operator response, user response, or application programmer response.

Storage Administrator Response

Instructions for the DFSMSdfp storage administrator.

Security Administrator Response

Instructions for the security administrator.

Only provided for security-related messages.

Problem Determination

Additional instructions for determining the cause of the problem, searching problem databases, and, if necessary, reporting the problem to the IBM support center. These instructions are for a customer support person who can troubleshoot problems, such as the system programmer or system administrator, an experienced security administrator, or an experienced storage administrator.

For additional information on performing problem determination procedures, see *z/OS Problem Management* and the appropriate diagnosis guide for the product or element issuing the message, such as:

- DFSMS/MVS diagnosis guides and references
- *z/OS JES2 Diagnosis*
- *z/OS JES3 Diagnosis*

Source

Element, product, or component that issued the message.

Detecting Module

Name of the module or modules that detected the condition that caused the message to be issued.

Routing Code

For WTO or WTOR messages, the routing code of the message.

Descriptor Code

For WTO or WTOR messages, the descriptor code of the message.

Messages Sent to MCS/SMCS Consoles

Messages sent to MCS/SMCS consoles appear in one of the following formats:

- The MFORM parameter in the OPERPARM segment in the CONSOLxx parmlib member
- The MFORM parameter on the CONTROL S operator command.

```
f hh.mm.ss sysname jobname message
f hh.mm.ss sysname message
f hh.mm.ss jobname message
f hh.mm.ss message
f sysname jobname message
f sysname message
f jobname message
f message
```

f A screen character to indicate the status of certain messages, as follows:

- I The operator has performed the action required for the message. The message has been deleted.
- The message is for information only; no operator action is required. The message was issued by the system or by a problem program.
- * The message requires specific operator action and was issued by a WTOR or by an authorized program. The message has a descriptor code of 1, 2, or 11.
- @ The message requires specific operator action and was issued by a WTOR or by a problem program. The message has a descriptor code of 1, 2, or 11.
- + The message requires no specific operator action and was issued by a problem program using a WTO macro.
- blank** The message requires no specific operator action.

hh.mm.ss

Time stamp: the hour (00-23), minute (00-59), and second (00-59).

sysname

System name for the system that issued the message.

jobname

Job name for the task that issued the message. This field is blank if a job did not issue the message.

message

Reply identifier, message identifier, and text.

Messages Sent to Hard-Copy Log in JES2 System

Multiple console support (MCS) handles message processing in:

- A JES2 system
- A JES3 system on a local processor

- A JES3 system on a global processor, if JES3 has failed

MCS sends messages with routing codes 1, 2, 3, 4, 7, 8, and 10 to the hard-copy log when display consoles are used or more than one console is active. All other messages can be routed to the hard-copy log by a system option or a VARY HARDCPY operator command.

Messages sent to the hard-copy log appear in the format:

tcrrrrrrr	sysname	yyddd	hh:mm:ss.th	ident	msgflags	message
t						message
t				1id		message

t The first character on the line indicates the record type:

- D** Data line of a multiple-line message; this line may be the last line of the message.
- E** End line or data-end line of a multiple-line message.
- L** Label line of a multiple-line message.
- M** First line of a multiple-line message.
- N** Single-line message that does not require a reply.
- O** Operator LOG command.
- S** Continuation of a single-line message or a continuation of the first line of a multi-line message. This continuation may be required because of the record length for the output device.
- W** A message that requires a reply.
- X** A log entry that did not originate with a LOG command or a system message.

c The second character on the line indicates whether the line was generated because of a command:

- C** Command input.
- R** Command response.
- I** Command issued internally. The job identifier contains the name of the internal issuer.
- blank** Neither command input nor command response.

rrrrrrr

Hexadecimal representation of the routing codes 1 through 28. To understand this hexadecimal number, convert it to binary; each binary 1 represents a routing code. For example, X'420C' represents routing codes 2, 7, 13, and 14 as shown here:

Hexadecimal:	4	2	0	C
Binary:	0 1 0 0	0 0 1 0	0 0 0 0	1 1 0 0
Routing Codes:	1 2 3 4	5 6 7 8	9 10 11 12	13 14 15 16

sysname

The system name from the SYSNAME parameter in parmlib.

yyddd

The Julian date, given as the year (00-99) and the day of the year (000-366).

Note: If HCFORMAT(CENTURY) is specified in the CONSOLOxx parmlib member, the Julian date appears as *yyyyddd*.

hh:mm:ss.th

Time stamp, given as the hour (00-23), minute (00-59), second (00-59), and hundredths of a second (00-99).

ident

The job identifier for the task that issued the message, if the second character on the line is blank.

If the second character on the line is C or R, this field contains one of the following:

jobid	The job identifier of the task that issued the message, if it was issued by a job.
consname	Console name of the console which issued the command or received the message.
INTERNAL	For a command generated by a problem program or the system.
INSTREAM	For a command read from the input stream.
blank	If MCS could not determine the source or destination for the message.

lid Multiple-line identifier for the second and succeeding lines of a multiple-line message. This field appears after the message text (1) on the first line or (2) in the message area and is not followed by text on a continuation of the first line. The identifier appears on all lines of the same message.

msgflags

Installation exit and message suppression flags. For information about the description of the hardcopy log message flags, see HCL in *z/OS MVS Data Areas, Vol 2 (DCCB-ITZYRETC)*.

message

Reply identifier, message identifier, and text. The reply identifier and message identifier appear only on the first line of a multiple-line message.

Messages Sent to Hard-Copy Log in JES3 System

Messages sent to the JESMSG hard-copy log in a JES3 system appear in the format:

hh:mm:ss message

Messages sent to the MLOG/DLOG hard-copy log in a JES3 system appear as follows:

```

C3E0SY1 05311 0841114 +I 0
C3E0SY1 05311 0841114 IAT8589 CONSOLE DISPLAY
C3E0SY1 05311 0841114 NAME COUNT SWITCH LL AUTH SAVEMSG
C3E0SY1 05311 0841114 SPC74 00000001 0120 15 YES
C3E0SY1 05311 0841114 ROUTE CODE=(BROADCAST)
C3E0SY1 05311 0841114 DEST CLASS=(ALL)
C3E0SY1 05311 0841114 WS77S 00000000 0120 10 YES
C3E0SY1 05311 0841114 ROUTE CODE=(NONE)
C3E0SY1 05311 0841114 DEST CLASS=(NONE)
C3E0SY1 05311 0841114 S8100 00000000 0120 15 YES
C3E0SY1 05311 0841114 ROUTE CODE=(NONE)
C3E0SY1 05311 0841114 DEST CLASS=(NONE)
C3E0SY1 05311 0841114 S0400 00000000 0120 15 YES
C3E0SY1 05311 0841114 ROUTE CODE=(NONE)
C3E0SY1 05311 0841114 DEST CLASS=(NONE)
C3E0SY1 05311 0841114 W8100 00000000 0120 15 YES
C3E0SY1 05311 0841114 ROUTE CODE=(NONE)
C3E0SY1 05311 0841114 DEST CLASS=(NONE)
C3E0SY1 05311 0841114 W0400 00000000 0120 15 YES
C3E0SY1 05311 0841114 ROUTE CODE=(NONE)
C3E0SY1 05311 0841114 DEST CLASS=(NONE)
C3E0SY1 05311 0841114 W3774 00000000 0120 15 YES
C3E0SY1 05311 0841114 ROUTE CODE=(NONE)
C3E0SY1 05311 0841114 DEST CLASS=(NONE)
C3E0SY1 05311 0841114 B0001 00000000 0120 15 YES
C3E0SY1 05311 0841114 ROUTE CODE=(NONE)
C3E0SY1 05311 0841114 DEST CLASS=(NONE)
C3E0SY1 05311 0841114 T0001 00000002 0120 15 YES
C3E0SY1 05311 0841114 ROUTE CODE=(BROADCAST,HARDCOPY,3,7-10,41-128)
C3E0SY1 05311 0841114 DEST CLASS=(TOTAL)
C3E0SY1 05311 0841114 T0002 00000000 0120 15 YES
C3E0SY1 05311 0841114 ROUTE CODE=(NONE)
C3E0SY1 05311 0841114 DEST CLASS=(NONE)
C3E0SY1 05311 0841114 T0003 00000000 0120 15 YES
C3E0SY1 05311 0841114 ROUTE CODE=(NONE)
C3E0SY1 05311 0841114 DEST CLASS=(NONE)
C3E0SY1 05311 0841114 T0004 00000002 0120 15 YES
C3E0SY1 05311 0841114 ROUTE CODE=(BROADCAST,HARDCOPY,3,7-10,41-128)
C3E0SY1 05311 0841114 DEST CLASS=(TOTAL)

```

Messages sent to the MLOG/DLOG hard-copy log appear in the format:

dest console yyddd hhmmssstia[prefix] message

dest

JES3 destination class, which corresponds to the MVS routing code.

console

JES3 or MVS console name, as follows:

blank For a message issued without a console name.

nnnnn The JES3 console name (JNAME) from the JES3 initialization stream. This applies to remote consoles only.

cnname The MCS console name, as specified on the NAME(cnname) parameter under the CONSOLE definition in SYS1.PARMLIB(CONSLxx).

INTERNAL For a command generated by a problem program or operating system routine.

NETWORK For a message issued to the network job entry (NJE) console.

yyddd

The Julian date, given as the year (00-99) and the day of the year (000-366).

Note: If HCFORMAT(CENTURY) is specified in the CONSLxx parmlib member, the Julian date appears as *yyyyddd*.

hhmmss

Time stamp, given as the hour (00-23), minute (00-59), second (00-59), and tenth of a second (0-9).

i Attention indicator for JES3 space constraints, as follows:

blank	Normal output or no action required.
#	The message is rerouted automatically or by a command from another console.
%	Minimum space (track) situation (JSAM).
=	Marginal space (track) situation (JSAM).
<	Minimum buffer situation (JSAM).

Note: The above four symbols can be changed by a CONSTD statement in the JES3 initialization stream.

a Action prefix character, as follows:

blank	Normal message.
+	JES3 input command, issued on the global processor.
-	MVS input command, issued on the global processor.
	Operator action required.

prefix

sysname R=jobname

Optional prefix for messages issued outside the JES3 address space or on a local processor, as follows:

sysname

The name of the system where the issuing program is running. JES3 determines the name from the ID parameter on the MAINPROC statement in the JES3 initialization stream.

jobname

The job name of the issuing program. It is all blanks for an system routine.

message

Reply identifier, message identifier, and text.

Messages Sent to the Job Log, to Other Data Sets, and to Display Terminals

Messages sent to the job log, to other data sets, and to display terminals appear in the format designed by the program that issued them.

Truncated Data in Multi-line Messages

Under any one of the following conditions, the system might need to truncate a multi-line message:

- When a message is being transported from one system to another in a sysplex, the sending or receiving system might encounter an error that prevents some or all of the message text from appearing. This can be caused by any of the following:
 - The issuing system is stopped or quiesced.
 - The issuing system fails to end a multi-line message.
 - The issuing system has an XCF buffer shortage.
 - A disruption occurs in sysplex communication.
 - An error occurs on the receiving system.

When one of the above conditions occurs, one of the following messages can appear within the message text, indicating such an error:

LOSS OF DATA - MESSAGE COMPLETION FORCED
LOSS OF INTERMEDIATE MESSAGE DATA

- When no data line or endline has been issued for a multi-line message after an interval of thirty seconds, the system issues the following endline:
MESSAGE TIMED OUT - MESSAGE COMPLETION FORCED
- When a connect request exceeds the limit of 65533 lines, the system truncates the message with the following text:
EXCEEDED LINE LIMIT - MESSAGE COMPLETION FORCED
- When a multi-line message is issued with no end line, and it is not possible for the system to obtain space to temporarily store the message, the system truncates the message with the following text:
CONNECT UNAVAILABLE - MESSAGE COMPLETION FORCED
- When a multi-line connect request is issued, and the system is unable to obtain space to store the connecting lines, the system truncates the message with the following text:
CONNECT UNSUCCESSFUL - MESSAGE COMPLETION FORCED
- When a message is too long to fit into 80% of the Console message cache, the system truncates the message with the following text:
MESSAGE TRUNCATED FOR CONSOLE MESSAGE CACHE
- When there is a shortage of WTO buffers for display on MCS consoles, the screen display may be truncated with one of the following lines of text:
NUMBER OF LINES EXCEEDED MLIM - MESSAGE TRUNCATED
STORAGE CONSTRAINT - MESSAGE TRUNCATED

Routing Codes

Routing codes send system messages to the consoles where they are to be displayed. More than one routing code can be assigned to a message to send it to more than one console. For more information on message routing, see the following books:

- *z/OS MVS Programming: Authorized Assembler Services Guide*
- *z/OS MVS Programming: Authorized Assembler Services Reference SET-WTO*
- *z/OS MVS Installation Exits*
- *z/OS MVS Initialization and Tuning Reference*

Specification

The routing codes are specified in the ROUTCDE parameter of the WTO or WTOR macro. If you specify a message which contains no routing codes, MVS may provide one or more default routing codes, based upon the presence or lack of other queuing specifications.

If you specify a message containing descriptor codes but no routing codes and no target console, MVS will not assign any routing codes and will write the message to the hardcopy log.

If you specify a message containing no routing codes, no descriptor codes, and no target console, MVS will assign a default set of routing codes. This set of default routing codes is specified at MVS initialization on the DEFAULT statement in your CONSOLxx parmlib member. If a set of default routing codes was not provided on the DEFAULT statement, MVS will assign routing codes 1 through 16.

Routing Code Meaning

Programming Interface information

Code	Meaning
1	Operator Action

- | The message indicates a change in the system status. It demands action by a primary operator.
- 2 Operator Information**
- | The message indicates a change in system status. It does not demand action; rather, it alerts a primary operator to a condition that might require action.
- This routing code is used for any message that indicates job status when the status is not requested specifically by an operator inquiry. It is also used to route processor and problem program messages to the system operator.
- 3 Tape Pool**
- The message gives information about tape devices, such as the status of a tape unit or reel, the disposition of a tape reel, or a request to mount a tape.
- 4 Direct Access Pool**
- The message gives information about direct access storage devices (DASD), such as the status of a direct access unit or volume, the disposition of a volume, or a request to mount a volume.
- 5 Tape Library**
- The message gives tape library information, such as a request by volume serial numbers for tapes for system or problem program use.
- 6 Disk Library**
- The message gives disk library information, such as a request by volume serial numbers for volumes for system or problem program use.
- 7 Unit Record Pool**
- The message gives information about unit record equipment, such as a request to mount a printer train.
- 8 Teleprocessing Control**
- The message gives the status or disposition of teleprocessing equipment, such as a message that describes line errors.
- 9 System Security**
- The message gives information about security checking, such as a request for a password.
- 10 System/Error Maintenance**
- The message gives problem information for the system programmer, such as a system error, an uncorrectable I/O error, or information about system maintenance.
- 11 Programmer Information**
- This is commonly referred to as write to programmer (WTP). The message is intended for the problem programmer. This routing code is used when the program issuing the message cannot route the message to the programmer through a system output (SYSOUT) data set. The message appears in the JESYSMSG data set.
- 12 Emulation**
- The message gives information about emulation. (These message identifiers are not included in this publication.)
- 13-20** For customer use only.
- 21-28** For subsystem use only.

29	Disaster recovery.
30-40	For IBM use only.
41	The message gives information about JES3 job status.
42	The message gives general information about JES2 or JES3.
43-64	For JES use only.
65-96	Messages associated with particular processors.
97-128	Messages associated with particular devices.

End of Programming Interface information

Routing Codes in this Book

Routing codes appear within the associated message. The routing code field can also contain the following special characters or notes:

- * The message will be routed back to the consoles that initiated the associated requests.
- / The message will be routed to different locations according to the task issuing it. For example, */2/3 means the message is routed back to the console that initiated the request, to a primary operator, or to the tape pool.
- # The message will be routed in one of the following ways:
 - According to the routing indicators specified by the operator
 - According to the default routing instructions previously specified by the operator
 - Back to the console that initiated the associated request
- The message has no routing code.
- N/A A routing code is not applicable for the message.
- Note 2** The message is issued by a WTO or WTOR macro, but has no routing or descriptor codes (old format WTO or WTOR macro).
- Note 3** The message has a routing code of 1, which sends the message to a primary operator, and the message is also routed to the console that it describes.
- Note 4** The message is sent to all active consoles; this is a broadcast message.
- Note 5** The message has a routing code of 2, which sends the message to a primary operator.
- Note 6** The message is routed only to non-printer consoles. This message is not issued by a WTO or WTOR macro.
- Note 7** The message is routed to consoles where one or more of the following are active:
 - MONITOR JOBNAMES
 - MONITOR SESSIONS
 - MONITOR STATUS
- Note 9** The message is issued during the nucleus initialization program (NIP) processing.
- Note 10** The message is issued by the WTL macro.
- Note 11** The message is routed to a SYSPRINT data set by data management.
- Note 12** The message is issued by a WTO or WTOR macro with SYNCH=YES. See *z/OS MVS Initialization and Tuning Reference* for more information.
- Note 13** The message is routed only to receivers of the hardcopy message set.

- Note 14** The message is routed back to the console that initiated the request and to all associated consoles.
- Note 16** The message is routed to the IPCS print file IPCSPRNT.
- Note 17** The message is issued by JES3. A JES3 destination class is specified either by the initialization stream or by operator commands.
- Note 18** The message is sent in response to a command to the console where the command was entered.
- Note 19** The message is written to a data set. If routing and descriptor codes are also included for the message, the message might also be displayed according to the specified routing and descriptor codes. (The descriptor code does not apply to writing the message to the data set.)
- Note 20** JES3 does not issue the message. JES3 sends the message to another subsystem for processing.
- Note 21** This message is a trailer attached to multiple messages previously issued. It has the same routing and descriptor codes as the first line of the conglomerate.
- Note 22** This message is routed to the transaction program (TP) message log.
- Note 23** This message is issued by the device controller. The routing code will vary according to the device controller's task.
- Note 24** This message is routed to the assembly listing.
- Note 25** When this message is issued during IPL, the routing codes are 2 and 10 and the descriptor code is 12. When it is issued after IPL, it has no routing code and the descriptor code is 5.
- Note 26** When this message is issued during NIP processing, the descriptor code is 12. When it is issued after NIP processing, the descriptor code is 4.
- Note 27** The indicated route codes are used only if this message is issued in response to a reply of CKPTDEF during a JES2 checkpoint reconfiguration. This message might be issued to a specific console rather than directed by route code. For further information concerning the routing of JES2 messages issued during a reconfiguration, see *z/OS JES2 Initialization and Tuning Guide*.
- Note 28** These routing and descriptor codes apply only when SMS issues the message. If SMS returns the message to its caller and the caller issues the message, the codes do not apply.
- Note 29** This message is written to the JES3OUT data set.
- Note 30** This message is issued by JES3. The message is written to the *MODIFY CONFIG (*F MODIFY) log and/or the issuer of the *F CONFIG command.
- Note 31** The routing and descriptor codes for this message are dependent on the setting of indicator bits within the S99EOPTS field in the SVC 99 Request Block Extension (S99RBX). See the *z/OS MVS Programming: Authorized Assembler Services Guide*, Processing Messages and Reason Codes from Dynamic Allocation for additional information.
- Note 32** Routing code 2 is only applicable if message IYP050D was issued.
- Note 33** Routing code 2 is only applicable if message IZP050D was issued.
- Note 34** This message is only displayed on the SMCS Console Selection screen, and is not issued via WTO support.
- Note 35** By default, IBM Health Checker for z/OS messages does not use routing codes, but the

- | installation can override the default to use routing codes using either the MODIFY *hzsproc* command or in the HZSPRMxx parmlib member. See *IBM Health Checker for z/OS: User's Guide* for more information.
 - | **Note 36** This message is written to the JESYSMSG data set.
-

Descriptor Codes

Descriptor codes describe the significance of messages. They indicate whether the system or a task stops processing, waits until some action is completed, or continues. This code also determines how the system will display and delete the message.

Association with Message Type Code

Descriptor codes are associated with message type codes, specified by a letter following the message serial number, as follows:

Descriptor Code	Type Code
1	W (wait)
2	A (action) or D (decision)
3	E (eventual action)
4 through 10	I (information)
11	E (critical eventual action)
12 and 13	I (information)

Valid combinations and restrictions for descriptor codes

Descriptor codes are specified in the DESC parameter of the WTO or WTOR macro. The following restrictions apply when specifying descriptor codes:

- Descriptor codes 1 through 6, 11, and 12 are mutually exclusive. Assign only one of these codes to a message. If you assign two mutually exclusive codes to one message, the system uses the most important code and ignores the other.
- Descriptor codes 7 through 10 and 13 can be assigned in combination with any of the mutually exclusive codes.
- | • Descriptor code 9 can be used only with descriptor code 8.

Under certain conditions, the system uses a descriptor code other than that specified in the macro as follows:

- The system assigns descriptor code 6 if the macro specifies a ROUTCDE parameter, but no DESC parameter.
- The system assigns descriptor code 7 if all of the following are true:
 1. A problem program issued the macro.
 2. The macro omits both DESC and ROUTCDE parameters, or specifies descriptor codes 1 or 2.
 3. The message is not a multiple-line WTO message.
- The system assigns no descriptor code if all of the following are true:
 1. An authorized program issued the macro.
 2. The macro omits both DESC and ROUTCDE parameters.
 3. The message is not a multiple-line WTO message.

Note: An authorized program has at least one of these characteristics:

- Authorized by the authorized program facility (APF)
- Runs in supervisor state

- Runs under PSW key 0 through 7

Message Deletion

With multiple console support (MCS), action messages with descriptor code 1 or 2 issued by problem programs are assigned descriptor code 7; thus, they are automatically deleted from the system at task or address space ending.

- I The system deletes messages issued by any program when that program issues the DOM macro for a message.

The operator can manually remove all messages from a display console screen or can set the console to roll messages off the screen.

Message Color

On operator consoles with color, the descriptor code determines the color of the message. The use of color is explained in *z/OS MVS System Commands*. Also see the descriptions of the CONSOLxx and MPFLSTxx parmlib members in *z/OS MVS Initialization and Tuning Reference*.

Descriptor Code Meaning

Programming Interface information	
Code	Meaning
1	System Failure The message indicates an error that disrupts system operations. To continue, the operator must rel IPL the system or restart a major subsystem. This causes the audible alarm to be sounded.
2	Immediate Action Required The message indicates that the operator must perform an action immediately. The message issuer could be in a wait state until the action is performed or the system needs the action as soon as possible to improve performance. The task waits for the operator to complete the action. This causes the audible alarm to be sounded. Note: When an authorized program issues a message with descriptor code 2, a DOM macro <i>must</i> be issued to delete the message after the requested action is performed.
3	Eventual Action Required The message indicates that the operator must perform an action eventually. The task does not wait for the operator to complete the action. If the task can determine when the operator has performed the action, the task should issue a DOM macro to delete the message when the action is complete.
4	System Status The message indicates the status of a system task or of a hardware unit.
5	Immediate Command Response The message is issued as an immediate response to a system command. The response does not depend on another system action or task.
6	Job Status The message indicates the status of a job or job step.

- 7 **Task-Related**
The message is issued by an application or system program. Messages with this descriptor code are deleted when the job step that issued them ends.
- 8 **Out-of-Line**
The message, which is one line of a group of one or more lines, is to be displayed out-of-line. If a message cannot be displayed out-of-line because of the device being used, descriptor code 8 is ignored, and the message is displayed in-line with the other messages.
- 9 **Operator's Request**
| The message is written in response to an operator's request for information by a DEVSERV, DISPLAY, or MONITOR command.
- 10 **Not defined**
Descriptor code 10 is not currently in use.
- 11 **Critical Eventual Action Required**
| The message indicates that the operator must perform an action eventually, and the action is important enough for the message to remain on the display screen until the action is completed. The task does not wait for the operator to complete the action. This causes the audible alarm to be sounded.
| Avoid using this descriptor code for non-critical messages because the display screen could become filled.
If the task can determine when the operator has performed the action, the task should issue a DOM macro to delete the message when the action is complete.
- 12 **Important Information**
The message contains important information that must be displayed at a console, but does not require any action in response.
- 13 **Automation Information**
Indicates that this message was previously automated.

End of Programming Interface information

14-16 Reserved for future use.

Descriptor Codes in this Book

Descriptor codes appear within the associated message. The descriptor code field can also contain the following special characters.

- / The message will have different descriptor codes according to the task issuing it. For example, 4/6 means the message can describe system status or job status.
- The message has no descriptor code.
- N/A A descriptor code is not applicable for the message.

| **Note 1**

| The descriptor code for an IBM Health Checker for z/OS check exception message might vary, because the installation can override the descriptor code either using the MODIFY hzsproc command or in the HZSPRMxx parmlib member. See *IBM Health Checker for z/OS: User's Guide* for more information. In addition to the descriptor code selected by the installation, one of the following descriptor codes is also included based on the severity of the check:

- High severity checks use a descriptor code of 11.
- Medium severity checks use a descriptor code of 3.
- Low severity checks use a descriptor code of 12.

A Method for Finding Changes to MVS and TSO/E Message Texts

Automation routines are sensitive to changes to message text between releases. You can find changes to message texts in the following ways:

- The Summary of Changes of the related messages book can be helpful when you go from one release to the next.
- Data set SYS1.MSGENU contains data that can help you identify changes to message texts more accurately. This method allows you to find message text changes between your current release and whatever release you choose to migrate to. This method is described below.

Using SYS1.MSGENU to Find Message Text Changes

IBM supplies a data set containing the text of system messages that are translated. This data set, called SYS1.MSGENU, contains the text of system messages in the form of message skeletons. (For more information, see *z/OS MVS Planning: Operations*.)

Note that this method will not show changes to:

- MVS system messages that are not translated, such as IPL and NIP messages (which are issued before the MVS message service is available)
- Other product messages that are not translated, such as DFSMS/MVS messages, and JES3 messages.
- For JES2 messages, use the appropriate SYS1.SHASMENU data set.

Also, this method works better if the “old” copy of SYS1.SHASMENU has the same level of service as the system from which you are migrating.

You can compare the new data set with the data set on the system from which you are migrating. Depending on how you do the comparison, you can get output like the following.

For new messages, the output might show an I (for Insert) on the left:

```
I - IEA403I      VALUE OF RMAX HAS BEEN CHANGED TO 99
```

For messages whose text has changed, the output might show both an I and a D, indicating that a record in the message file has been replaced:

```
I - IEE162I 46  &NNN. ROLL &A. MESSAGES (DEL=R OR RD)
D - IEE162I 46  &NNN. ROLL &A. MESSAGES (DEL=R, RD)
```

This means that, in message IEE162I, (DEL=R, RD) was replaced by (DEL=R OR RD).

Using this information, you can decide if your automation routines need to be changed.

Chapter 2. IXC Messages

IXC101I SYSPLEX PARTITIONING IN PROGRESS FOR *sysname* REQUESTED BY *jobname* REASON: *reason*

Explanation: XCF is removing a system from the sysplex.

In the message text:

sysname

The name of the system XCF is removing from the sysplex.

jobname

The name of the job that requested the sysplex partition.

reason

The reason the system is being removed from the sysplex:

LOSS OF COUPLE DATA SET

System *sysname* could not function in the sysplex because of failure(s) of the primary and alternate (if available) couple data set.

LOSS OF CONNECTIVITY

XCF initiated a request to remove system *sysname* from the sysplex because it lost signalling connectivity to one or more other systems in the sysplex.

OPERATOR VARY REQUEST

An operator requested that system *sysname* be removed from the sysplex.

SYSTEM STATUS UPDATE MISSING

XCF initiated a request to remove system *sysname* from the sysplex because XCF detected missing system status updates for *sysname*. This indicates that the system may have failed.

LOSS OF ETR

An operator requested that *sysname* be removed from the sysplex because it lost access to the external time reference (ETR).

SYSTEM ENTERED WAIT STATE

System *sysname* entered a wait state.

SYSTEM DETECTED AS NO LONGER IN SYSPLEX

System *sysname* was removed from the sysplex. XCF could not determine the reason.

POLICY INITIATED REQUEST

XCF processor resource/systems manager (PR/SM) policy initiated the request to remove the system from the sysplex.

SFM STARTED DUE TO STATUS UPDATE MISSING

System *sysname* was removed from the

sysplex as required by the sysplex failure management policy because the system was not updating its status at regular intervals.

SFM INITIATED DUE TO SIGNALLING FAILURE

System *sysname* was removed from the sysplex as required by the sysplex failure management policy because the sysplex had to be reconfigured in order to resolve a signalling connectivity failure in the sysplex.

A NEW SYSTEM IS DETECTED RUNNING ON THE SAME CPC

System *sysname* was removed from the sysplex because it was determined that another MVS system was running on the same CPC image which system *sysname* was previously running.

INCOMPATIBLE LOGICAL PARTITION NUMBER

System *sysname* was removed from the sysplex because it was determined that it could not support the logical partition number of another system in the sysplex.

TIMING NOT SYNCHRONIZED WITH SYSPLEX

System *sysname* was removed from the sysplex because it was determined that it was not synchronized to the same time reference as the other systems in the sysplex.

System action: The system continues processing without the removed system.

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

System programmer response: Look for and correct any problems with the ETR clock, signalling paths, or couple data set.

If the system was removed because it could not support the logical partition number of another system, look for and correct the missing service that will allow the system to support the attributes of the other systems in the sysplex.

If the problem persists, 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.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS4TSK

Routing Code: 1,2,10

Descriptor Code: 12

IXC102A XCF IS WAITING FOR SYSTEM *sysname* DEACTIVATION. REPLY DOWN WHEN MVS ON *sysname* HAS BEEN SYSTEM RESET.

IXC105I

Explanation: XCF is removing a system from the sysplex. The system which is to be removed must be system reset before the operator replies DOWN to this message.

Notes:

1. The system reset is needed to ensure that the system image being removed from the sysplex no longer has the capability to perform I/O to devices which may be shared with other systems that remain active in the sysplex. If this reset is not performed before replying to this message, then severe data integrity problems may result. When the subject system is removed from the sysplex, XCF will clean up resources (such as locks, ENQs, and reserves) which are held by that system, and make them available to other systems in the sysplex. If the subject system is in fact still active, and operating in the belief that it still holds these resources, unpredictable results may occur.
2. When this message appears, it is important that the appropriate system reset action be taken, and that this message be replied to in a timely fashion. While this message is outstanding, XCF must still consider the subject system to be (at least potentially) active in the sysplex, and therefore XCF cannot clean up resources (such as locks, ENQs, and reserves) which are held by that system. These resources will remain unavailable to all other systems in the sysplex until this message is replied to, and the system completes the process of being removed from the sysplex. Extended unavailability of these resources is likely to cause delays, timeouts, or other problems for the other systems in the sysplex.
3. There are instances when this message will be issued and the appropriate action must be taken even though there is an SFM policy active in the sysplex. If SFM cannot successfully isolate the system image being removed, manual intervention will be required. This message will be issued and must be responded to.

In the message text:

sysname

The name of the system XCF is removing from the sysplex.

System action: Processing continues. The system is not removed from the sysplex until the operator performs a system reset and replies DOWN.

Operator response: Before replying DOWN, a system reset must be performed on system *sysname*. Perform the hardware SYSTEM RESET or LOAD (IPL) function to ensure that system *sysname* is reset. If system *sysname* is to be dumped (for example, via Standalone Dump), take care to perform a SYSTEM-RESET-NORMAL or LOAD-NORMAL function that does not clear the system storage. Once system *sysname* is system reset, reply DOWN.

Note that several acceptable alternatives to SYSTEM RESET or LOAD exist. You may reply DOWN after any action or condition listed below occurs for system *sysname*:

- SYSTEM RESET-NORMAL
- LOAD-NORMAL
- INITIATION OF STANDALONE DUMP (via LOAD-NORMAL)
- SYSTEM RESET-CLEAR
- LOAD-CLEAR
- SYSTEM-IML
- POWER-ON-RESET
- NO POWER to CPC where system *sysname* resides
- Deactivation of the logical partition where system *sysname* resides
- Reset of the logical partition where system *sysname* resides
- | • Processor on which *sysname* is running is in a checkstopped state.

Depending on your hardware and your hardware operational procedures, the above functions may be invoked explicitly or implicitly. For example, on an HMC you may implicitly perform one of the above hardware functions by dragging a CPC object or an image object and dropping the object on the ACTIVATE task. The hardware function performed depends on the activation profile associated with the object.

It is important to note that, if system *sysname* is in a disabled wait state, that is not, by itself, sufficient to guarantee that system *sysname* can no longer access I/O devices that may be shared with other active systems in the sysplex. However, if the system is configured so that a system reset is automatically performed when a disabled wait state is entered, then that is sufficient and there is no need to manually reset the system again.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS2WTO

Routing Code: 1,2

Descriptor Code: 4

IXC105I SYSPLEX PARTITIONING HAS COMPLETED FOR *sysname* - PRIMARY REASON: *text* - REASON FLAGS: *flags*

Explanation: XCF removed a system from the sysplex.

In the message text:

sysname

The name of the system that XCF removed from the sysplex.

flags

Information that IBM might request for diagnosis.

LOSS OF COUPLE DATA SET

System *sysname* could not function in the sysplex because of failure(s) of the primary and alternate (if available) couple data set.

LOSS OF CONNECTIVITY

XCF initiated a request to remove system *sysname* from the sysplex because it lost signalling connectivity to one or more other systems in the sysplex.

OPERATOR VARY REQUEST

An operator requested that system *sysname* be removed from the sysplex.

SYSTEM STATUS UPDATE MISSING

XCF initiated a request to remove system *sysname* from the sysplex because XCF detected missing system status updates for *sysname*. This indicates that the system may have failed.

LOSS OF ETR

An operator requested that *sysname* be removed from the sysplex because it lost access to the external time reference (ETR).

SYSTEM ENTERED WAIT STATE

System *sysname* entered a wait state.

SYSTEM DETECTED AS NO LONGER IN SYSPLEX

System *sysname* was removed from the sysplex. XCF could not determine the reason.

POLICY INITIATED REQUEST

XCF processor resource/systems manager (PR/SM) policy initiated the request to remove the system from the sysplex.

SYSTEM REMOVED BY SYSPLEX FAILURE MANAGEMENT BECAUSE ITS STATUS UPDATE WAS MISSING

System *sysname* was removed from the sysplex as required by the sysplex failure management policy because the system was not updating its status at regular intervals.

SYSTEM REMOVED BY SYSPLEX FAILURE MANAGEMENT BECAUSE OF A SIGNALLING CONNECTIVITY FAILURE IN THE SYSPLEX

System *sysname* was removed from the sysplex as required by the sysplex failure management policy because the sysplex had to be reconfigured in order to resolve a signalling connectivity failure in the sysplex.

SYSTEM REMOVED BECAUSE A NEW MVS SYSTEM WAS DETECTED RUNNING ON THE SAME CPC IMAGE

System *sysname* was removed from the sysplex because it was determined that another MVS system was running on the same CPC image on which system *sysname* was previously running.

SYSTEM REMOVED BECAUSE THE LOGICAL PARTITION NUMBER OF ANOTHER SYSTEM WAS NOT COMPATIBLE

System *sysname* was removed from the sysplex because it was determined that it could not support the logical partition number of another system in the sysplex.

TIMING NOT SYNCHRONIZED WITH SYSPLEX

System *sysname* was removed from the sysplex because it was determined that it was not synchronized to the same time reference as the other systems in the sysplex.

System action: The sysplex continues processing without the removed system.

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

System programmer response: Look for and correct any problems with the ETR clock, signalling paths, or couple data sets.

If the system was removed because it could not support the logical partition number of another system, look for and correct the missing service that will allow the system to support the attributes of the other systems in the sysplex.

If the problem persists, 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.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS4TSK

Routing Code: 1,2,10

Descriptor Code: 12

IXC201A RESPECIFY COUPLE SYSTEM PARAMETER, REPLY COUPLE=xx

Explanation: XCF cannot initialize this system into the sysplex because the current COUPLExx parmlib member is unusable. A previous message states why the current COUPLExx parmlib member cannot be used.

In the message text:

xx The suffix identifying the COUPLE parmlib member.

System action: System initialization stops until the operator specifies a new COUPLExx parmlib member.

Operator response: Do one of the following:

- Reply COUPLExx, where xx is either:
 - The same suffix to try the same COUPLExx parmlib member again.
 - A different suffix to specify an alternate COUPLExx parmlib member, if there is one available. Then notify the system programmer.

IXC202I • IXC203I

- If there is no alternate COUPLExx parmlib member, notify the system programmer, who will correct the COUPLExx parmlib member. Provide any preceding informational messages.

After the system programmer corrects the COUPLExx parmlib member, respecify it.

If it is necessary to reIPL to correct the COUPLExx parmlib member, specify COUPLE=00 to IPL the system in XCF-local mode. Make sure the data set is protected with adequate serialization.

- Have another system that shares access to the SYS1.PARMLIB data set fix any errors in the COUPLExx parmlib member in error. Then reply COUPLE=xx to specify the same COUPLExx parmlib member.

System programmer response: Do one of the following:

- If there is an alternate COUPLExx parmlib member available, have the operator specify the alternate. Correct the current COUPLExx parmlib member.
- If there is no alternate COUPLExx parmlib member available, correct the COUPLExx parmlib member before system initialization can continue. Look for a preceding message explaining the problem. When the parmlib member is correct, ask the operator to respecify it.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCI2PRM

Routing Code: 1,2M

Descriptor Code: 4

IXC202I **SYSPLEX *sysplex-name* IS FULL WITH nnn SYSTEMS**

Explanation: A system is trying to join the sysplex, but the sysplex is full. No more systems can join the sysplex.

The system might also issue this message when:

- The sysplex is waiting for XCF to clean up resources for a system that is leaving the sysplex. In this case, the system also issues message IXC402D.
- A system is trying to join the wrong sysplex.

In the message text:

sysplex-name

The name of the sysplex.

nnn

The number of systems currently defined to the sysplex.

System action: System initialization stops. The system issues message IXC207A to prompt the operator for a new COUPLE=xx parmlib member.

Operator response: If the sysplex is waiting for XCF to clean up resources for a system leaving the sysplex,

see the operator response for message IXC402D. Then reply to message IXC207A to respecify the current COUPLExx parmlib member.

Notify the system programmer.

System programmer response: If the system must be added to sysplex *sysplex-name*, one or more systems must first be removed. Enter the command DISPLAY XCF,SYSPLEX to display the name and status of each of the systems in the sysplex. Enter the command VARY XCF, *sysname*, OFFLINE to save a system from the sysplex, if appropriate.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS2SEL

Routing Code: 1,2

Descriptor Code: 12

IXC203I *sysname* IS CURRENTLY {ACTIVE|IPLING} IN THE SYSPLEX

Explanation: This system is trying to join the sysplex, but the system name, *sysname*, is already in use in the sysplex. A system name must be unique within a sysplex.

This error may mean that a system is joining the wrong sysplex, or that this system just reIPLed with message IXC402D outstanding on the other systems in the sysplex.

In the message text:

sysname

The system name that is not unique within the sysplex.

ACTIVE

There is already a system *sysname* active in the sysplex.

IPLING

There is already a system *sysname* IPLing into the sysplex.

System action: The system issues message IXC207A to prompt the operator for a new COUPLExx parmlib member.

Operator response: Do one of the following:

- If this system just reIPLed, look for message IXC402D on the other systems in the sysplex. See the operator response for message IXC402D. Then reply to message IXC207A to respecify the current COUPLExx parmlib member.
- Respond to the outstanding replies or notify the system programmer.
- Verify that the system parameter options specified on this IPL were correct. Notify the system programmer.

System programmer response: Look at the DISPLAY command output to determine the name being used by each system in the sysplex. If another system is already

correctly using the name, do one of the following:

- Change the SYSNAME system parameter in the IEASYSxx parmlib member to a unique name within the sysplex. Make sure the global resource serialization parameters specify the new name correctly. Then ask the operator to reIPL the system with the updated CONFIG=xx member.
- If this system must have the name *sysname*, remove the other system named *sysname* from the sysplex.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCI2SEL

Routing Code: 1,2

Descriptor Code: 12

IXC204I I/O ERROR WHILE READING THE COUPLExx PARMLIB MEMBER

Explanation: XCF detected an I/O error while trying to read the COUPLExx parmlib member during system initialization.

In the message text:

xx The suffix identifying the COUPLE parmlib member.

System action: XCF stops using COUPLExx and issues message IXC201A to prompt the operator for a new COUPLExx parmlib member.

Operator response: Notify the system programmer.

System programmer response: Look at the logrec error records for the I/O error.

Correct the I/O error and ask the operator to reIPL, or respond to message IXC201A with a new COUPLExx parmlib member.

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: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCI2PRM

Routing Code: 1,2,10.

Descriptor Code: 12

IXC205I SYNTAX ERROR IN COUPLExx: *text*

Explanation: The system is being IPLed with the COUPLExx parmlib member. XCF detected a syntax error in the parmlib member with the suffix *xx*.

In the message text:

xx The suffix identifying the COUPLE parmlib member.

statement

The statement in error.

n The line number of the COUPLExx parmlib member in error.

input

Up to ten characters of the line in error.

IMPROPER USE OF COMMENTS

Comment delimiters are not balanced. A significant portion of the data in the parmlib member may be ignored.

PREMATURE END OF FILE DETECTED.

INCOMPLETE PCOUPLE KEYWORD IGNORED.

The PCOUPLE keyword is incomplete.

PREMATURE END OF FILE DETECTED.

INCOMPLETE ACOPUPLE KEYWORD IGNORED.

The ACOPUPLE keyword is incomplete.

IMPROPER USE OF RIGHT PARENTHESIS FOR THE VALUE OF KEYWORD IN STATEMENT *statement*.

THE FOLLOWING TEXT IN LINE *n* WAS IN ERROR:

input

A right parenthesis was used incorrectly for a keyword value in a *statement* in the COUPLExx parmlib member. The right parenthesis was probably missing. The *statement* containing the incorrect right parenthesis can be:

- COUPLE
- PATHIN
- PATHOUT
- LOCALMSG
- CLASSDEF

STATEMENT TYPE NOT RECOGNIZED OR NO VALID DELIMITER AFTER STATEMENT TYPE. THE FOLLOWING TEXT IN LINE *n* WAS IN ERROR: *input*.

Either an unknown *statement* type was specified or the delimiter after the *statement* is not valid.

KEYWORD NOT RECOGNIZED IN STATEMENT *statement* OR NO VALID LEFT PARENTHESIS AFTER KEYWORD. THE FOLLOWING TEXT IN LINE *n* WAS IN ERROR: *input*.

Either an unknown keyword was specified or the delimiter after the keyword is not valid.

System action: If one of the following appears in the message text, the system ignores the PCOUPLE or ACOPUPLE keyword and continues processing in XCF-local mode.

- **PREMATURE END OF FILE DETECTED.**
- **INCOMPLETE PCOUPLE KEYWORD IGNORED**

- **PREMATURE END OF FILE DETECTED.**
- **INCOMPLETE ACOPUPLE KEYWORD IGNORED**

Otherwise, XCF stops using the COUPLExx parmlib member and issues message IXC210A to prompt the operator for a new one.

Operator response: Notify the system programmer.

System programmer response: Correct the COUPLExx parmlib member and ask the operator to reIPL the system with the same COUPLExx parmlib member.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCI2PRM

Routing Code: 1,2

Descriptor Code: 12

IXC206I THE COUPLExx text

Explanation: XCF detected an incorrect keyword value member while a system was being IPLed into the sysplex.

In the message text:

xx The suffix identifying the COUPLE parmlib member.

keyword

The keyword in error.

n The line in the COUPLExx parmlib member containing the error.

dev

The duplicate device number.

keytype

The keyword type in error.

classname

The name of the transport class.

item

The name of the item in error.

name

The name of the transport class or group in error.

strucname

The name of the structure.

parmlib

The name of the parmlib member.

statement

The statement in error.

KEYWORD keyword IS ERRONEOUS: SYSPLEX NAME IS NOT VALID. ERROR IN LINE *n*.

The sysplex name specified on the SYSPLEX keyword is not a valid sysplex name.

KEYWORD keyword IS ERRONEOUS: PRIMARY DATA SET NAME OR VOLUME IS NOT VALID. ERROR IN LINE *n*.

On the PCOUPLE keyword, one of the following is incorrect:

- The data set specified is not valid.
- The volume serial specified is not a valid volume serial.

KEYWORD keyword IS ERRONEOUS: DEVICE NUMBER MUST BE THREE OR FOUR HEX DIGITS. ERROR IN LINE *n*.

The device number(s) for the signalling paths are not valid.

KEYWORD keyword IS ERRONEOUS: ALTERNATE DATA SET NAME OR VOLUME IS NOT VALID.

ERROR IN LINE *n*.

On the ACOUPLE keyword, one of the following is incorrect:

- The data set specified is not valid.
- The volume serial specified is not a valid volume serial.

KEYWORD keyword IS ERRONEOUS: MAXMSG VALUE MUST BE IN RANGE 1 TO 999999. ERROR IN LINE *n*.

The MAXMSG value is not valid.

KEYWORD keyword IS ERRONEOUS: CLASS NAME IS NOT VALID. ERROR IN LINE *n*.

The class specified on the CLASS keyword is not a valid class name.

KEYWORD keyword IS ERRONEOUS: TIME INTERVAL MUST BE IN RANGE 3 TO 86400 SECONDS. ERROR IN LINE *n*.

The time interval specified is not valid.

KEYWORD keyword IS ERRONEOUS: RETRY LIMIT MUST BE IN RANGE 3 TO 255. ERROR IN LINE *n*.

The RETRY limit value specified is not valid.

KEYWORD keyword IS ERRONEOUS: CLEANUP INTERVAL MUST BE IN RANGE 0 TO 86400 SECONDS. ERROR IN LINE *n*.

The interval specified for CLEANUP is not valid.

KEYWORD keyword IS ERRONEOUS: CLASSLEN MUST BE IN RANGE 0 TO 62464. ERROR IN LINE *n*.

The transport class length specified for CLASSLEN is not valid.

KEYWORD keyword IS ERRONEOUS: GROUP NAME IS NOT VALID. ERROR IN LINE *n*.

The group specified on the GROUP keyword is not a valid group name.

KEYWORD keyword IS ERRONEOUS: DUPLICATE KEYWORD IS SPECIFIED. ERROR IN LINE *n*.

The indicated keyword was specified more than once.

KEYWORD keyword IS ERRONEOUS: OPNOTIFY VALUE CANNOT BE LESS THAN INTERVAL VALUE. ERROR IN LINE *n*.

The value specified for OPNOTIFY is less than the value specified for INTERVAL. The system cannot notify the operator of a system failure before the system detects the failure.

KEYWORD keyword IS ERRONEOUS: TOO MANY CLASS DEFINITIONS, LIMIT IS 62 NON DEFAULT CLASSES. ERROR IN LINE *n*.

Too many transport classes are defined in the COUPLExx parmlib member. The maximum does not include the default class.

KEYWORD keyword IS ERRONEOUS: TOO MANY GROUPS DEFINED, LIMIT IS 2045. ERROR IN LINE *n*.

There are too many groups assigned to transport classes in the COUPLExx parmlib member.

KEYWORD keyword IS ERRONEOUS: GROUP COULD NOT BE ADDED DUE TO STORAGE CONSTRAINTS. ERROR IN LINE *n*.

XCF could not obtain the storage needed to add this group.

KEYWORD keyword IS ERRONEOUS: TYPE NAME IS NOT VALID. ERROR IN LINE *n*.

The type name specified on the TYPE keyword is not valid. The TYPE keyword is associated with the DATA statement.

KEYWORD keyword IS ERRONEOUS: CTRACE PARMLIB MEMBERS MUST BEGIN WITH 'CT' AND CHARACTERS 4-6 MUST BE 'XCF' OR 'XES' AND CHARACTERS 7-8 CAN BE ANY VALID CHARACTERS. ERROR IN LINE *n*.

A CTRACE parmlib member name was incorrect. The CTRACE parmlib member name must be in format CTyXCFxx or CTyXESxx.

KEYWORD keyword IS ERRONEOUS: STRUCTURE NAME IS NOT VALID. ERROR IN LINE *n*.

The structure name specified on the STRUCTURE keyword is not valid.

KEYWORD keyword IS ERRONEOUS: CFRMOWNEDCFPROMPT VALUE MUST BE YES OR NO. ERROR IN LINE *n*.

The CFRMOWNEDCFPROMPT keyword value must be either YES or NO.

KEYWORD keyword IS ERRONEOUS: VMCPUIDTOLERATION VALUE MUST BE YES OR NO

The VMCPUIDTOLERATION keyword value must be either YES or NO.

KEYWORD keyword IS ERRONEOUS: REQUIRED KEYWORD IS MISSING

The indicated required keyword was not specified in the parmlib member.

KEYWORD keyword IS ERRONEOUS: DUPLICATE DEVICE SPECIFIED: *dev*. ERROR IN LINE *n*.

Device number, *dev*, was specified more than once in the COUPLExx parmlib member.

KEYWORD TYPE IN DATA IS ERRONEOUS: DUPLICATE TYPE SPECIFIED: *keytype*. ERROR IN LINE *n*.

The type name for keyword TYPE has been specified more than once. The TYPE keyword is associated with the DATA statement.

KEYWORD keyword IS ERRONEOUS: DUPLICATE LOCALMSG SPECIFIED FOR CLASS *classname*. ERROR IN LINE *n*.

More than one LOCALMSG statement was coded for a transport class. Only one LOCALMSG statement can be coded per class.

KEYWORD keyword IS ERRONEOUS: *item name* IS NOT DEFINED. ERROR IN LINE *n*.

A necessary item was not specified on the CLASSDEF statement.

KEYWORD keyword IS ERRONEOUS: *item name* IS MULTIPLY DEFINED. ERROR IN LINE *n*.

A transport class name was specified on more than one CLASSDEF statement.

KEYWORD keyword IS ERRONEOUS: *item name* IS MULTIPLY SPECIFIED. ERROR IN LINE *n*.

A group name was specified more than once on the same CLASSDEF statement.

KEYWORD keyword IS ERRONEOUS: DUPLICATE STRUCTURE NAME SPECIFIED: *strucname*. ERROR IN LINE *n*.

Structure name, *strucname*, was specified more than once in the COUPLExx parmlib member.

KEYWORD keyword IS ERRONEOUS: DEVICE AND STRNAME ARE MUTUALLY EXCLUSIVE. ERROR IN LINE *n*.

DEVICE and STRNAME cannot be coded on the same PATHOUT or PATHIN statement in the COUPLExx parmlib member.

KEYWORD keyword IS ERRONEOUS: DUPLICATE SPECIFICATION FOR THE *parmlibXX* PARMLIB MEMBER. ERROR IN LINE *n*.

Parmlib member, *parmlib*, was specified more than once.

statement STATEMENT AT LINE *n* IS ERRONEOUS: EITHER THE DEVICE OR STRNAME KEYWORD MUST BE SPECIFIED

Either the DEVICE or STRNAME keyword must be specified on the indicated statement type.

KEYWORD keyword IS ERRONEOUS: CFRM POLICY NAME IS NOT VALID. ERROR IN LINE *n*

The CFRM policy name specification for the CFRMPOL keyword was incorrect.

System action: XCF stops using the COUPLExx parmlib member. The system issues message IXC201A to prompt the operator for a new COUPLExx parmlib member.

Operator response: Correct the error indicated in the message or notify the system programmer.

System programmer response: Correct the COUPLExx parmlib member or specify a new one. Then ask the operator to reIPL the system with the corrected COUPLExx parmlib member.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCI2PRM

Routing Code: 1,2

Descriptor Code: 12

IXC207A XCF INITIALIZATION IS RESTARTED. RESPECIFY COUPLE SYSTEM PARAMETER, REPLY *couple=xx*.

Explanation: Previous message(s) describe why XCF initialization was restarted. The system requires a new

IXC208I • IXC210I

COUPLExx parmlib member to restart XCF initialization.

In the message text:

couple=xx

The suffix for the alternate COUPLExx parmlib member.

System action: System initialization stops until the operator specifies a COUPLExx parmlib member.

If XCF initialization is to be restarted for an issue related to signalling connectivity, message IXC207A prompts the operator to respecify the COUPLExx parmlib member. The response to message IXC207A determines whether message IXC305I is displayed on an operator console. If the same COUPLExx parmlib member is specified, message IXC305I will be displayed. If a different COUPLExx parmlib member is specified, message IXC305I will not be displayed on the operator console, but IXC305I will always be displayed on the hardcopy log.

Operator response: Reply **COUPLE=xx**, where xx is either:

- The same suffix to try the same COUPLExx parmlib member again.
- A different suffix to specify an alternate COUPLExx parmlib member, if there is one available. Then notify the system programmer.

If you are IPLing in order to correct the COUPLExx parmlib member, specify COUPLE=00 to IPL the system in XCF-local mode.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCI2PRM

Routing Code: 1,2

Descriptor Code: 4

IXC208I THE RESPONSE TO MESSAGE message IS INCORRECT: *reply text*

Explanation: The operator entered an incorrect response to a message.

In the message text:

message

The message identifier.

reply

The incorrect response.

text

One of the following:

IS NOT A VALID ACTION

The operator entered an incorrect response to a preceding message.

IS NOT A VALID INTERVAL

The operator entered an incorrect interval in reply to a preceding message.

IS THE CURRENT SYSTEM, DOWN IS NOT VALID

The operator response, DOWN, is not a valid reply to message IXC409D for the current system.

IS NOT ONE OF THE SPECIFIED SYSTEMS

The operator specified an incorrect system in reply to message IXC409D.

IS NOT THE SPECIFIED SYSTEM

The operator specified an incorrect system in reply to message IXC426D.

System action: The system reissues the message that received an incorrect reply.

Operator response: See the operator response for message *message* and respond accordingly, if applicable.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1DSI, IXCL1SRV, IXCL2LHN, IXCL2RC, IXCO1VCP, IXCS2IN, IXCS2WTO, IXCT1CON

Routing Code: 1,2

Descriptor Code: 12

IXC209I PARMLIB MEMBER COUPLExx IS EMPTY

Explanation: The COUPLExx parmlib member specified contains no text.

In the message text:

xx The suffix identifying the COUPLE parmlib member.

System action: XCF stops using the COUPLExx parmlib member and prompts the operator for a new one with message IXC201A.

Operator response: Notify the system programmer.

System programmer response: Do one of the following:

- Correct the COUPLExx parmlib member.
- Specify a different COUPLExx parmlib member.

Ask the operator to reIPL with the correct or updated COUPLExx parmlib member.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCI2PRM

Routing Code: 1,2

Descriptor Code: 12

IXC210I UNKNOWN ERROR WHILE PARSING THE COUPLExx PARMLIB MEMBER

Explanation: An unexpected error occurred while the system was processing the COUPLExx parmlib member.

In the message text:

xx The suffix identifying the COUPLE parmlib member.

System action: XCF stops using the COUPLExx parmlib member and prompts the operator for a new one with message IXC201A.

Operator response: Notify the system programmer. Obtain a stand-alone dump, if the system programmer requests it.

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 stand-alone dump. Provide a copy of the COUPLExx parmlib member.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCI2PRM

Routing Code: 1,2

Descriptor Code: 12

IXC211A SYNTAX ERROR IN COUPLE SYSTEM PARAMETER. REPLY COUPLE=XX.

Explanation: XCF could not process the specified COUPLExx parmlib member because of an error in the specification. The COUPLExx suffix is not correct.

System action: System initialization stops until the operator specifies a valid COUPLExx parmlib member.

Operator response: Reply COUPLE=xx where xx is the suffix of the COUPLExx parmlib member.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCI2PRM

Routing Code: 1,2

Descriptor Code: 4

IXC212I SYSTEM WILL CONTINUE IPLING IN XCF-LOCAL MODE. NO PCOUPLE KEYWORD OR PRIMARY DATA SET NAME WAS SPECIFIED IN THE COUPLExx PARMLIB MEMBER.

Explanation: A system was trying to join the sysplex, but XCF found no PCOUPLE keyword or primary data set name specified in the COUPLExx parmlib member. The system cannot join the sysplex without these required items. This system can IPL only in XCF-local mode.

In the message text:

xx The suffix identifying the COUPLE parmlib member.

System action: The system IPLs in XCF-local mode.

Operator response: If this system was supposed to IPL in XCF-local mode, no response is needed.

If this system was supposed to join a sysplex, correct

the parmlib member to specify a PCOUPLE keyword and a primary couple data set. RelIPL when notified by the system programmer, using the corrected COUPLExx parmlib member.

System programmer response: If necessary, you can prevent the system from IPLing in XCF-local mode by using the PLEXCFG=MULTISYSTEM system parameter. Ask the operator to relIPL the system with the corrected parmlib member.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCI2PRM

Routing Code: 1,2

Descriptor Code: 4

IXC213I INTERNAL XCF COMPONENT ERROR

Explanation: XCF encountered an error during system initialization.

System action: System initialization stops.

Operator response: Notify the system programmer. Specify a new COUPLExx parmlib member to initialize the system.

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

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCI2PRM

Routing Code: 1,2,10

Descriptor Code: 4

IXC214I COUPLExx IS THE CURRENT COUPLE PARMLIB MEMBER

Explanation: COUPLExx is the name of the XCF COUPLE parmlib member.

In the message text:

xx The suffix identifying the COUPLE parmlib member.

System action: XCF uses COUPLExx as the COUPLE parmlib member.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCI2PRM

Routing Code: 1,2

Descriptor Code: 12

IXC215I SYSCLONE ID *sysclone_text* IS ALREADY IN USE BY SYSTEM *system_name*

Explanation: The system issues this message during system initialization to indicate that the substitution text

for the SYSCLONE system symbol is being used by another system in the sysplex. The system issues this message only once, no matter how many other systems are using the same substitution text for SYSCLONE.

In the message text:

sysclone_text

The substitution text for the SYSCLONE system symbol.

system_name

The name of the system in the sysplex that is using the specified substitution text for the SYSCLONE system symbol.

System action: The system issues messages IXC214I and IXC201A to prompt for a new COUPLExx parmlib member.

System programmer response: Do one of the following:

- Respond to message IXC201A with a suffix of a COUPLExx member that indicates XCF-local mode for the initializing system. (The default member, COUPLE00, specifies XCF-local mode.) After system initialization is complete, correct the value of SYSCLONE in the IEASYMxx parmlib member. Then reIPL the system, using the COUPLExx parmlib member that you specified on the original IPL.
- If the SYS1.PARMLIB data set for this system is accessible from another system that is already initialized (the system may or may not be part of the same sysplex), update the substitution text for SYSCLONE, from the other system, in the IEASYMxx member. Then reIPL this system.

Otherwise, no action is necessary.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCI2PH2

Routing Code: 1,2

Descriptor Code: 12

IXC216I SYSPLEX NAME *sysplex_loadxx* FROM COUPLExx IS NOT THE SAME AS THE SYSPLEX NAME SPECIFIED IN LOADxx, *sysplex_couplexx*

Explanation: The system issues this message during system initialization to indicate that the sysplex name specified in the LOADxx parmlib member is not the same as the sysplex name specified in the COUPLExx parmlib member.

In the message text:

sysplex_loadxx

The sysplex name specified on the SYSPLEX statement in the LOADxx parmlib member.

sysplex_couplexx

The sysplex name specified on the SYSPLEX statement in the COUPLExx parmlib member.

System action: The system issues messages IXC214I and IXC207A to prompt for a new COUPLExx parmlib member.

System programmer response: Respond to message IXC207A with the suffix of a valid COUPLExx parmlib member. Ensure that the SYSPLEX statement in the COUPLExx member specifies the same sysplex name that is specified on the SYSPLEX statement in LOADxx.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCI2PRM

Routing Code: 1,2

Descriptor Code: 12

IXC218I SYSTEM STATUS FOR SYSPLEX

plexname AT *curdate curtime*:
sysname1 hh.mm.ss state

Explanation: This message displays the systems in the sysplex that this system was attempting to join.

In the message text:

plexname

Name of the sysplex this system is attempting to join.

currdate

Date when this system attempted to join the sysplex.

currtime

Time at which this system attempted to join the sysplex.

sysname1

A system in the sysplex.

hh.mm.ss

Timestamp of its last status update.

state

One of the following:

BEING REMOVED

XCF is removing the system from the sysplex. This can mean:

- A VARY XCF,sysname command was entered to remove the system from the sysplex.
- The system lost signalling connectivity to the other systems in the sysplex.
- The system lost access to the common clock being used by the sysplex.

MNTR DETECT STOP

The system has not updated its status on the couple data set within the time interval

specified on that system's COUPLExx parmlib member. This can mean:

- The system is issuing an SVC dump.
- The system is going through reconfiguration.
- A spin loop is occurring.
- The operator pressed stop.
- The system is in a restartable wait state.
- The system lost access to the couple data set.

BEING CLEANED UP

XCF is in the process of removing a system from the sysplex.

ACTIVE

The system is running and has updated its status on the couple data set within the last time interval as defined in the system's COUPLExx parmlib member.

System action: The system issues prompt IXC207A.

Operator response: If this system is listed among the systems in IXC218I, XCF has determined that a system by that name is already in the sysplex. This could mean two things:

1. This system was IPLed with a system name that duplicates an active system
2. The other system with this system's name was intended to be removed from the sysplex prior to this system's IPL.

Either re-IPL this system with a different system name or partition the other system and reset it. At that point, you can respecify your COUPLExx parmlib member in response to IXC207A and bring that system into the sysplex.

System programmer response: Issue D R,R from another system.

- If IXC102A is outstanding, this would indicate that the partitioning process has started, but is waiting for the operator to confirm that it is finished before allowing the system to rejoin the sysplex.
- If IXC102A is not outstanding, then the IPLing system duplicates an active system. Either it must be partitioned and reset, or the IPLing system must be re-IPLed with a different name.

Source: Cross System Coupling Facility (SCXCF)

Routing Code: 1,2

Descriptor Code: 12

**IXC219E *typename COUPLE DATA SET dname
ON VOLSER volser DEVN devnum
recordname RECORD NUMBER
recordnum WAS INCOMPLETELY
WRITTEN BY SYSTEM sysname. [text]***

Explanation: While attempting to read the specified record in the named primary couple data set, the

issuing system detected that a previous write to the record did not complete successfully. The most likely cause is an I/O delay or period of unresponsiveness experienced by the writing system, allowing the reading system to observe the incomplete write.

In the message text:

typename

The type of data contained in the data set.

dname

The name of the couple data set.

volser

The DASD volume on which the data set resides.

devnum

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

recordname

The name of the partially written record.

recordnum

The occurrence number of the affected record.

sysname

The name of the system which last attempted to update the affected record. A value of '*****' means that the writing system could not be identified.

text

One of the following:

READ IS WAITING FOR REPAIR.

The issuing system is waiting for the named system to complete its write. This message line is issued when the incomplete write is first recognized.

READ HAS BEEN WAITING FOR REPAIR FOR *delaysec* SECONDS.

The issuing system is waiting for the named system to complete its write. This message is issued to report the length of time the incomplete write condition has persisted.

delaysec

The number of seconds since the incomplete write was detected.

System action: The issuing system will continue attempting to read the couple data set record for up to 5 minutes, allowing the writing system an opportunity to complete the write. If the read has not succeeded within that time, or if the issuing system determines that the corrupted record cannot be repaired, the issuing system removes the data set from use.

Operator response: Notify the system programmer.

System programmer response: Examine the system logs for the named system to identify any problems that may be preventing the completion of the write. Of particular interest are I/O-related problems that affect the volume on which the couple data set resides, or

IXC220W

problems causing system unresponsiveness, such as dumping or looping. Take corrective action as appropriate.

Note that partitioning the named system will cause the issuing system to remove the data set from use.

If the data set is removed, the SETXCF COUPLE,ACOUPLE operator command should be used to install a new alternate for the affected type as soon as possible.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1IOR

Routing Code: 2,10

Descriptor Code: 11,12

IXC220W XCF IS UNABLE TO CONTINUE: WAIT STATE CODE: *www* REASON CODE: *reason-code, text*

Explanation: XCF found a severe error.

In the message text:

www

The wait state code.

reason-code

The reason code describing the error.

task-id

The task-id of the failing task

AN OPERATOR REQUESTED PARTITIONING WITH THE VARY XCF COMMAND

The operator entered a VARY XCF command for this system.

LOSS OF CONNECTIVITY WAS DETECTED

The last signalling path between this system and one or more others in the sysplex failed. The operator requested that this system be removed from the sysplex in response to IXC409D.

XCF also issues message IXC467I or message IXC307I, or both messages, on either this system or the other system where connectivity was lost. Messages IXC467I and IXC307I describe reasons for the signalling path loss.

LOSS OF COUPLE DATA SET WAS DETECTED

The system found an error in the primary couple data set. Either no alternate couple data set was available or the alternate also failed. The couple data set must be preserved and dumped. XCF also issues message IXC253I or IXC257I.

SYSPLEX PARTITIONING OCCURRED DURING IPL

This system could not join the sysplex because of errors found during the initialization process. Other messages accompany this message to explain the error.

AN XCF ERROR IN SYSPLEX PARTITIONING, THIS SYSTEM WAS TARGETED

An unexpected error occurred while XCF was trying to remove this system from the sysplex.

THIS SYSTEM RECOGNIZED THAT IT WAS REMOVED FROM THE SYSPLEX

The system record could not be used because XCF is removing the system from the sysplex.

THE SYSTEM MONITOR DISABLED INTERRUPT EXIT COULD NOT BE ESTABLISHED

XCF was not able to establish the system monitor disabled interrupt exit. The needed clock was probably not available.

THE SYSTEM MONITOR STATUS TABLE (SMST) WAS DESTROYED

An internal error damaged system data in the SMST.

THE SYSTEM WAS RUNNING IN ETR SYNCHRONIZATION MODE WITH A PARTICULAR ETRID AND NOW A NEW ETRID IS IN USE

The system changed from external time reference (ETR) synchronous mode to ETR-local mode and back to ETR synchronous mode, but the new ETR clock identifier (ETRID) does not match the old one. The system does not allow another system to go into ETR synchronization mode if the clock identifiers do not match.

AN ETR FAILURE ON ANOTHER SYSTEM HAS OCCURRED. THE OPERATOR HAS RESTARTED THAT SYSTEM. ALL OTHER SYSTEMS ARE STOPPED.

Another system is removing this system from the sysplex because of an external time reference (ETR) failure. When there is an ETR failure, only one system can remain in the sysplex. The remaining system removes all others from the sysplex.

ONE OF THE XCF DATA SPACES WAS OUT OF STORAGE

An XCF data space ran out of storage.

COUPLE DATA SET SWITCH ERROR OCCURRED DURING INITIALIZATION

XCF found an unrecoverable error while switching couple data sets during initialization of this system into the sysplex. The couple data set must be preserved and dumped.

NONE OF THE VALID CONFIGURATIONS IS PERMITTED

XCF encountered an unrecoverable error. As a result, the system will not allow any of the sysplex configurations specified on the PLEXCFX system parameter.

THIS SYSTEM IS TRYING TO JOIN A SYSPLEX THAT IS NOT ACCEPTING MORE SYSTEMS

This system is trying to join a sysplex that contains

an active system that will not let other systems join. This can be caused by one of the following:

- The active system is not running with the external time reference (ETR) hardware facility, so no other systems can join because of the lack of ETR synchronization. The only way for this system to join the sysplex is to connect the active system to an ETR clock in synchronization mode. Then the operator can reIPL this system.
- The active system was IPLed in MONOPLEX mode. The only way for this system to join this sysplex is to reIPL the active system in multisystem mode. The operator can then reIPL this system.

EXTERNAL CALLER REQUESTED WAIT STATE TO BE LOADED

XCF issues this wait state for a non-XCF program that requested XCF services to remove a system from the sysplex.

THIS SYSTEM WAS REMOVED FROM THE SYSPLEX AS REQUIRED BY THE PR/SM POLICY

XCF issues this wait state when automatic action to remove a system from the sysplex was initiated in accordance with information specified in the PR/SM policy.

THIS SYSTEM WAS REMOVED FROM THE SYSPLEX AS REQUIRED BY THE SYSPLEX FAILURE MANAGEMENT POLICY BECAUSE ITS STATUS UPDATE WAS MISSING

XCF issues this wait state when automatic action to remove a system from the sysplex was initiated in accordance with information specified in the Sysplex Failure Management policy, because the system was not updating its system status at regular intervals.

THIS SYSTEM WAS REMOVED FROM THE SYSPLEX AS REQUIRED BY THE SYSPLEX FAILURE MANAGEMENT POLICY BECAUSE OF A SIGNALLING CONNECTIVITY FAILURE IN THE SYSPLEX

XCF issues this wait state when automatic action to remove a system from the sysplex was initiated in accordance with information specified in the Sysplex Failure Management policy, in response to a signalling connectivity failure in the sysplex.

LOSS OF COUPLE DATA SET FOR CFRM WAS DETECTED

The system found an error in the primary couple data set for CFRM. Either no alternate couple data was available or the alternate also failed. The couple data set must be preserved and dumped. The couple data set for CFRM must be preserved and dumped. XCF may also issue message IXC253I or IXC257I.

UNKNOWN REASON CODE

An unknown reason code was received, this is the result of an internal error.

A TASK IN THE XCFAS ADDRESS SPACE HAS FAILED AND CANNOT BE RECOVERED. TASK IDENTIFIER: task-id.

An XCF task *task-id* failed and cannot be recovered.

System action: The system enters a nonrestartable wait state code. The system issues other messages prior to the wait state that explain the problem.

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

```
DUMP DATASPACES OF ASID('XCFAS')
DUMP RANGE(ALL) IN ASID('XCFAS')
```

ReIPL the system.

If one of the following appears in the message text, dump the couple data set.

- COUPLE DATA SET SWITCH ERROR OCCURS DURING INITIALIZATION
- LOSS OF COUPLE DATA SET WAS DETECTED
- LOSS OF COUPLE DATA SET FOR CFRM WAS DETECTED

For this message text, the couple data set for CFRM should be preserved and dumped. Use the ADRDSSU utility.

To dump the couple data set, use the ADRDSSU utility in the following JCL:

```
//DUMP JOB MSGLEVEL=(1,1)
//STEP1 EXEC PGM=ADRDSU,REGION=4M
//SYSPRINT DD SYSOUT=*
//DD1 DD DISP=SHR,VOL=SER=SHR001,UNIT=3380
//SYSIN DD *
      PRINT DATASET(SYS1.PRIMARY) INDDNAME(DD1)
/*

```

See *z/OS DFSMS Storage Administration Reference* for more information on the ADRDSSU utility.

System programmer response: See the system programmer response for other messages preceding this message.

Format the stand-alone dump with the IPCS COUPLE commands, 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 IPCS COUPLE reports and the stand-alone dump.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCM2LWT

Routing Code: 1,2,10

Descriptor Code: 1

IXC230I WAITING FOR SYSTEM *sysname* TO BE PARTITIONED FROM THE SYSPLEX

Explanation: While this system was trying to join the sysplex it detected that it is running on the same CPC image as the active system *sysname*. It has attempted to initiate the partition of that system. It will wait for the partition to complete and attempt to join the sysplex again.

Note that this message might be issued if you have altered the TOD clock or sysplex timer to a time earlier than the system previously was using. If either the TOD clock or the sysplex timer has been regressed, you can avoid this message by waiting the amount of regressed time before re-IPLing or by reformatting the sysplex couple data set.

In the message text:

sysname

The system name of the system that was previously running on the same CPC image as the current system.

System action: The system will wait for the partition to complete. If the partition completes, the system will join the sysplex. If the partition does not complete in a timely manner, then the system issues message IXC231I.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCI2RIP

Routing Code: 1,2

Descriptor Code: 12

IXC231I TIMED OUT WAITING FOR SYSTEM *sysname* TO BE PARTITIONED FROM THE SYSPLEX

Explanation: This system has stopped waiting for system *sysname* to be partitioned from the sysplex. This system will not be able to join the sysplex until system *sysname* has been partitioned out of the sysplex.

Note that this message might be issued if you have altered the TOD clock or sysplex timer to a time earlier than the system previously was using. If either the TOD clock or the sysplex timer has been regressed, you can avoid this message by waiting the amount of regressed time before re-IPLing or by reformatting the sysplex couple data set.

In the message text:

sysname

The system name of the system that was previously running on the same CPC image as the current system.

System action: The system issues prompt IXC207A requesting that you specify a new COUPLExx parmlib member to restart XCF initialization. The system also

issues IXC218I and IXC203I, which give additional information about the system and the sysplex.

Operator response: Respond to message IXC207A, specifying the new COUPLExx parmlib member. IXC218I and IXC203I contain information that can be used to respond to IXC207A.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCI2RIP

Routing Code: 1,2

Descriptor Code: 12

IXC239A UNABLE TO ACTIVATE COUPLE DATA SET(S) FOR *typename*

Explanation: The system was unable to activate the same couple data set configuration that is in use by the other systems in the sysplex for the named function. Message IXC255I has been issued to describe specific allocation problems encountered.

In the message text:

typename

The type of data contained in the data set.

System action: The system will prompt the operator to determine whether it is acceptable to IPL without use of the specified function. This message is followed by message IXC252D.

Operator response: Respond to message IXC252D as directed by the system programmer.

System programmer response: If it is not acceptable to continue the IPL without access to the specified function, then either correct the problems that prevent this system from activating the current sysplex couple data set configuration, or use the SETXCF COUPLE command on some other system in the sysplex to modify the current configuration to one that this system can attain.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1AFN

Routing Code: 1,2,10

Descriptor Code: 2

IXC240I IF XCF-LOCAL MODE INITIALIZATION IS DESIRED, *text*

Explanation: XCF could not process the COUPLExx parmlib member because of an error. This message is issued to inform the operator that either a reply of COUPLE=** to the message or a reIPL with a specification of COUPLE=** and PLEXCFG=XCFLOCAL will allow the system to initialize using the IBM-supplied XCF defaults. This may be needed to correct any parmlib errors that otherwise cause the IPL to fail. Note that the XCF defaults will

configure the system for XCF-local mode only if permitted by the PLEXCFG system initialization specification and any other system component specifications that need to be set to allow XCF-local mode. The COUPLE=** specification will also allow the sysplex name specified in LOADxx to be used.

In the message text:

REPLY 'COUPLE=' TO THE FOLLOWING PROMPT**

A reply of COUPLE=** is suggested because PLEXCFG will allow XCF-local mode.

RE-IPL WITH 'PLEXCFG=XCFLOCAL' AND 'COUPLE='**

The COUPLE=** specification attempts to configure the system in XCF-local mode, and the PLEXCFG specification prevented XCF-local mode.

RE-IPL WITH 'PLEXCFG=XCFLOCAL' AND 'COUPLE=' ALONG WITH ANY OTHER SPECIFICATIONS NEEDED TO SUPPORT XCF-LOCAL MODE**

The COUPLE=** specification attempts to configure the system in XCF-local mode, and a system component prevented XCF-local mode.

System action: XCF issues message IXC201A, IXC207A, or IXC211A at which point initialization stops and waits for a valid reply.

Operator response: Either re-IPL the system or reply to message IXC201A, IXC207A, or IXC211A when issued.

System programmer response: None.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCI2PRM

Routing Code: 1,2

Descriptor Code: 12

IXC241I UNABLE TO PROCESS 'COUPLE=' SPECIFICATION BECAUSE *text***

Explanation: XCF could not process the COUPLE=** specification because the resultant XCF-local mode system configuration was prevented. The message text indicates whether a system component or the PLEXCFG specification prevented XCF-local mode. If COUPLE=** is still desired and the message text indicates that PLEXCFG is the reason, then a re-IPL with a PLEXCFG specification that allows XCF-local mode will likely succeed. If a system component prevented XCF-local mode, then changing the initialization parameters for the component to allow XCF-local mode may be needed along with COUPLE=** and PLEXCFG=XCFLOCAL.

In the message text, *text* is one of the following:

THE PLEXCFG SPECIFICATION PREVENTED XCF-LOCAL MODE

The COUPLE=** specification attempts to configure

the system in XCF-local mode, and the PLEXCFG specification prevented XCF-local mode.

A SYSTEM COMPONENT PREVENTED XCF-LOCAL MODE

The COUPLE=** specification attempts to configure the system in XCF-local mode, and a system component prevented XCF-local mode.

OF AN UNKNOWN REASON

The reason that COUPLE=** was not accepted could not be determined.

System action: XCF issues message IXC201A, IXC207A, or IXC211A at which point system initialization stops and waits for a valid reply.

Operator response: Either re-IPL the system or respond to message IXC201A, IXC207A, or IXC211A when issued.

System programmer response: None

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCI2PRM

Routing Code: 1,2

Descriptor Code: 12

IXC242I XCF UNABLE TO BUILD SAF AUTHORIZATION PROFILES UNDER THE FACILITY CLASS FOR APPLICATION *applname* SECURITY AUTHORIZATION FACILITY RETURNED RC = *saf-return-code* THE SECURITY PRODUCT RETURNED RC = *product-return-code* RS = *product-reason-code*

Explanation: XCF has attempted to have in-storage security profiles built. SAF returned an unsuccessful return code.

In the message text:

applname

The name of the application requesting the authorization checking.

saf-return-code

The return code from the SAF call.

product-return-code

The return code from the security product.

product-reason-code

The reason code from the security product.

System action: XCF will continue its initialization. XCF does not attempt to build the security profiles again.

Operator response: Notify the system programmer.

System programmer response: See the appropriate security products messages and codes manual for detailed information.

IXC244E • IXC245I

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCI2JST

Routing Code: 2,10

Descriptor Code: 2

**IXC244E XCF CANNOT USE {PRIMARY I
ALTERNATE} SYSPLEX COUPLE DATA
SET *dsname*, {ON VOLSER *volser*, I
VOLSER N/A,} *text***

Explanation: XCF could not open the data set indicated and will attempt to continue to IPL the system without it.

b

In the message text:

dsname

The name of the couple data set.

volser

The DASD volume where the data set resides, if known. (It may be unknown when the master catalog is used to determine the volser, but the data set has not been cataloged.)

text

One of the following:

CONTINUING THE IPL USING SPECIFIED ALTERNATE AS PRIMARY

XCF is attempting to use the data set that was specified as the Alternate in the COUPLExx parmlib member as the Primary Sysplex couple data set, because the specified Primary could not be opened.

CONTINUING THE IPL WITHOUT AN ALTERNATE

XCF could not open the data set specified as the Alternate in the COUPLExx parmlib member, and is continuing without it.

System action: XCF issues message IXC255I, giving the details of the OPEN error which occurred for the specified data set and attempts to continue the IPL without it.

Operator response: Contact the system programmer.

System programmer response: Determine why the open of the specified data set failed. If the name or volume serial of the data set is incorrect in the COUPLExx parmlib member, correct it before the next IPL. If the data set name and volser are valid, but the data set is on a volume that is inaccessible, format a new Sysplex couple data set on another volume, update the COUPLExx parmlib member, and use the SETXCF COUPLE,ACOUPLE command to add it to the current sysplex.

While the sysplex is running with only one Sysplex couple data set, it is exposed to errors on that device

that could bring down the entire sysplex.

Source: Cross System Coupling Facility (SCXCF)

Routing Code: 1,2

Descriptor Code: 2

**IXC245I INITIALIZATION OF SYSPLEX COUPLE
DATA SET *dsname* ON VOLSER *volser*
DEVICE *device* IS *nnn%* COMPLETE.
TIME: *time* SECONDS, DIAG: *x***

Explanation: One minute has passed since initialization of the indicated sysplex couple data set began or since the last IXC245I message was issued. The message indicates the amount of initialization progress that has been made. Note that the percentage complete is an estimate and may not be an exact value.

In the message text:

dsname

The name of the sysplex couple data set that is being initialized.

volser

The volume serial number of the direct access storage device (DASD) on which the sysplex couple data set resides.

device

The device address of the direct access storage device (DASD) on which the sysplex couple data set resides.

nnn

Percentage of initialization complete.

time

The amount of time, in seconds, that has been spent so far initializing the specified sysplex couple data set.

x Diagnostic data.

System action: The system continues initialization of the sysplex couple data set.

Operator response: This is an information message for which no response is expected. However, if initialization of the sysplex couple data set is taking longer than expected, you might want to notify the system programmer.

System programmer response: There are many factors that contribute to the amount of time required to initialize a sysplex couple data set. If the initialization time is longer than expected, check for changes that might have caused it. (For example, increases in the size of the sysplex couple data set, changes to DASD, changes to the DASD control unit, or volume contention might increase initialization time.)

If the elapsed time is seen as a problem, search problem reporting data bases for a possible problem in XCF couple data set initialization. If no fix exists,

contact the IBM Support Center.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1DSX

Routing Code: 2,10

Descriptor Code: 4,12

**IXC246E *typename COUPLE DATA SET dsname
ON VOLSER volser, DEVNdevnum, HAS
BEEN EXPERIENCING I/O DELAYS
FOR delaysec SECONDS.***

Explanation: XCF has been attempting to read or write to the couple data set of the type specified for the number of seconds stated. However, the I/O has not completed within the time allotted by the I/O timing facility. Currently, this time is set to one-third of the System Failure Detection Interval, or 15 seconds, whichever is smaller.

In the message text:

typename

The type of data contained in the data set.

dsname

The name of the couple data set.

volser

The DASD volume where the data set resides.

devnum

The DASD device number where the data set resides.

delaysec

The number of seconds of delay.

System action: XCF will attempt to retry the failing I/O for five minutes. If no I/O completes to the data set in that time, XCF removes the data set from use.

Operator response: Notify the system programmer.

System programmer response: If the device on which the couple data set is experiencing an expected delay, no action may be necessary. However, the I/O which is being delayed is critical to the health of the sysplex, and the delay may cause performance problems for users of sysplex services. If the delay is not expected, device or control unit diagnostics should be examined to remove the cause of the delay. If no I/O completes to the data set within five minutes, XCF will remove the data set from use. If BOTH primary and alternate data sets are removed, that function will be unavailable to the sysplex. For Sysplex and CFRM couple data sets, the loss of both data sets will cause every system in the sysplex to load a non-restartable wait state. If a data set is removed, the SETXCF COUPLE,ACOUPLE operator command should be used to install a new alternate for that type as soon as possible.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1SIO

Routing Code: 1,10

Descriptor Code: 11,12

**IXC247D REPLY U TO ACCEPT USE OR D TO
DENY USE OF THE COUPLE DATA SET
FOR *typename*.**

Explanation: This system attempted to initialize a couple data set for the specified type and determined that the data set might be in use by another sysplex. Message IXC248E, which precedes this message, indicates the name of the data set that is possibly in use by another sysplex.

In the message text:

typename

The type of data contained in the couple data set.

System action: Initialization of the couple data set stops until the operator replies to message IXC247D.

Operator response: Choose one of the following replies:

U To continue initialization of the couple data set.

Allowing initialization to continue on a couple data set that is in use by another sysplex causes the other sysplex to lose access to the data set, which might cause the system(s) in that sysplex to enter a wait state.

D To stop initialization of the couple data set.

If initialization is stopped, either the data set will not be brought on as an alternate couple data set or the type will not be started.

If an incorrect reply is entered, the system issues message IXC208I to notify the operator of the error. The system then reissues message IXC247D.

Notify the system programmer.

System programmer response: This message occurs because the couple data set is or was being used by another sysplex, or the couple data set was previously used by this sysplex but there is no longer a record of its use.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1OWN

Routing Code: 1,2

Descriptor Code: 2

**IXC248E COUPLE DATA SET *dsname* ON
VOLSER *volser* FOR *typename* MAY BE
IN USE BY ANOTHER SYSPLEX.**

Explanation: XCF tried to initialize a data set as a primary or alternate function couple data set, but found

that it contains sysplex ownership information inconsistent with the ownership information in the sysplex couple data set. This may indicate that the incoming data set is currently in use by another sysplex. However, it may simply indicate that the incoming data set has been previously used and is not part of the last known couple data set configuration for the specified type, as recorded in the sysplex couple data set. For example:

- The data set may have been in use as the primary couple data set, been removed by a SETXCF COUPLE,PSWITCH command, and is now being brought back into use as the alternate via a SETXCF COUPLE,ACOUPLE command.
- The data set may have been in use as the primary couple data set, and is still named in COUPLExx as the primary couple data set, but the current IPL is using different sysplex couple data sets that have no record of the data set's previous usage.

In the message text:

dsname

The name of the couple data set.

volser

The DASD volume where the couple data set resides.

typename

The type of data contained in the couple data set.

System action: Message IXC247D follows this message; XCF prompts the operator to see if it is acceptable to use this couple data set for the specified type.

Operator response: Notify the system programmer.

System programmer response: Determine whether the incoming data set is in use by another sysplex. If so, direct the operator to reply 'D' to message IXC247D to deny use of the data set.

Take steps to prevent inadvertent use of a couple data set by two sysplexes. Change the COUPLExx member so that it does not reference the same couple data set for both sysplexes, or ensure that the operator does not specify the wrong couple data set on the SETXCF command.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1OWN

Routing Code: 2,10

Descriptor Code: 11

IXC249I	ERROR PROCESSING COUPLE DATA SET <i>dsname</i> ON VOLSER <i>volser</i> FOR <i>typename</i>: INCONSISTENT DATA FOR <i>recordname,record-occurrence number,subrecordname,subrecord- occurrence number,errorcode</i>
----------------	--

Explanation: XCF tried to initialize a data set as a primary or alternate couple data set, but found a problem with the data set.

In the message text:

dsname

The name of the couple data set.

volser

The DASD volume where the data set resides.

typename

The type of data contained in the data set.

INCONSISTENT DATA FOR

Data was read from the couple data set which is not consistent.

recordname

The name of the record which could not be read.

record-occurrence number

The number of the recordname in error.

subrecordname

The name of the subrecord which could not be read.

subrecord-occurrence number

The number of the subrecord name in error.

errorcode

A code identifying the type of error.

System action: If this is a primary couple data set, XCF will attempt to resolve the inconsistency by repairing the data from information contained on the alternate couple data set. If there is no alternate or if this error was on an alternate couple data set, then XCF will not be able to repair the inconsistency. If the inconsistency is not repaired, the couple data set is not placed into use. If the inconsistency is repaired, the couple data set is placed into use and initialization continues.

Operator response: If the couple data set was placed into use then no further action is required. If the couple data set was not placed into use then notify the system programmer and dump the couple data set. See the operator response to message IXC220W for the correct JCL to dump the couple data sets.

System programmer response: If the couple data set was placed into use then no further action is required. Otherwise IBM service should be contacted. A dump of the failing couple data set should be provided along with the information in the above message. One possible cause of the problem is a system reset of a system that had I/O active to the couple data set. Once all diagnostic information has been collected, the couple data set may be reformatted.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1AAR

Routing Code: 1,2,10

Descriptor Code: 12

IXC250I ALTERNATE COUPLE DATA SET REQUEST FAILED FOR DATA SET
dsname FOR typename: text

Explanation: XCF could not make a data set available as an alternate couple data.

In the message text:

dsname

The name of the data set.

typename

The type of data contained in the data set.

ANOTHER ALTERNATE COUPLE DATA SET REQUEST IS CURRENTLY BEING PROCESSED

The system is already trying to make a couple data set available as the alternate couple data set.

THE NEW ALTERNATE DATA SET COULD NOT BE OPENED

The system was unable to open data set *dsname*.
The data set cannot be used.

THE NEW ALTERNATE DATA SET IS CURRENTLY IN USE AS THE PRIMARY DATA SET

Data set *dsname* is already in use as the primary couple data set. It cannot be used as the alternate couple data set.

THE NEW ALTERNATE DATA SET IS CURRENTLY IN USE AS THE ALTERNATE DATA SET

Data set *dsname* is already in use as the alternate couple data set. The request is ignored.

COULD NOT WRITE SYSTEM STATUS RECORD(S) OR LOCK BLOCK(S)

The system was unable to initialize *dsname* by writing the system status record(s) or lock block(s) to it. The data set cannot be used.

COULD NOT CLEAR THE RECOVERY LOCK BLOCKS ON THE NEW ALTERNATE DATA SET

The system was unable to initialize *dsname* by clearing the recovery lock blocks. The data set cannot be used.

COULD NOT CLEAR THE SYSPLEX LOCK BLOCKS ON THE NEW ALTERNATE DATA SET

The system was unable to initialize *dsname* by clearing the sysplex lock blocks. The data set cannot be used.

COULD NOT CLEAR THE LOCK BLOCKS ON THE NEW ALTERNATE DATA SET

The system was unable to initialize *dsname* by clearing the sysplex lock blocks. The data set cannot be used.

COULD NOT WRITE A SEQUENCE NUMBER TO THE NEW ALTERNATE DATA SET

The system was unable to initialize *dsname* by writing a sequence number to it. The data set cannot be used.

THE NEW ALTERNATE DATA SET COULD NOT BE SYNCHRONIZED WITH THE PRIMARY DATA SET

The system was unable to initialize *dsname* by synchronizing it with the primary data set. The data set cannot be used.

REQUIRED RECORDS COULD NOT BE READ FROM THE NEW ALTERNATE DATA SET

The system was unable to read required records from data set *dsname*. The data set cannot be used.

CONSISTENCY CHECKING FAILED FOR THE NEW ALTERNATE DATA SET

Data set *dsname* failed consistency checking. The data set cannot be used.

THE FORMAT TOD IN THE NEW ALTERNATE DATA SET IS INCORRECT

The format time-of-day (TOD) stamp in alternate couple data set *dsname* does not match the format TOD stamp for the primary couple data set. The data set cannot be used.

THE SYSTEM IS IN XCF-LOCAL MODE

The system is in XCF-local mode, and cannot use couple data sets. The request is rejected.

THE CAUSE OF THE FAILURE IS UNKNOWN

XCF could not determine why the couple data set request failed.

PERMANENT ERROR PROCESSING IS CURRENTLY ACTIVE FOR THIS DATA TYPE

XCF is currently processing a permanent error for this data type.

COULD NOT GAIN OWNERSHIP OF THE DATA

The system was unable to gain ownership of the data for type *typename* within *dsname*. The data set cannot be used.

COULD NOT CLEAR UPLEVEL RECORDS ON THE NEW ALTERNATE DATA SET

The system was unable to clear uplevel records on the new alternate couple data set for type *typename* within *dsname*. The data set cannot be used.

ORIGINATING SYSTEM DID NOT COMPLETE INITIALIZATION

The system on which the ACOPUPLE request originated did not complete the necessary initialization of the new alternate couple data set. This indicates a maintenance mismatch. The issuing system requires an initialization protocol in which the originating system is not capable of participating.

UNABLE TO SERIALIZE ACOUPLE PROCESS

The issuing system was unable to access the primary sysplex couple data set to serialize the ACOUPLE request, probably due to an I/O timeout.

OWNERSHIP INDICATORS INCONSISTENT

The data ownership indicator in the new alternate couple data set as read by a participating system does not match the information provided by the system initiating the ACOUPLE request. This indicates that the two systems are not using the same data set, probably because the volume serial specified or implied by the ACOUPLE command refers to different devices on the two systems.

System action: XCF may already have removed from use the old alternate couple data set for the specified type of data, so the sysplex may be running without an alternate couple data set.

Operator response: If the message text contains ORIGINATING SYSTEM DID NOT COMPLETE INITIALIZATION, reissue the SETXCF COUPLE,ACOUPLE command from any system that issued this message.

If the message text contains UNABLE TO SERIALIZE ACOUPLE PROCESS, check for indications of I/O delays affecting the primary sysplex couple data set. Reissue the ACOUPLE command after correcting any problems.

Otherwise, notify the system programmer.

System programmer response: Make a different alternate data set available, or delete and reformat data set *dsname* to make it available.

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: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1AA

Routing Code: 1,2

Descriptor Code: 4

IXC251I NEW ALTERNATE DATA SET *dsname* FOR *typename* HAS BEEN MADE AVAILABLE

Explanation: A new alternate couple data set, *dsname*, was successfully defined.

In the message text:

dsname

The name of the data set that XCF made available.

typename

The type of data contained in the data set.

System action: XCF is using data set *dsname* as the alternate couple data set.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1AA

Routing Code: 1,2

Descriptor Code: 4

IXC252D REPLY C TO CONTINUE IPL WITHOUT THE *typename* FUNCTION, OR R TO RETRY DATA SET ALLOCATION

Explanation: The system was unable to activate the same couple data set configuration that is in use by the other systems in the sysplex for the named function. This message was preceded by message IXC239A.

In the message text:

typename

The type of data contained in the data set.

System action: Activation of the named function stops until the operator replies to message IXC252D.

Operator response: As directed by the system programmer, do one of the following:

- Reply 'C' to continue the IPL. The named function will be inactive on the IPLing system, until some subsequent action is taken to correct the problem.
- Reply 'R' to cause the system to attempt allocation of the couple data set(s) again.

System programmer response: Determine whether the condition that prevented the IPLing system from allocating the necessary couple data sets can be corrected before continuing with the IPL. If so, correct the condition and attempt allocation of the couple data sets again. If not, continue with the IPL, correct the condition after the IPL completes, and issue SETXCF COUPLE commands as necessary to restore the use of the named function on the affected system and achieve the desired couple data set configuration.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1AFN

Routing Code: 1,2

Descriptor Code: 2

IXC253I {PRIMARY|ALTERNATE} COUPLE DATA SET *dsname* FOR *typename* IS BEING REMOVED BECAUSE OF *errortype* DETECTED BY SYSTEM *sysname* [ERROR CASE: *errorcase*] [DATA SET TAKEN OVER BY SYSTEM *stealsys* AT *stealtime*]

Explanation: A couple data set failed. XCF is removing it from the sysplex.

Each system affected by the failure of the couple data set issues IXC253I to report its removal. The system detecting the error may also issue the ERROR CASE

line(s) to provide additional detail about the failure.

In the message text:

PRIMARY

XCF is removing the primary couple data set from the sysplex.

ALTERNATE

XCF is removing the alternate couple data set from the sysplex.

dsname

The name of the couple data set that XCF is removing from the sysplex.

typename

The type of data contained in the data set.

errortype

One of the following:

AN UNKNOWN ERROR

An error that cannot be determined.

AN I/O ERROR

I/O error on the couple data set.

INCONSISTENT INFORMATION

Inconsistent information in the couple data set.

A SETXCF COUPLE,PSWITCH OPERATOR COMMAND

Initiated by operator command
SETXCF,COUPLE with the PSWITCH option.

A SETXCF COUPLE,ACOUPLE OPERATOR COMMAND

Initiated by operator command
SETXCF,COUPLE with the ACOUPLE option.

sysname

The name of the system that initiated the request or detected the error.

errorcase

One of the following:

PERMANENT ERROR

An I/O operation has failed with a permanent I/O error.

UNRESOLVED I/O TIMEOUT

Attempts to initiate I/O have timed out repeatedly, and the system has been unable to complete an I/O request within the 5 minute retry period.

TAKEOVER BY ANOTHER SYSPLEX

Another sysplex has taken ownership of the couple data set because the operator incorrectly replied 'U' to IXC248E / IXC247D while the couple data set was still in use by the sysplex of which the issuing system is a member.

UNABLE TO IDENTIFY WRITING SYSTEM

The system that left the couple data set partially written did not record its identity before

beginning the write. The writing system may not have the partial write recovery support introduced by APAR OW51741 or z/OS V1R5.

WRITING SYSTEM NO LONGER ACTIVE

The system that left the couple data set partially written was partitioned from the sysplex before it could complete the repair of the affected record.

TIME LIMIT FOR REPAIR EXPIRED

The maximum time limit for repair of a partially written record has elapsed.

stealsys

The name of the system from which the operator replied to IXC247D to allow ownership of the couple data set to be taken over.

stealtime

The date/time when ownership of the couple data set was taken over, in the format mm/dd/yyyy hh:mm:ss.fffffffff.

System action: The system stops using the couple data set.

If the failing couple data set was the primary, XCF tries to switch to the alternate couple data set. Any work in progress will be restarted once the switch is made. If no alternate couple data set is available, the function associated with this couple data set type becomes unavailable. If the affected couple data set is sysplex or CFRM, XCF removes the issuing system from the sysplex.

If the failing couple data set was the alternate, the alternate becomes unusable. XCF informs all other systems in the sysplex of the failure.

Operator response: If the reason for the couple data set removal was:

- AN I/O ERROR with error case PERMANENT ERROR
- INCONSISTENT INFORMATION

then dump the couple data set. See the operator response to message IXC220W for the correct JCL to dump the couple data set. Otherwise, notify the system programmer.

System programmer response: Allocate and format a new alternate couple data set. Ask the operator to enter the SETXCF COUPLE,ACOUPLE command to make the new alternate couple data set available to XCF. The command should only be entered on one system in the sysplex.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1SWT, IXCL1IOC, IXCL1IOR, IXCL1SIO, IXCO1ASY

Routing Code: 1,2,10

Descriptor Code: 4

IXC254I DATA SET *dname* IS CURRENTLY IN USE AS THE {PRIMARY\ALTERNATE} COUPLE DATA SET

Explanation: XCF is using *dname* as the primary or alternate couple data set.

In the message text:

dname

The name of the couple data set that XCF is using as the primary or alternate couple data set.

PRIMARY

XCF is using the couple data set as the primary couple data set in the sysplex.

ALTERNATE

XCF is using the couple data set as the alternate couple data set in the sysplex.

System action: Couple data set *dname* is used by XCF as the primary or alternate couple data set.

Source: Cross System Coupling Facility (SCXCF)

Routing Code: 1,2

Descriptor Code: 11

IXC255I UNABLE TO USE DATA SET *dname* AS THE {PRIMARY\ALTERNATE} FOR *typename*: *text* [RELEVANT*typename* COUPLE DATA SET FORMAT INFORMATION]

PRIMARY

FORMAT LEVEL: *fmtlevel*
FORMAT KEYWORDS: *fmtinfo*
fmtinfo

ALTERNATE

FORMAT LEVEL: *fmtlevel*
FORMAT KEYWORDS: *fmtinfo*
fmtinfo]

Explanation: XCF tried to initialize a data set as a primary or alternate couple data set, but was unsuccessful.

If the message is issued while attempting to bring a new alternate couple data set into service, and the message text is one of the following:

- ALLOWABLE NUMBER SIZE OF *record-type* RECORDS IS LESS THAN CURRENT PRIMARY
- DOES NOT CONTAIN *record-type* RECORDS

the system determined that the incoming alternate was formatted with lesser capacity than the existing primary couple data set. In this case, the lines beginning with RELEVANT *typename* COUPLE DATA SET FORMAT INFORMATION may be included. These lines compare the existing primary and incoming alternate to allow the installation to determine how to reformat the new alternate couple data set. The component owning the *typename* couple data set supplies the interpretive

information displayed in these lines. The additional lines are displayed only when the owning component provides the necessary information.

In the message text:

dname

The name of the data set that XCF could not use as a couple data set for the sysplex.

PRIMARY

XCF was trying to use the data set as the primary couple data set for the sysplex.

ALTERNATE

XCF was trying to use the data set as an alternate couple data set for the sysplex.

typename

The type of data contained in the data set. This name corresponds to the TYPE= specification on the SETXCF command.

text

One of the following:

ALLOWABLE NUMBER OF GROUPS IS LESS THAN CURRENT PRIMARY

The maximum number of groups allowed for the alternate couple data set is less than the maximum defined for the primary data set. The alternate couple data set must support at least as many groups as the primary couple data set.

CAPACITY INSUFFICIENT FOR PRACTICAL USE

The data set has less capacity than the minimum supported by XCF. The couple data set must be dumped.

MAXMEMBER VALUE IS LESS THAN THAT OF THE CURRENT PRIMARY

The alternate couple data set has a maximum number of members value, MAXMEMBER, less than that of the current primary data set. The alternate must support at least as many members as the primary.

MULTI-VOLUME DATA SETS ARE NOT SUPPORTED

The data set is a multi-volume data set, which is not supported by XCF.

DATA SET MUST RESIDE ON DASD

The data set does not reside on direct access storage device (DASD). Couple data sets must reside on DASD.

MULTIPLE EXTENTS ARE NOT SUPPORTED

The data set has more than one extent, which is not supported by XCF.

UNABLE TO OPEN DATA SET

The data set could not be opened.

MULTIPLE EXPOSURE DEVICES ARE NOT SUPPORTED

The data set resides on a multiple exposure device, which is not supported by XCF.

AN INCOMPLETE RECORD WAS FOUND

The data set is unusable because it contains an incomplete record. The couple data set must be dumped.

THE ALTERNATE AND PRIMARY DATA SETS ARE THE SAME

The alternate data set has the same name and volser as the primary data set. The primary and alternate data sets must be unique.

IT WAS CREATED AT A FORMAT LEVEL HIGHER THAN THIS SYSTEM CAN USE

This system is not using the level of MVS required for the couple data set.

I/O TO DEVICE HAS BEEN STOPPED

I/O to the device on which the data set resides has been stopped as the result of an IOACTION STOP command.

DATA SET NOT FOUND - LOCATE RETURN CODE *rc*

The system could not find the data set.

ERROR TRYING TO READ DSCB - RETURN CODE *rc*

An I/O error occurred while trying to obtain volume or data set information for the new couple data set.

ALLOCATION ERROR *errcode, infocode*

The system could not allocate the data set. XCF returns two reason codes.

DASD VOLUME *volser* NOT MOUNTED

The DASD volume, *volser* where the data set resides is not mounted. The data set cannot be used.

ALLOWABLE {NUMBER|SIZE} OF *record-type* RECORDS IS LESS THAN CURRENT PRIMARY

XCF cannot use the data set as an alternate couple data set because it does not have enough of one of the record or subrecord types, or one of the (sub)record types is smaller than the corresponding (sub)record in the primary. An alternate couple data set must have as many or more records of each type as the primary couple data set, and they must be at least as large as those in the primary.

SYSPLEX NAME *sysname* DOES NOT MATCH THE SYSPLEX NAME IN USE

XCF cannot use the data set as a couple data set because the sysplex name does not match the sysplex name in use.

DOES NOT CONTAIN *record-type* RECORDS

XCF cannot use the data set as a couple data set because either:

- | • For sysplex couple data sets only, it does not contain all the required record types, or
- | • For incoming alternates only, it is missing a record or subrecord present in the primary.

REJECTED by *typename*

XCF cannot use the data set as a couple data set because its use was rejected by the specified type.

IT WAS FORMATTED AT A LEVEL BELOW THE MINIMUM REQUIRED BY THIS SYSTEM.

MINIMUM REQUIRED LEVEL: *fmtlevel*

The couple data set was formatted by a format utility (IXCL1DSU) at a release or maintenance level too low for use by the issuing system.

rc The return code.

errcode

The allocation error code.

infocode

The allocation information return code.

volser

The DASD volume where the data set resides.

record-type

The record which is not correct. The *record-type* is based on the *typename*. The *record-type* may not directly correspond to the item name(s) used when the couple data set for *typename* was formatted. For the *typename*, each item name must have a number specified as equal to or greater than the value in primary couple data set.

sysname

The sysplex name that does not match the sysplex name in use.

fmtlevel

The minimum level of the format utility that must be used to format couple data sets of the specified type.

fmtinfo

Keywords specified as input to the IXCL1DSU format utility when formatting the couple data set.
One or more lines may appear.

System action: The system does not use the data set as a couple data set. If the system detects the error during XCF initialization, it issues message IXC207A to prompt the operator for a new COUPLExx parmlib member.

Operator response: If one of the following appears in the message text, dump the couple data set:

- | • AN INCOMPLETE RECORD WAS FOUND
- | • CAPACITY INSUFFICIENT FOR PRACTICAL USE
- | • DOES NOT CONTAIN *record-type* RECORDS

IXC256A

See the operator response to message IXC220W for the correct JCL to dump the couple data set. In all cases, notify the system programmer if a dump had to be taken.

- | When directed by the system programmer, bring the reformatted alternate couple data set into service using the SETXCF COUPLE,TYPE=typename,ACOUPLE command.

System programmer response: Depending on the message text, do one of the following:

MAXMEMBER VALUE IS LESS THAN THAT OF THE CURRENT PRIMARY

Use an alternate couple data set which supports an equal or larger number of members than the primary couple data set. Enter the DISPLAY XCF,COUPLE command to display the MAXMEMBER value.

ALLOWABLE NUMBER OF GROUPS IS LESS THAN CURRENT PRIMARY

Use an alternate data set which supports an equal or larger number of groups than the primary couple data set. Enter the DISPLAY XCF,COUPLE command to display the current status of the couple data sets.

ALLOWABLE NUMBERISIZE OF *record-type* RECORDS IS LESS THAN THE CURRENT PRIMARY

- | If the lines beginning with RELEVANT *typename* COUPLE DATA SET FORMAT INFORMATION are present, evaluate the differences between the existing primary and incoming alternate couple data sets. If the interpretive information is not provided, refer to the documentation for the type of couple data set in question to determine how format keywords or version affect the named record.
- | Reformat the alternate with capacity equal to or greater than that of the primary.

DOES NOT CONTAIN *record-type* RECORDS

- | Same as the preceding case.

IT WAS FORMATTED AT A LEVEL BELOW THE MINIMUM REQUIRED BY THIS SYSTEM

Reformat the data set using the format utility provided by a release at or above the level required by the issuing system.

For any other text:

- Enter the DISPLAY XCF,COUPLE command to display the current status of the couple data sets.
- Look for and correct any errors in the couple data sets.
- Make sure the COUPLExx parmlib member specifies the correct data sets.
- Enter a new COUPLExx parmlib member in response to message IXC207A.
- Re-IPL the system with the new COUPLExx parmlib member.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCI2PRM, IXCL1DSC, IXCL1DSO, IXCL1RIP, IXCL1SRV

Routing Code: 1.2.10

Descriptor Code: 12

IXC256A REMOVAL OF {PRIMARY|ALTERNATE} COUPLE DATA SET *dsname* FOR *typename* CANNOT COMPLETE UNTIL THE FOLLOWING SYSTEM(S) ACKNOWLEDGE THE REMOVAL: *list*

Explanation: XCF is removing a primary or alternate couple data set from the sysplex. Not all systems have responded to the request to switch couple data sets.

This problem can occur when one or more of the following problems exist on the systems listed in the message:

- A system is in a wait state.
- A system is in a loop.
- Signalling communication between systems has been lost.
- A problem occurred preventing a system from dispatching work normally.

In the message text:

PRIMARY

XCF is removing a primary couple data set from the sysplex.

ALTERNATE

XCF is removing an alternate couple data set from the sysplex.

dsname

The name of the data set that XCF is removing from the sysplex.

typename

The type of data contained in the data set.

list The list of systems XCF is waiting on to complete the removal of the data set.

System action: XCF requests requiring the couple data set are delayed until the switch is made.

Processing does not complete until one of the following occur:

- All systems acknowledge the removal of the couple data set.
- XCF removes failed systems from the sysplex.

While this condition continues, the performance and workload of all the systems may be negatively affected.

Operator response: Enter the DISPLAY XCF,SYSPLEX command to display the status of all the systems in the sysplex to determine why one or more system has not acknowledged the removal of the couple data set. Depending on the state of each system, do

the following to correct the problem:

Disabled wait state

Either perform a SYSTEM RESET to clear all active I/O or obtain a stand-alone dump.

Restartable wait state

Either resolve the wait state and restart the system, or perform a SYSTEM RESET.

Signalling loss

Enter a DISPLAY R,L to look for outstanding IXC messages. See the explanation for the messages. If a message involves removing a system from the sysplex, perform a SYSTEM RESET on that system.

System is looping or running abnormally

Either wait for the automated spin loop time out facility to take action or else try to resolve the problem. If the condition cannot be resolved, either perform a SYSTEM RESET or obtain a stand-alone dump.

After a system has been reset, remove the system from the sysplex by issuing a VARY command followed by a second VARY command with the FORCE option. Both VARY commands must be issued from the same system.

System programmer response: 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: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1SWT

Routing Code: 1,2,10

Descriptor Code: 11

**IXC257I PRIMARY COUPLE DATA SET *dsname1*
FOR *typename* IS BEING REPLACED
BY *dsname2* DUE TO OPERATOR
REQUEST**

Explanation: An operator entered the SETXCF COUPLE,PSWITCH command to replace the primary couple data set with the alternate one.

In the message text:

dsname1

The primary couple data set that XCF is replacing.

typename

The type of data contained in the data set.

dsname2

The alternate couple data set that is replacing the primary couple data set.

System action: The system uses the alternate couple data set.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1SWT

Routing Code: 1,2

Descriptor Code: 4

**IXC258I COUPLE DATA SET *dsname* WAS
CREATED AT A FORMAT LEVEL
HIGHER THAN THIS SYSTEM CAN USE**

Explanation: One of the following occurred:

1. The system IPLing into the sysplex was attempting to use an XCF couple data set, but the level of the data set had an improper structure for the current IPLing system.
2. The operator issued a SETXCF command to activate an alternate XCF couple data set, but the level of the data set had an improper structure for the current system.

In the message text:

dsname

The data set name.

System action: For explanation 1, the system restarts initialization of XCF after prompting the operator for a new COUPLExx parmlib member.

For explanation 2, the system continues running with either:

- the alternate couple data set that existed before this message was issued
- without an alternate couple data set.

Operator response: For explanation 1, respond to the system request with a new COUPLExx parmlib member (if one is available). Notify the system programmer if a new COUPLExx parmlib member is not available.

For explanation 2, you can issue another SETXCF command, with an alternate XCF couple data set that is formatted for the currently running system. Notify the system programmer.

System programmer response: If the XCF couple data set should have been formatted at a level higher than the system that detected the error, the detecting system should not be in the sysplex. Replace the detecting system with a higher-level system. Otherwise, you must reformat the XCF couple data set to be compatible with the lower-level system and then do the following:

- For explanation 1, initiate an IPL of all systems in the sysplex to replace the higher-level XCF couple data set with one that is compatible with the detecting system.
- For explanation 2, have the operator issue the SETXCF command with the reformatted XCF couple data set.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1DSC

IXC259I • IXC261I

Routing Code: 1,2

Descriptor Code: 4

IXC259I I/O ERROR ON DATA SET *dsname FOR*
typename, VOLSER volser,
modname,post-code,text

Explanation: An I/O error occurred on a couple data set when an execute channel program (EXCP) module failed.

In the message text:

dsname

The name of the couple data set on which the I/O error occurred.

typename

The type of data contained in the data set.

volser

The direct access storage device (DASD) volume on which the couple data set resides.

modname

The name of the EXCP channel program that failed.

post-code

The returned post code.

status-bytes

The returned status information.

commandcode

The EXCP channel program command code.

sense-bytes

The returned hardware information.

status-bytes,commandcode,sense-bytes

The error information contains both the commandcode and sense bytes.

status-bytes,commandcode

The error information contains only the commandcode.

status-bytes,,sense-bytes

The error information contains only the sense bytes.

status-bytes

The error information contains neither the commandcode nor the sense bytes.

System action: The system issues message IXC207A to prompt the operator for a new COUPLExx parmlib member. The system restarts initialization of XCF when a new COUPLExx parmlib member is specified.

Operator response: Dump the couple data set. See the operator response to message IXC220W for the correct JCL to dump the couple data set. If the problem persists, contact hardware support.

System programmer response: If necessary, correct

the COUPLExx parmlib member to specify a different couple data set.

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: Cross System Coupling Facility (SCXCF)

Routing Code: 1,2,10

Descriptor Code: 3

IXC260I ALTERNATE COUPLE DATA SET
REQUEST FROM SYSTEM *sysname*
FOR *typename IS NOW BEING*
PROCESSED. DATA SET: *dsname*

Explanation: XCF received a request to make a data set available as an alternate couple data set.

In the message text:

sysname

The name of the system making the request.

typename

The type of data contained in the data set.

dsname

The name of the data set that system *sysname* wants to use as an alternate couple data set.

System action: The system tries to make the data set available as the alternate couple data set.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1AA

Routing Code: 1,2

Descriptor Code: 4

IXC261I ALTERNATE COUPLE DATA SET
REQUEST REJECTED BY SYSTEM
sysname FOR typename DATA SET
NAME: *dsname*

Explanation: The data set *dsname* cannot be used as the alternate data set. A system rejected the request.

In the message text:

sysname

The name of the system rejecting the request.

typename

The type of data contained in the data set.

dsname

The name of the data set that XCF is trying to make available as an alternate couple data set.

System action: The data set *dsname* cannot be used as the alternate data set. XCF may already have removed the old alternate couple data set from use, so the sysplex may be running without an alternate couple data set.

Operator response: Notify the system programmer.

System programmer response: Make a different alternate data set available, or delete and reformat data set *dsname* to make it available.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1AA

Routing Code: 1,2

Descriptor Code: 4

IXC262I ALTERNATE COUPLE DATA SET REQUEST FROM SYSTEM *sysname* FOR *typename* IGNORED. IT IS A DUPLICATE REQUEST. DATA SET NAME: *dsname*.

Explanation: A system requested a data set for use as an alternate couple data set, but the system is already processing the same request from another system in the sysplex.

In the message text:

sysname

The name of the system that already requested data set *dsname* for use as an alternate couple data set.

typename

The type of data contained in the data set.

dsname

The name of the data set that system *sysname* requested as an alternate couple data set.

System action: The system ignores the duplicate couple data set request and processes the previous request.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1AA

Routing Code: 1,2

Descriptor Code: 4

IXC263I REMOVAL OF THE {PRIMARY\ALTERNATE} COUPLE DATA SET *dsname* FOR *typename* IS COMPLETE

Explanation: XCF removed a couple data set from the sysplex in response to an operator command or because the data set appeared to be damaged.

In the message text:

PRIMARY

XCF removed the primary couple data set.

ALTERNATE

XCF removed the alternate couple data set.

dsname

The name of the couple data set XCF removed.

typename

The type of data contained in the data set.

System action: The sysplex continues processing with another couple data set.

Operator response: Enter the SETXCF COUPLE,ACOUPLE=(*dsname*, *volser*) to make a new alternate couple data set available.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1SWT

Routing Code: 1,2

Descriptor Code: 4

IXC264I ALLOCATION ERROR ON {PRIMARY\ALTERNATE} COUPLE DATA SET *dsname* FOR *typename*: *errcode*, *infocode*. XCF WILL CONTINUE TO USE THE DATA SET, AND WILL ATTEMPT REALLOCATION PERIODICALLY.

Explanation: XCF was unable to allocate one of the couple data sets to reserve it for XCF's use.

In the message text:

PRIMARY

XCF could not allocate a primary couple data set.

ALTERNATE

XCF could not allocate an alternate couple data set.

dsname

The name of the couple data set with an allocation error.

typename

The type of data contained in the data set.

errcode

The dynamic allocation error reason code.

infocode

The dynamic allocation information reason code.

System action: The system continues to use the couple data set, but tries to reallocate it periodically.

Operator response: Notify the system programmer.

System programmer response: See the return codes for dynamic allocation.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1CMD

Routing Code: 1,2,10.

Descriptor Code: 4

IXC265I XCF HAS SUCCEEDED IN ALLOCATING {PRIMARY|ALTERNATE} COUPLE DATA SET *dsname* FOR *typename*

Explanation: XCF allocated a couple data set after a previous attempt failed.

In the message text:

PRIMARY

XCF allocated the primary couple data set.

ALTERNATE

XCF allocated the alternate couple data set.

dsname

The name of the couple data set that XCF allocated.

typename

The type of data contained in the data set.

System action: The system uses the data set.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1CMD

Routing Code: 1,2,10

Descriptor Code: 4

IXC266I PSWITCH REQUEST WAS REJECTED BECAUSE A PSWITCH REQUEST IS ALREADY IN PROGRESS

Explanation: XCF cannot process a SETXCF COUPLE,PSWITCH command to replace the primary couple data set with the alternate one. The system is already processing another SETXCF COUPLE,PSWITCH command.

System action: The system ignores the SETXCF COUPLE,PSWITCH command.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1SWT

Routing Code: 1,2

Descriptor Code: 4

IXC267E PROCESSING WITHOUT AN ALTERNATE COUPLE DATA SET FOR *typename*. ISSUE SETXCF COMMAND TO ACTIVATE A NEW ALTERNATE.

Explanation: There is no alternate couple data set defined for XCF. If the primary couple data set fails, XCF will have no backup couple data set and might enter a wait state.

In the message text:

typename

The type of data contained in the data set.

System action: Processing continues.

Operator response: Enter the SETXCF COUPLE,ACOUPLE=(*dsname*, *volser*) command to activate a new alternate couple data set.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1AA, IXCL1SWT

Routing Code: 1,2

Descriptor Code: 2

IXC268I THE COUPLE DATA SETS SPECIFIED IN COUPLExx ARE IN AN INCONSISTENT STATE

Explanation: This system found the couple data sets specified in COUPLExx to be in an inconsistent state. The data sets either are not currently in use by the systems in the sysplex or, if there are no systems active in the sysplex, are not the couple data sets last used by the sysplex. An example of an inconsistency would be if COUPLExx specified a primary of SYS1.DS1 and no alternate but the systems in the sysplex are currently using SYS1.DS1 as the primary and SYS1.DS2 as the alternate couple data set.

In the message text:

xx The suffix identifying the COUPLE parmlib member.

System action: The system will attempt to resolve the inconsistency by trying to determine the correct couple data sets to use. The couple data sets determined from this attempt will either be the couple data sets currently in use by the systems in the sysplex or those last used by the sysplex.

Operator response: Notify the system programmer.

System programmer response: Check the COUPLExx specification to determine if the couple data sets have been specified correctly. To avoid unnecessary processing during XCF initialization, COUPLExx should specify the couple data sets currently in use by the systems in the sysplex.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1DSI

Routing Code: 1,2,10

Descriptor Code: 12

IXC269D REPLY U TO USE RESOLVED DATA SETS, C TO USE COUPLE DATA SETS SPECIFIED IN COUPLExx, OR R TO RESPECIFY COUPLEXX

Explanation: This system detected an inconsistency in the couple data sets specified in COUPLExx. This system has resolved the inconsistency and has found a consistent primary and alternate couple data set. However, it does not appear that any of the systems

using the data sets are active. The couple data sets specified by COUPLExx have been displayed via message IXC275I as well as those that this system has determined to be consistent.

In the message text:

xx The suffix identifying the COUPLE parmlib member.

System action: System initialization processing stops until the operator replies to message IXC269D.

Operator response: Choose one of the following replies:

- U** To continue initialization with the resolved couple data sets that XCF has determined to be the better choice to use.
- C** To continue initialization processing with the couple data sets that were specified in COUPLExx.
- R** To request that XCF be reinitialized. XCF will stop using the current couple data sets and issue message IXC207A to prompt the operator for a new COUPLExx parmlib member.

If an incorrect reply is entered, the system issues message IXC208I to notify the operator of the error. The system then reissues message IXC269D.

Notify the system programmer.

System programmer response: This message resulted from a possibly down level specification of the couple data sets in the COUPLExx parmlib member. This could be caused by the removal of a primary or an alternate or as the result of the addition of a new alternate couple data set. Updating the COUPLExx parmlib member should eliminate this message.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1DSI

Routing Code: 1,2

Descriptor Code: 2

**IXC270I XCF ATTEMPTING TO CONTINUE
INITIALIZATION PROCESSING WITH
THE COUPLE DATA SETS SPECIFIED
IN COUPLExx**

Explanation: XCF encountered an error while trying to resolve a couple data set inconsistency with the data sets specified in COUPLExx.

In the message text:

xx The suffix identifying the COUPLE parmlib member.

System action: XCF will attempt to continue initialization processing with the couple data sets specified in COUPLExx.

Operator response: Notify the system programmer.

System programmer response: Determine which

couple data sets are correct and update the COUPLExx parmlib member to contain the correct specification.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1DSI

Routing Code: 1,2,10.

Descriptor Code: 12

**IXC272I XCF WAS UNABLE TO RESOLVE THE
COUPLE DATA SETS**

Explanation: XCF attempted to resolve a couple data set inconsistency but was unable to. An error was encountered while processing one of the couple data sets needed to complete the resolution, or one of the couple data sets indicates that a couple data set transition is in progress (the sysplex is processing a couple data set PSWITCH or ACOPPLE).

System action: XCF will attempt to continue initialization with the COUPLExx specified couple data sets, if they are usable. If they are not usable, XCF will issue message IXC207A to prompt the operator for a new COUPLExx parmlib member specification.

Operator response: Notify the system programmer.

System programmer response: The couple data sets may need to be reformatted. If they do need reformatting then reformat them and re-IPL this system.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1DSI

Routing Code: 1,2,10

Descriptor Code: 12

**IXC273I XCF ATTEMPTING TO RESOLVE THE
COUPLE DATA SETS**

Explanation: The couple data sets specified in COUPLExx are either in an inconsistent state or an error was detected with one of the couple data sets. One or more messages describing the error have proceeded this message.

System action: XCF will attempt to resolve the inconsistency or to run without the couple data set which had the error.

Operator response: Notify the system programmer.

System programmer response: Address the problems reported by the previous messages.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1DSI

Routing Code: 1,2,10

Descriptor Code: 12

IXC274I PRIMARY DATA SET CONTAINS RECORD *record* WHICH DOES NOT APPEAR IN THE ALTERNATE

Explanation: XCF found that the primary and alternate couple data set do not match.

In the message text:

record

The couple data set record missing in the alternate.

System action: Processing continues. The system continues to use the alternate data set.

Operator response: Dump both the primary and alternate couple data sets. See the operator response to message IXC220W for the correct JCL to dump the couple data sets.

System programmer response: Make sure the correct alternate couple data set is defined, or correct the contents of the alternate couple data set.

Source: Cross System Coupling Facility (SCXCF)

Routing Code: 1,2

Descriptor Code: 4

IXC275I {RESOLVED COUPLE DATA SETS| COUPLE DATA SETS SPECIFIED IN COUPLExx} ARE PRIMARY: *primdsname* ON VOLSER *privolser* ALTERNATE: [*altdsname*] {ON VOLSERINONE USEDINONE SPECIFIED} [*altvolser*]

Explanation: XCF has detected an inconsistency in the sysplex couple data sets specified in COUPLExx. This message lists the primary and alternate couple data sets as specified either in the COUPLExx parmlib member or the resolved couple data sets as determined by XCF to be those currently or last in use as the sysplex couple data sets.

In the message text:

RESOLVED COUPLE DATA SETS

The primary and alternate couple data sets have been resolved.

COUPLE DATA SETS SPECIFIED IN COUPLExx

The primary and alternate couple data sets specified in the COUPLExx parmlib member.

primdsname

The name of the primary couple data set.

privolser

The DASD volume where the primary data set resides.

altdsname

The name of the alternate couple data set.

ON VOLSER

The volser on which the data set resides.

NONE USED

No alternate data set was used.

NONE SPECIFIED

No alternate data set was specified.

altvolser

The DASD volume where the alternate data set resides.

System action: XCF is trying to determine the correct set of couple data sets to use for this system's initialization

Operator response: Notify the system programmer.

System programmer response: Update COUPLExx to reflect the couple data sets that should be used by the sysplex.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1DSI

Routing Code: 1,2,10

Descriptor Code: 12

IXC276I ERROR PROCESSING DATA SET *dsname: text*

Explanation: XCF tried to process an offline (not currently in use by the system) couple data set when an error occurred.

In the message text:

dsname

The name of the couple data set that cannot be processed.

rc The error return code from OBTAIN.

r The dynamic allocation return code.

eeeeiiii

The dynamic allocation error reason code, information reason code.

recordname

The name of the record which could not be read.

record-occurrence number

The number of the recordname in error.

subrecordname

The name of the subrecord which could not be read.

subrecord-occurrence number

The number of the subrecord name in error.

UNABLE TO OPEN DATA SET

The system was unable to open the data set. The data set cannot be used.

OBTAIN ERROR *rc*

An internal failure occurred.

DYNAMIC ALLOCATION ERROR *r-eeeeeee*

An error occurred while trying to allocate or unallocate the couple data set.

INCONSISTENT DATA FOR *recordname,record-occurrence number,subrecordname,subrecord-occurrence number*

Data was read from the couple data set which is not consistent.

LOCATE ERROR *rc*

An internal failure occurred.

MULTI-VOLUME DATA SETS ARE NOT SUPPORTED

The data set is a multi-volume data set, which is not supported by XCF.

DATA SET MUST RESIDE ON DASD

The data set does not reside on direct access storage device (DASD). Couple data sets must reside on DASD.

System action: Processing is terminated.

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: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1CDC, IXCL1CDO, IXCL1CDR

Routing Code: 1,2,10

Descriptor Code: 12

IXC277I I/O ERROR WHILE READING OR WRITING *dsname, postcode,status-bytes, [commandcode],[sense-bytes]*

Explanation: An I/O error occurred while XCF was reading or writing an offline couple data set. An execute channel program (EXCP) failed.

In the message text:

dsname

The name of the couple data set where the I/O error occurred.

postcode

The returned post code.

status-bytes

The returned status information.

commandcode

The EXCP command code.

sense-bytes

The returned hardware information.

System action: Processing of the specified couple data set is terminated.

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: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1CDO

Routing Code: 1,2

Descriptor Code: 5

IXC278I COUPLE DATA SET DATA DEFINITION FOR *typename text*

Explanation: XCF couple data set format utility program ended because of a problem with the specified data definition.

In the message text:

typename

The type of data contained in the data set.

CONTAINS INVALID DATA

The data definition specified does not contain correct data. It may not be a data definition module.

WAS CREATED AT A FORMAT LEVEL HIGHER THAN THIS SYSTEM CAN USE

The data definition was formatted with a level that this system cannot use.

System action: The system ends the XCF couple data set format utility program.

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: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1DSU

Routing Code: 1,2

Descriptor Code: 5

IXC279D REPLY R TO USE *altdsname* ON *altvolser* TO REPAIR DATA FOR *typename* OR S TO STOP

Explanation: The system has detected a problem with the primary couple data set. Initialization using the primary couple data set can not continue. XCF was unable to determine automatically that the alternate couple data set can be used to recover the primary couple data set. The name of the primary couple data set with the error was printed in message IXC249I.

In the message text:

altdsname

The name of the alternate couple data set.

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altvolser

The DASD volume where the alternate data set resides.

typename

The type of data contained in the data set.

System action: Couple data set initialization and possibly system initialization processing stops until the operator replies to this message.

Operator response: Choose one of the following replies:

- R** To allow XCF to attempt to repair the primary couple data set from the information contained on the alternate couple data set. This action should only be selected if it is known that the alternate listed in this message and the primary listed in message IXC249I are the last ones used by the sysplex and have not been reformatted or restored since they were last used.
- S** To stop XCF from repairing the primary couple data set. This response will prevent XCF from completing the couple data set initialization.

If an incorrect reply is entered, the system issues message IXC208I to notify the operator of the error. The system then reissues message IXC279D.

System programmer response: The reason for XCF having to take this repair action should be determined and action taken to correct the cause. See the system programmer response for message IXC249I.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1AAR

Routing Code: 1,2

Descriptor Code: 2

IXC280I **DATA SET** *dsname*, **VOLSER** *volser*, **IS NOT ON THE SAME PHYSICAL VOLUME AS THE DATA SET THAT IS IN USE BY THE SYSPLEX FOR** *typename*

Explanation: The volume used by both systems is not the same physical volume.

In the message text:

dsname

The name of the couple data set.

volser

The DASD volume where the data set resides.

typename

The type of data contained in the data set.

System action: A function which requires the type of data contained in a couple data set was not started on this system.

Operator response: Notify the system programmer.

System programmer response: Make sure all systems are sharing the same physical volume.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1AFN

Routing Code: 1,2

Descriptor Code: 4

IXC281I **DATA SET** *dsname*, **VOLSER** *volser*, **CANNOT BE USED FOR** *typename* **BY THIS SYSTEM. THE SYSTEM CAPACITY IS TOO SMALL** (*nnn*).

Explanation: This system attempted to initiate use of the data but was unable to make the data available because the couple data set was not formatted with enough system capacity to support this system.

In the message text:

dsname

The name of the couple data set.

volser

The DASD volume where the data set resides.

typename

The type of data contained in the data set.

nnn

The minimum number of systems that the data set must be formatted with to support the current system.

System action: This system attempts to continue running without access to the data.

Operator response: Report the message to the system programmer

System programmer response: Make a couple data set available for the data type which has been formatted with enough system capacity to support this system. The MAXSYSTEM parameter on the DEFINEDS statement for the XCF couple data set format utility must specify at least *nnn*.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1AFN

Routing Code: 1,2

Descriptor Code: 12

IXC282I *typename* **DATA CANNOT BE ACTIVATED.** *text*

Explanation: The data cannot be activated as indicated by the text.

In the message text:

typename

The type of data contained in the data set.

dsname

The name of the couple data set.

volser

The DASD volume where the data set resides.

number

The maximum number of types that can be supported by the sysplex.

COUPLE DATA SET *dsname*, VOLSER *volser* DOES NOT SUPPORT THE ACTIVATION.

The sysplex couple data set was formatted with a prior release.

THE LIMIT OF *number* HAS BEEN REACHED.

The maximum number of types has been reached.

THE SYSTEM IS IN XCF-LOCAL MODE.

Couple data sets of any type cannot be activated in XCF-local mode.

System action: A function which requires the type of data contained in a couple data set was not activated.

Operator response: Notify the system programmer.

System programmer response: Do one of the following, depending on the message text:

COUPLE DATA SET *dsname*, VOLSER *volser* DOES NOT SUPPORT THE ACTIVATION

Format a new sysplex couple data set with the current level of the format utility and activate the data set with the SETXCF command.

THE LIMIT OF *number* HAS BEEN REACHED.

Contact the IBM Support Center.

THE SYSTEM IS IN XCF-LOCAL MODE.

Re IPL in non XCF-local mode.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1AFN

Routing Code: 1,2

Descriptor Code: 4

IXC283I COUPLE DATA SET *dsname*, VOLSER *volser*, NOT AVAILABLE FOR *typename*. DATA SET IN USE BY ANOTHER SYSPLEX.

Explanation: The same couple data set cannot be shared by systems in different sysplexes.

In the message text:

dsname

The name of the couple data set.

volser

The DASD volume where the data set resides.

typename

The type of data contained in the data set.

System action: The specified type of data contained

in *dsname* was not activated on the system.

Operator response: Notify the system programmer.

System programmer response: Make a couple data set available for this data type which has been formatted for this sysplex. The SYSPLEX parameter on the DEFINEDS statement for the XCF couple data set format utility must specify the name of this sysplex.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1FDX, IXCL1OWN

Routing Code: 1,2

Descriptor Code: 4

IXC284I UNABLE TO LOAD *routine* FOR *typename*

Explanation: The exit routine associated with the specified type could not be loaded.

In the message text:

routine

The exit routine that could not be loaded.

typename

The type of data contained in the data set.

System action: Processing is terminated.

Operator response: Notify the system programmer.

System programmer response: This system might have experienced problems while trying to load processing routines for a type of couple data set that was introduced at a later level of MVS. The processing routines would not be present on this level of MVS.

If this is not the problem, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1AFN, IXCL1FDX

Routing Code: 1,2

Descriptor Code: 4

IXC285I COUPLE DATA SET *dsname*, VOLSER *volser*, IS ALREADY IN USE FOR *typename* ON SYSTEM *sysname*

Explanation: The specified couple data set is already in use by this system for this *typename*.

In the message text:

dsname

The name of the couple data set.

volser

The DASD volume where the data set resides.

IXC286I • IXC288I

typename

The type of data contained in the data set.

sysname

The name of the XCF system.

System action: The system continues to use the previously activated type.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1AFN

Routing Code: 1,2

Descriptor Code: 4

**IXC286I COUPLE DATA SET *dsname*, VOLSER
 volser, HAS BEEN ADDED AS THE
 {PRIMARY|ALTERNATE} FOR *typename*
 ON SYSTEM *sysname***

Explanation: Data set *dsname* has been activated on this system for the specified type.

In the message text:

dsname

The name of the couple data set.

volser

The DASD volume where the data set resides.

PRIMARY

XCF is adding the primary couple data set to the sysplex.

ALTERNATE

XCF is adding the alternate couple data set to the sysplex.

typename

The type of data contained in the data set.

sysname

The system on which the activation occurred.

System action: The primary and/or alternate couple data set has been made available on this system.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1AFN

Routing Code: 1,2

Descriptor Code: 4

**IXC287I THE COUPLE DATA SETS SPECIFIED
 IN COUPLExx ARE INCONSISTENT
 WITH THOSE LAST USED FOR
 *typename***

Explanation: This system found the couple data sets specified in COUPLExx are not the same couple data sets last used by the sysplex for this data type. Since no systems are currently using this data type, XCF cannot determine if it should use the data sets which

are specified in COUPLExx or those last used by the sysplex.

In the message text:

xx The suffix identifying the COUPLE parmlib member.

typename

The type of data contained in the data set.

System action: The system will list the data sets specified in COUPLExx and those last used by the sysplex and then prompt the operator to choose between the two sets.

Operator response: Notify the system programmer.

System programmer response: Check the COUPLExx specification to determine if the couple data sets have been specified correctly. To avoid unnecessary processing during XCF initialization, COUPLExx should specify the couple data sets currently in use by the systems in the sysplex or those last used by the sysplex.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1SRV

Routing Code: 1,2,10

Descriptor Code: 12

**IXC288I COUPLE DATA SETS {LAST
 USEDISPECIFIED IN COUPLExx} FOR
 typename ARE PRIMARY: *primdsname*
 ON VOLSER *privolser* ALTERNATE:
 [*altdsname*] {ON VOLSERINONE
 SPECIFIED} [*altvolser*]**

Explanation: XCF has detected an inconsistency in the couple data sets specified in COUPLExx. This message lists the primary and alternate couple data sets as specified in the COUPLExx parmlib member or the primary and alternate couple data sets determined by XCF to be those currently or last in use by the sysplex (the resolved couple data sets).

In the message text:

LAST USED

The specified *typename* is not currently active on any of the systems in the sysplex. The data sets in use the last time this type was used, will be used.

SPECIFIED IN COUPLExx

The data sets were used by the COUPLExx parmlib member.

typename

The type of data contained in the data set.

primdsname

The name of the primary couple data set.

privolser

The DASD volume where the primary data set resides.

altdsname

The name of the alternate couple data set.

ON VOLSER

The volser on which the data set resides.

NONE SPECIFIED

No alternate data set was specified.

altvolser

The DASD volume where the alternate data set resides.

System action: XCF is trying to determine the correct set of couple data sets to use for this system's initialization. This message is followed by message IXC289D.

Operator response: Notify the system programmer.

System programmer response: Update COUPLExx to reflect the couple data sets that should be used by the sysplex.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1SRV

Routing Code: 1,2,10

Descriptor Code: 12

IXC289D REPLY U TO USE THE DATA SETS LAST USED FOR *typename* OR C TO USE THE COUPLE DATA SETS SPECIFIED IN COUPLExx

Explanation: XCF has detected an inconsistency in the couple data sets specified in COUPLExx. This system found the couple data sets specified in COUPLExx are not the same couple data sets last used by the sysplex for this data type. The system has listed, via message IXC288I, those data sets last used by the sysplex and also those specified in COUPLExx. The operator is to indicate which is the correct set of couple data sets to be used for further processing.

In the message text:

typename

The type of data contained in the data set.

xx The suffix identifying the COUPLE parmlib member.

System action: System initialization processing stops until the operator replies to message IXC289D.

Operator response: Choose one of the following replies:

- U** To continue initialization with the primary and alternate sysplex data sets that were last used by the sysplex, which are not the same couple data sets specified in COUPLExx. This could have been caused by the removal of a primary or an alternate couple data set, or as the result of the addition of a new alternate couple data set after the sysplex was IPLed. A normal re-IPL should choose this option.

- C** To continue initialization processing with the couple data sets as specified in COUPLExx and not choose the sysplex couple data sets that were last in use by the sysplex.

Attention:

This option should only be chosen if the sysplex couple data sets specified in the COUPLExx member are still valid since these are NOT the couple data sets last in use by the sysplex.

If an incorrect reply is entered, the system issues message IXC208I to notify the operator of the error. The system then reissues message IXC289D.

System programmer response: This message resulted from a possibly down level specification of the couple data sets in the COUPLExx parmlib member. This could be caused by the removal of a primary or an alternate couple data set or as the result of the addition of a new alternate couple data set. Updating the COUPLExx parmlib member should eliminate this message.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1SRV

Routing Code: 1,2

Descriptor Code: 2

IXC290I COUPLE DATA SET UTILITY ENDED ABNORMALLY: *text*

Explanation: The XCF couple data set format utility program ended because of problems in the JCL.

In the message text:

UNABLE TO OPEN SYSIN

An error occurred while the system tried to open the SYSIN file. The SYSIN DD control statement may be missing.

I/O ERROR ON SYSIN

An I/O error occurred while the system read from the SYSIN data set.

NO SYSIN CONTROL STATEMENTS

No DEFINEDS control statements were provided in the SYSIN data set.

UNKNOWN ERROR WHILE PARSING THE SYSIN STATEMENTS

The parser found an error.

System action: The system ends the XCF couple data set format utility program.

Operator response: Notify the system programmer.

System programmer response: Correct the JCL and rerun the program.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1DSU

IXC291I

Routing Code: 1,2

Descriptor Code: 5

IXC291I *text*

Explanation: The XCF couple data set format utility program could not process the couple data set because of an error in the DEFINEDS statement in the JCL for the program.

In the message text:

sysplex-name

The name of the sysplex.

dsname

The name of the data set.

volser

The volume serial number.

value

The maximum group value.

maxmem

The maximum member value.

type

The value specified for the type keyword on the data statement of the XCF couple data set format utility.

name

The value specified for the name keyword on the item statement of the XCF couple data set format utility.

number

The value specified for the number keyword on the item statement of the XCF couple data set format utility.

information

The extraneous information that is being ignored.

keyword

The keyword in error.

routine

The name of the exit routine.

data-type

The name of the data type.

item-name

The name of the item.

unit

The unit device type.

CONTROL STATEMENT NOT VALID

The control statement preceding this message was incorrect. It was not a DEFINEDS statement.

ITEM STATEMENT OUT OF SEQUENCE

The Item Statement preceding this message is out of sequence. It must be preceded by a DATA statement.

DATA STATEMENT OUT OF SEQUENCE

The Data Statement preceding this message is out of sequence. It must be preceded by a DEFINEDS or a DATA statement.

INVALID SYSPLEX NAME, *sysplex-name*

The listed sysplex name was not valid.

INVALID DATA SET NAME, *dsname*

The listed data set name was not valid.

INVALID VOLSER, *volser*

The listed volser name was not valid.

MAXIMUM GROUP VALUE, *value*

The listed maximum group value was not valid.

INVALID MAXIMUM MEMBER VALUE, *maxmem*

The listed maximum member value was not valid.

INCORRECT DATA TYPE VALUE, *type*

The listed data type value was not valid.

INCORRECT ITEM NAME, *name*

The listed item name value was not valid.

INCORRECT ITEM NUMBER, *number*

The listed item number value was not valid.

EXTRANEOUS INFORMATION WAS IGNORED, *information*

A keyword was too long. The system ignored some of the values. *information* displays the data the system ignored.

NO VALUE FOR KEYWORD, *keyword*

No value was found for a keyword that must have a value.

INVALID KEYWORD, *keyword*

The specified keyword is not valid for the DEFINEDS statement.

REQUIRED KEYWORD NOT SPECIFIED, *keyword*

A required keyword was not specified.

EXIT ROUTINE NOT FOUND, *routine*

The exit routine specified could not be found.

DATA TYPE NOT FOUND, *data-type*

The data type specified was not found.

ITEM NAME NOT DEFINED, *item-name*

The item name specified is not defined for the data type being formatted.

ITEM NAME CANNOT BE MODIFIED, *item-name*

The specified item name cannot be modified by the XCF couple data set format utility.

INVALID MAXIMUM SYSTEM VALUE, *value*

The listed maximum system value was not valid.

INVALID UNIT, *unit*

The listed unit name was not valid.

INVALID NUMBER VALUE, *number*

The listed number value is out of range..

System action: The XCF couple data set format utility

program continues checking other parameters of the control statement. The program does not format this couple data set.

System programmer response: Correct the problem and rerun the program.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1DSU, IXCL1FMT

Routing Code: 1,2

Descriptor Code: 5

IXC292I *text*

Explanation: The XCF couple data set format utility program successfully formatted a couple data set.

In the message text:

ttt The number of tracks allocated to this couple data set.

volser

Volume serial on which the data set was allocated.

xxxx

The number of records supported by this couple data set.

rectype

The name of the record.

yyyy

The number of items per record supported by this couple data set.

itemtype

The name of the item contained within *rectype*.

**DATA SET FORMATTING COMPLETE: DATA SET
REQUIRES *ttt* TRACKS ON VOLSER *volser***

It required *ttt* tracks to format the data set.

***xxxx [rectype] RECORDS FORMATTED WITH *yyyy*
itemtype ITEMS EACH***

xxxx records with *yyyy* items each have been successfully formatted.

xxxx rectype RECORDS FORMATTED

xxxx records of type *rectype* have been successfully formatted.

System action: The program continues with the next DEFINEDS control statement.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1FMT

Routing Code: 1,2

Descriptor Code: 5

IXC293I **I/O ERROR WHILE FORMATTING THE DATA SET *dsname*, VOLSER *volser*, *modname*,*postcode*,*status-bytes*, [*commandcode*],[*sense-bytes*]**

Explanation: An I/O error occurred while XCF was formatting the couple data set. An execute channel program (EXCP) failed.

In the message text:

dsname

The name of the couple data set where the I/O error occurred.

volser

The direct access storage device (DASD) volume where the couple data set resides.

modname

The name of the EXCP that failed.

postcode

The returned post code.

status-bytes

The returned status information.

commandcode

The EXCP command code.

sense-bytes

The returned hardware information.

System action: The XCF couple data set format utility program stops processing the couple data set. The program continues processing the next DEFINEDS control statement.

Operator response: Contact hardware support for the failing device.

System programmer response: Rerun the XCF couple data set format utility to format the couple data set on a different device.

Source: Cross System Coupling Facility (SCXCF)

Routing Code: 1,2

Descriptor Code: 5

IXC294I *text*

Explanation: The XCF couple data set format utility program could not format the couple data set because of a processing error.

In the message text:

ttt The number of tracks.

r The dynamic allocation return code.

eeee The dynamic allocation error reason code.

iiii The information reason code.

rc The error return code.

UNABLE TO OPEN DATA SET

The XCF couple data set format utility could not open the couple data set.

MULTIPLE EXPOSURE DEVICES ARE NOT SUPPORTED

The volume specified was a multiple exposure device, which is not supported by the XCF couple data set format utility. To avoid serialization problems, the couple data set cannot reside on a multiple exposure device.

DASD VOLUME NOT MOUNTED

The couple data set must reside on a direct access storage device (DASD). Either the specified volume was not associated with any DASD device, or the allocation failed.

DATA SET NOT NEW

The couple data set to be formatted must be new.

MULTIPLE EXTENTS ARE NOT SUPPORTED

The couple data set may not be a multiple extent data set.

**UNABLE TO ALLOCATE *ttt* CONTIGUOUS TRACKS,
DYNAMIC ALLOCATION ERROR *r-eeeeiiii***

An error occurred while the XCF couple data set format utility tried to allocate the couple data set.

**UNABLE TO UNALLOCATE DATA SET, DYNAMIC
ALLOCATION ERROR *r-eeeeiiii***

An error occurred while the XCF couple data set format utility tried to unallocate the couple data set.

OBTAIN ERROR *rc*

An internal failure occurred.

**DATA SET UNALLOCATION VIA DYNAMIC
ALLOCATION RETURNED INFORMATIONAL CODE**

iiii The XCF couple data set format utility unallocated the couple data set. The unallocate was successful, but Dynamic Allocation returned an informational reason code. Any messages returned by Dynamic Allocation were written to the joblog.

System action: The program stops processing the couple data set at the current DEFINEDS control statement.

Operator response: Notify the system programmer.

System programmer response: If they appear in the message see the return codes for dynamic allocation. Correct the problem and rerun the program.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1FMT

Routing Code: 1,2

Descriptor Code: 5

**IXC295I ERROR ENCOUNTERED DURING
FORMAT. THE COUPLE DATA SET MAY
NOT HAVE BEEN FORMATTED OR
CATALOGUED AS REQUESTED.**

Explanation: The XCF couple data set format utility program encountered an error, either while formatting or cataloging the data set. Error messages with problem details were issued by XCF (prefixed with "IXC") or by Dynamic Allocation (prefixed with "IKJ").

System action: The program continues processing the couple data set with the next DEFINEDS control statement.

Operator response: Notify the system programmer.

System programmer response: Correct the problem and rerun the program.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1DSU

Routing Code: 1,2M

Descriptor Code: 5

**IXC296I COUPLE DATA SET NOT FORMATTED
DUE TO AN ABEND**

Explanation: XCF encountered an error while formatting a couple data set with the XCF couple data set format utility program.

System action: The XCF couple data set format utility does not format the couple data set.

Operator response: Notify the system programmer.

System programmer response: Resubmit the job, requesting a SYSUDUMP or SYSMDUMP abend dump this time. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the abend dump.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1FMT

Routing Code: 1,2

Descriptor Code: 5

IXC297I NO ESTAE ESTABLISHED

Explanation: XCF encountered an error while formatting a couple data set with the XCF couple data set format utility program. There is no recovery established for the program.

System action: The XCF format utility program continues processing the couple data set.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1FMT

Routing Code: 1,2

Descriptor Code: 5

**IXC298I COUPLE DATA SET NOT FORMATTED.
UNABLE TO OBTAIN A *byte*-BYTE
WORK AREA.**

Explanation: XCF attempted to obtain a work area to format the couple data set, but was unsuccessful.

In the message text:

byte

The number of bytes that the system tried to obtain to format the couple data set.

System action: Formatting of the current couple data set is terminated. The next data set will be formatted.

Operator response: Notify the system programmer.

System programmer response: Specify a larger region parameter on the JOB or EXEC statement of the JCL used to run the XCF couple data set format utility.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1FMT

Routing Code: 1,2

Descriptor Code: 5

**IXC299I *typename* MAY NOT BE PLACED INTO
COUPLE DATA SET WITH OTHER
TYPES OF DATA**

Explanation: The specified *typename* data cannot be placed into a couple data set which contains other types of data.

In the message text:

typename

The type of data that may not be mixed with other types.

System action: XCF terminates processing.

Operator response: Notify the system programmer.

System programmer response: Specify a data set that contains only the one type of data.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL1DSU

Routing Code: 1,2

Descriptor Code: 5

**IXC300I THE SETXCF COMMAND COULD NOT
BE PROCESSED: *text***

Explanation: The cross-system coupling facility (XCF) found incorrect syntax or options on the SETXCF command. The message text shows the syntax error.

In the message text:

userdata

Incorrect user data. The data will be truncated after the first 16 characters.

name

The device number, structure name, coupling facility name, or connection name which is a duplicate.

**MAXMSG MUST BE A NUMERIC VALUE IN THE
RANGE 1 - 999999**

The MAXMSG value is not valid.

**RETRY MUST BE A NUMERIC VALUE IN THE
RANGE 3 - 255**

The retry limit value is not valid.

**INTERVAL MUST BE A NUMERIC VALUE IN THE
RANGE 3 - 86400 SECONDS**

The time interval specified is not valid.

**OPNOTIFY MUST BE A NUMERIC VALUE IN THE
RANGE 3 - 86400 SECONDS**

The OPNOTIFY value specified is not valid.

**INTERVAL MUST BE LESS THAN OR EQUAL TO
OPNOTIFY**

The value specified for INTERVAL is greater than the value specified for OPNOTIFY. The system cannot notify the operator of a system failure before the system detects the failure.

**OPNOTIFY MUST BE GREATER THAN OR EQUAL
TO INTERVAL**

The value specified for OPNOTIFY is less than the value specified for INTERVAL. The system cannot notify the operator of a system failure before the system detects the failure.

PCOUPLE DATA SET NAME IS NOT VALID

The primary couple data set name specified is not valid.

PCOUPLE DATA SET VOLUME IS NOT VALID

The volume serial specified for the primary couple data set is not valid.

ACOUPLE DATA SET NAME IS NOT VALID

The alternate couple data set name specified is not valid.

ACOUPLE DATA SET VOLUME IS NOT VALID

The volume serial specified for the alternate couple data set is not valid.

INSUFFICIENT COMMAND AUTHORITY

Authority is insufficient for the command.

**CLEANUP MUST BE A NUMERIC VALUE IN THE
RANGE 0 - 86400 SECONDS**

The cleanup interval specified is not valid.

**CLASSLEN MUST BE A NUMERIC VALUE IN THE
RANGE 0 - 62464**

The transport class length is not valid.

NO CHANGES REQUESTED

The SETXCF command entered indicates no changes are requested.

SFM POLICY HAS ALREADY BEEN STARTED

A SETXCF PRSMOPOLICY command was entered. The command could not be processed because an SFM policy has already been started on this system. Note that if a PR/SM policy was active at the time the SFM policy was started, then the PR/SM policy was deactivated at that time.

userdata IS NOT A VALID DEVICE NUMBER

The device number for the signalling path is not valid.

userdata IS NOT A VALID GROUP NAME

The group specified on the GROUP keyword is too long or contains characters that are not valid.

userdata IS NOT A VALID STRUCTURE NAME

The structure name specified on the STRNAME keyword is too long or contains characters that are not valid.

userdata IS NOT A VALID TYPE

The type specified on the SETXCF command is not valid.

userdata IS NOT A VALID CONNECTION NAME

The connection name specified on the CONNAME keyword is too long or contains characters that are not valid.

userdata IS NOT A VALID POLICY NAME

The policy name specified on the POLNAME keyword is too long or contains characters that are not valid.

userdata IS NOT A VALID CLASS NAME

The class name specified on the CLASS keyword is too long or contains characters that are not valid.

userdata IS NOT A VALID COUPLING FACILITY NAME

The coupling facility name specified on the CFNAME keyword is too long or contains characters that are not valid.

userdata IS NOT A VALID STRUCTURE DUMP IDENTIFIER

The structure dump identifier specified on the STRDUMPID keyword is too long or contains characters that are not valid.

userdata IS NOT A VALID ARM ELEMENT NAME

The element name specified on the ELEMENT keyword is too long or contains characters that are not valid.

name IS A DUPLICATE STRUCTURE NAME

The structure name is a duplicate.

name IS A DUPLICATE DEVICE NAME

The device name is a duplicate.

***name* IS A DUPLICATE COUPLING FACILITY NAME**

The coupling facility name is a duplicate.

***name* IS A DUPLICATE CONNECTION NAME**

The connection name is a duplicate.

System action: SETXCF command processing ends.

Operator response: Reenter the command with the correct options. If the command fails a second time and the syntax is correct, notify the system programmer.

System programmer response: 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: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1ASY, IXCO1SCP, IXCT1MOD

Routing Code: 1,2

Descriptor Code: 5

IXC301I {SETXCF START|START} *dir* REQUEST FOR *pathname* REJECTED: *text*

Explanation: The request to start an XCF signalling path was rejected by the system.

In the message text:

SETXCF START

An operator entered a SETXCF START path command.

START

The system initiated a start path request in response to some event or circumstance. System initiated start requests do not cause paths to become defined to XCF for signalling, but are otherwise functionally equivalent to SETXCF START path commands entered by an operator.

dir The path direction specified for the rejected start request. An inbound signalling path is used to receive signals from another system in the sysplex. An outbound signalling path is used to send signals to another system in the sysplex.

PATHIN

Indicates the path was to be started for inbound signal traffic.

PATHOUT

Indicates the path was to be started for outbound signal traffic.

PATH Indicates the path direction was not specified or could not be determined. For system initiated requests, the existing XCF path definition was to be used to determine the direction(s) in which to start the path.

pathname

The name of the signalling path.

DEVICE *dev*

Indicates the CTC device with device number *dev*.

STRUCTURE *strname*

Indicates the XES list structure whose name is *strname*. A list structure can contain one or more individual list signalling paths.

**STRUCTURE *strname* LIST *num* TO
COMMUNICATE WITH SYSTEM *sysname***

Indicates the list signalling path using list number *num* within the XES list structure named *strname* to communicate with the system named *sysname*. The list number is zero if the path was not yet assigned a list within the structure, or if the initiator of the request could not determine which list was assigned for the path.

classnm

The name of the transport class.

minimum

The minimum value for the MAXMSG specification.

PATH ALREADY STARTED AS OUTBOUND

The path is already defined to XCF for signalling in the outbound direction.

If the START command specified PATHOUT, the indicated path was already started for outbound signal traffic. In the case of a list structure, there was no need to start or restart any list paths.

If the START command specified PATHIN, the signalling path cannot be used in different directions by the same system.

PATH ALREADY STARTED AS INBOUND

The path is already defined to XCF for signalling in the inbound direction.

If the START command specified PATHIN, the indicated path was already started for inbound signal traffic. In the case of a list structure, there was no need to start or restart any list paths.

If the START command specified PATHOUT, the signalling path cannot be used in different directions by the same system.

PATH START IN PROGRESS

The path is already defined to XCF for signalling in the requested direction. The path is in the midst of start processing.

SYSTEM IS IN XCF-LOCAL MODE

The system on which the START command was entered is running in XCF-local mode. A system in XCF-local mode is restricted to a single system sysplex, and has no need to use XCF signalling paths for intersystem communication.

PATH STOP IN PROGRESS

The path is already defined to XCF for signalling in the requested direction. The path is in the midst of stop processing. The signalling path cannot be started until stop processing completes.

PATH IS RUNNING

The path is already defined to XCF for signalling in the requested direction. The path is either in the midst of attempting to establish signalling connectivity, or has already done so.

SYSTEM IS IN MONOPLEX MODE

The system where the start command was entered is running in MONOPLEX mode. A system in MONOPLEX mode is restricted to a single system sysplex, and has no need to use XCF signalling paths for intersystem communication.

UNEXPECTED ERROR

An unexpected error occurred. Diagnostic data is provided to help IBM service personnel with problem determination.

NOT DEFINED TO XCF

A system initiated start request was made for a path that is not currently defined to XCF for signalling. A system initiated start request is not permitted to define a new path to XCF for signalling. Paths are defined for signalling via the COUPLExx parmlib member or as a result of a SETXCF START path operator command.

IGNORING EXPECTED EVENT

An event occurred that caused the system to initiate a start path request. However, this event was generated as a result of normal processing performed for the signalling path. XCF rejects the start request initiated as a result of this expected event.

INTERVENTION REQUIRED

The signalling path is currently inoperative. XCF will automatically start the signalling path once it receives notification that the circumstances that caused the path to be placed in the inoperative state are resolved. This start request is rejected because it was not made as a result of such a resolution. For example, a start request initiated to resolve a loss of signalling connectivity would be rejected for a CTC signalling path placed in an inoperative state because the device is not online.

STRUCTURE NOT DEFINED FOR PATHOUT

The start of the outbound list path is rejected because the indicated XES list structure is no longer defined to XCF for outbound use. Between the time that the start list path request was created and the time it was processed, the associated list structure was stopped in the outbound direction.

STRUCTURE NOT DEFINED FOR PATHIN

The start of the inbound list path is rejected because the indicated XES list structure is no longer defined to XCF for inbound use. Between

the time that the start list path request was created and the time it was processed, the associated list structure was stopped in the inbound direction.

STOP PATHOUT FOR STRUCTURE IN PROGRESS

The start of the outbound list path is rejected because the indicated XES list structure is in the midst of being stopped for outbound use. Between the time that the start list path request was created and the time it was processed, the associated list structure was stopped in the outbound direction.

STOP PATHIN FOR STRUCTURE IN PROGRESS

The start of the inbound list path is rejected because the indicated XES list structure is in the midst of being stopped for inbound use. Between the time that the start list path request was created and the time it was processed, the associated list structure was stopped in the inbound direction.

STRUCTURE INOPERATIVE FOR PATHOUT

The start of the outbound list path is rejected because the indicated XES list structure has been stopped in the outbound direction. Between the time that the start list path request was created and the time it was processed, the associated list structure was stopped in the outbound direction.

STRUCTURE INOPERATIVE FOR PATHIN

The start of the inbound list path is rejected because the indicated XES list structure has been stopped in the inbound direction. Between the time that the start list path request was created and the time it was processed, the associated list structure was stopped in the inbound direction.

STRUCTURE NAME MUST BEGIN WITH LETTERS IXC

The start request for the list structure is rejected because the name of the structure does not begin with the characters 'IXC'. Any list structure to be used by XCF for signalling must have a name that begins with the letters IXC. This convention is intended to help prevent the XCF signalling service from connecting to a XES structure used by some other application as a result of a typographical error on a start request..

DIAG037=n

Diagnostic data that is provided to assist IBM service personnel with problem determination.

DIAG074=n

Diagnostic data that is provided to assist IBM service personnel with problem determination.

RC,RSN=n

Diagnostic data that is provided to assist IBM service personnel with problem determination.

TRANSPORT CLASS *classname* NOT DEFINED

The operator entered a start command to start an outbound signalling path, but the transport class name, *classname*, is not defined to the system.

MAXMSG MUST BE AT LEAST *minimum*

The MAXMSG value specified on the start command was not large enough for messages in the indicated transport class.

The MAXMSG value for any outbound signalling path must provide enough message buffer space for at least one message as long as the class length for the transport class to which the signalling path is assigned. If the CLASS keyword was not explicitly coded, the signalling path was assigned to the default transport class. To start a signalling path in the indicated transport class, the MAXMSG value must be greater than or equal to *minimum*.

System action: The system ignores the start path request. The requested path does not become defined to XCF for signalling. Processing continues.

A system initiated start request for a path that is already defined to XCF may be preserved for future processing even though the start request is initially rejected. For example, a signalling path could be in the midst of stop processing as a result of some hardware failure. If the hardware failure was resolved before completion of stop path processing, a system initiated start path request would be rejected due to 'PATH STOP IN PROGRESS'. However, the start path request is preserved and reissued upon completion of stop path processing (provided that the path remains defined to XCF for signalling).

Operator response: Depending on the message text, do one of the following:

PATH ALREADY STARTED AS OUTBOUND

If the signalling path should be outbound, no action is needed.

If PATHIN was specified on the START command, the path cannot be used in different directions by the same system. If the signalling path should be used exclusively for inbound signal traffic, enter a SETXCF STOP,PATHOUT command to stop the signalling path. After the stop completes successfully, enter a SETXCF START,PATHIN command to start the signalling path in the inbound direction.

PATH ALREADY STARTED AS INBOUND

If the signalling path should be inbound, no action is needed.

If PATHOUT was specified on the START command, the path cannot be used in different directions by the same system. If the signalling path should be used exclusively for outbound signal traffic, enter a SETXCF STOP,PATHIN command to stop the signalling path. After the stop completes successfully, enter a SETXCF START,PATHOUT command to start the signalling path in the outbound direction.

PATH STOP IN PROGRESS

Enter the SETXCF START path command after

stop processing for the path has completed. Either message IXC307I or message IXC308I is issued when the stop path request is complete (although the message may appear only in the system log). Enter a DISPLAY XCF,*dir* command specifying the indicated path to determine the state of the signalling path. If message IXC356I indicates that the status of the signalling path is INOPERATIVE, or if the path is not found, stop processing completed.

UNEXPECTED ERROR

Enter the DISPLAY XCF,*dir* specifying the indicated signalling path to get detailed information concerning the indicated path. Note that information will only be displayed if the path is defined to XCF for signalling. Enter the SETXCF START command again. If the command continues to be rejected with this response, inform the system programmer.

Provide the result of the DISPLAY XCF command if the path was defined to XCF for signalling, as well as any diagnostic data presented as part of this start rejected message.

STRUCTURE NAME MUST BEGIN WITH LETTERS

IXC

Enter the SETXCF START,STRUCTURE command specifying a structure name to be used by the XCF signalling service. Any structure name defined by the system programmer for signalling must begin with the characters IXC.

TRANSPORT CLASS *classname* NOT DEFINED

The transport class must be defined to XCF before any signalling paths can be started in that class. Enter the DISPLAY XCF,CLASSDEF command to obtain a list of the transport classes currently defined to the system. If needed, use the SETXCF START,CLASSDEF command to define the transport class. Then enter the SETXCF START,PATHOUT command with a valid transport class name.

MAXMSG MUST BE AT LEAST *minimum*

There is a mismatch between the MAXMSG value specified for the signalling path and the class length defined for the transport class to which the path was to be assigned. If a transport class was not specified, the transport class named DEFAULT was assumed. Either the MAXMSG value should be increased, the class length for the transport class should be decreased, or the path should be assigned to a different transport class. Consult the system programmer as needed to determine which action is appropriate.

If the MAXMSG value should be increased, enter the SETXCF START,PATHOUT command with a MAXMSG value that is greater than or equal to *minimum*. Note that the MAXMSG value chosen by the system programmer usually exceeds the indicated *minimum* value in order to ensure reasonable performance for signal delivery. If the

transport class definition should be changed, enter a SETXCF MODIFY,CLASSDEF command to change the class length of the transport class. If the path should be assigned to a different transport class, enter the SETXCF START,PATHOUT command with the appropriate transport class specified.

For any other *text*, no action is needed.

System programmer response: Examine the listed operator responses for an appropriate action.

Ensure that the path is defined to the XCF signalling service correctly. Verify that the direction and the MAXMSG value are correctly specified. For an outbound path, verify that the transport class is correctly specified and that the transport class definition is consistent with the path definition.

In the case of an *UNEXPECTED ERROR*, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Supply any diagnostic data presented as part of the start rejected message, any output from the DISPLAY XCF command issued for the signalling path, and the XCF component trace table. The trace table must be obtained within 30 seconds of completion of the command if XCF detail tracing is enabled, and within a few minutes if just XCF default tracing is in effect. Default tracing is sufficient to resolve this problem.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCT1FSR, IXCT1FSS, IXCT1MOD

Routing Code: 1,2

Descriptor Code: 5

**IXC302I {SETXCF STOP|STOP} *dir* REQUEST
FOR *pathname* REJECTED: *text***

Explanation: The request to stop an XCF signalling path was rejected by the system.

In the message text:

SETXCF STOP

An operator entered a SETXCF STOP path command.

STOP

The system initiated a stop path request in response to some event or circumstance. System initiated stop requests do not cause paths to become undefined to XCF for signalling, but are otherwise functionally equivalent to SETXCF STOP path commands entered by an operator.

dir The path direction specified for the rejected stop request. An inbound signalling path is used to receive signals from another system in the sysplex. An outbound signalling path is used to send signals to another system in the sysplex.

PATHIN

Indicates the path was to be stopped for inbound signal traffic.

PATHOUT

Indicates the path was to be stopped for outbound signal traffic.

PATH Indicates the path direction was not specified or could not be determined. For system initiated requests, the existing XCF path definition was to be used to determine the direction(s) in which to stop the path.

pathname

The name of the signalling path.

DEVICE *dev*

Indicates the CTC device with device number *dev*.

STRUCTURE *strname*

Indicates the XES list structure whose name is *strname*. A list structure can contain one or more individual list signalling paths.

STRUCTURE *strname* **LIST** *num* **TO COMMUNICATE WITH SYSTEM** *sysname*

Indicates the list signalling path using list number *num* within the XES list structure named *strname* to communicate with the system named *sysname*. The list number is zero if the path was not yet assigned a list within the structure, or if the initiator of the request could not determine which list was assigned for the path.

USE PATHOUT TO STOP OUTBOUND PATH

The request specified PATHIN to stop an outbound signalling path. The path can be defined for signalling in only one direction.

USE PATHIN TO STOP INBOUND PATH

The request specified PATHOUT to stop an inbound signalling path. The path can be defined for signalling in only one direction.

NOT IN USE AS OUTBOUND PATH

The request specified PATHOUT to stop an inbound signalling path. The path can be defined for signalling in both directions simultaneously, but is not currently defined as an outbound path.

NOT IN USE AS INBOUND PATH

The request specified PATHIN to stop an outbound signalling path. The path can be defined for signalling in both directions simultaneously, but is not currently defined as an inbound path.

LAST PATH TO SYSTEM

The system will not process a SETXCF STOP command to stop the last operational signalling path to a system, because it would cause a loss of signalling connectivity.

STOP ALREADY IN PROGRESS

A stop path request for the indicated direction has already been accepted. The request is not yet complete.

FIRST USE STOP WITH UNCOND=NO

The request specified UNCOND=YES, which the system does not accept unless there is an outstanding stop request for the signalling path.

UNKNOWN DEVICE

The request specified a device not defined to XCF.

SYSTEM IS IN XCF-LOCAL MODE

The system on which the stop command was entered is running in XCF-local mode. A system in XCF-local mode is restricted to a single system sysplex, and cannot use XCF signalling paths for intersystem communication.

SYSTEM IS IN MONOPLEX MODE

The system on which the stop command was entered is running in MONOPLEX mode. A system in MONOPLEX mode is restricted to a single system sysplex, and cannot use XCF signalling paths for intersystem communication.

UNKNOWN STRUCTURE

The stop request specified a structure not in use by XCF.

UNKNOWN PATH

The stop request specified a path not in use by XCF.

UNEXPECTED ERROR

An unexpected error occurred. Diagnostic data is provided to help IBM service personnel with problem determination.

DIAG037=*n*

Diagnostic data that is provided to assist IBM service personnel with problem determination.

DIAG074=*n*

Diagnostic data that is provided to assist IBM service personnel with problem determination.

RC,RSN=*n*

Diagnostic data that is provided to assist IBM service personnel with problem determination.

System action: The system ignores the stop path request. Processing continues.

Operator response: Depending on the message text, do one of the following:

USE PATHOUT TO STOP OUTBOUND PATH**NOT IN USE AS INBOUND PATH**

If the path should be defined for inbound use, no action is needed. If the path should be stopped for outbound use, enter a SETXCF STOP,PATHOUT command.

USE PATHIN TO STOP INBOUND PATH

NOT IN USE AS OUTBOUND PATH

If the path should be defined for outbound use, no action is needed. If the path should be stopped for inbound use, enter a SETXCF STOP,PATHIN command.

FIRST USE STOP WITH UNCOND=NO

Enter SETXCF STOP command without the UNCOND=YES specification to stop the signalling path. One can specify UNCOND=NO explicitly or omit the UNCOND specification since UNCOND=NO is the default.

LAST PATH TO SYSTEM

To remove the system from the sysplex, enter the VARY command. If the system is to remain in the sysplex, start additional signalling paths before stopping this one. Enter a DISPLAY XCF path command for the signalling path to determine the system to which the path is connected.

UNKNOWN DEVICE**UNKNOWN STRUCTURE****UNKNOWN PATH**

If the signalling path was correctly specified, it has already been stopped and is no longer defined to XCF. No further action is needed.

If the signalling path was not correctly specified, enter a SETXCF STOP path command for the correct signalling path. Enter the DISPLAY XCF,PATHIN command to list the signalling paths defined to XCF for inbound use. Enter the DISPLAY XCF,PATHOUT command to list the signalling paths defined to XCF for outbound use.

UNEXPECTED ERROR

Enter a DISPLAY XCF path command to obtain detailed information for the signalling path. Record the display output for the path along with any diagnostic data contained in this message in case the system programmer must contact IBM service personnel for problem determination. Then try entering the SETXCF STOP path command again.

System programmer response: Examine the listed operator responses for an appropriate action.

In the case of an *UNEXPECTED ERROR*, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Supply any diagnostic data presented as part of the stop rejected message, any output from the DISPLAY XCF command issued for the signalling path, and the XCF component trace table. The trace table must be obtained within 30 seconds of completion of the command if XCF detail tracing is enabled, and within a few minutes if just XCF default tracing is in effect. Default tracing is sufficient to resolve this problem.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCT1FSP, IXCT1FSS

Routing Code: 1,2

Descriptor Code: 5

IXC303I SETXCF MODIFY *dir REQUEST* *text*

Explanation: An operator entered a SETXCF MODIFY command to modify a signalling path or a LOCALMSG parameter, but the command was rejected by the system.

In the message text:

dir The path direction specified for the rejected modify command. An inbound signalling path is used to receive signals from another system in the sysplex. An outbound signalling path is used to send signals to another system in the sysplex.

PATHIN

Indicates that the inbound path definition was to be modified.

PATHOUT

Indicates that the outbound path definition was to be modified.

PATH Indicates the path direction was not specified or could not be determined.

pathname

The name of the signalling path.

DEVICE *dev*

Indicates the CTC device with device number *dev*.

STRUCTURE *strname*

Indicates the XES list structure whose name is *strname*. A list structure can contain one or more individual list signalling paths.

**STRUCTURE *strname* LIST *num* TO
COMMUNICATE WITH SYSTEM *sysname***

Indicates the list signalling path using list number *num* within the XES list structure named *strname* to communicate with the system named *sysname*. The list number is zero if the path was not yet assigned a list within the structure, or if the initiator of the request could not determine which list was assigned for the path.

classname

The name of a transport class.

minimum

Minimum length of maxmsg.

**FOR *pathname* REJECTED: USE PATHOUT TO
MODIFY OUTBOUND PATH**

The request specified PATHIN to modify an outbound signalling path. The path can be defined for signalling in only one direction.

**FOR *pathname* REJECTED: USE PATHIN TO MODIFY
INBOUND PATH**

The request specified PATHOUT to modify an

inbound signalling path. The path can be defined for signalling in only one direction.

FOR pathname REJECTED: NOT IN USE AS OUTBOUND PATH

The request specified PATHOUT to modify an inbound signalling path. The path can be defined for signalling in both directions simultaneously, but is not currently defined as an outbound path.

FOR pathname REJECTED: NOT IN USE AS INBOUND PATH

The request specified PATHIN to modify an outbound signalling path. The path can be defined for signalling in both directions simultaneously, but is not currently defined as an inbound path.

FOR pathname REJECTED: PATH STOPPED

The SETXCF MODIFY command was entered for a signalling path that was being stopped.

FOR pathname REJECTED: UNKNOWN DEVICE

The SETXCF MODIFY command specified a device not in use by XCF.

FOR pathname REJECTED: SYSTEM IS IN XCF-LOCAL MODE

The system on which the modify command was entered is running in XCF-local mode. A system in XCF-local mode is restricted to a single system sysplex, and cannot use XCF signalling paths for intersystem communication.

FOR pathname REJECTED: SYSTEM IS IN MONOPLEX MODE

The system on which the modify command was entered is running in MONOPLEX mode. A system in MONOPLEX mode is restricted to a single system sysplex, and cannot use XCF signalling paths for intersystem communication.

FOR pathname REJECTED: UNKNOWN STRUCTURE

The SETXCF MODIFY command specified a structure not in use by XCF.

FOR pathname REJECTED: UNEXPECTED ERROR

An unexpected error occurred. Diagnostic data is provided to help IBM service personnel with problem determination.

FOR pathname REJECTED: UNKNOWN PATH

The MODIFY command specified a path not in use by XCF.

FOR pathname REJECTED: DIAG037=n

Diagnostic data that is provided to assist IBM service personnel with problem determination.

FOR pathname REJECTED: DIAG074=n

Diagnostic data that is provided to assist IBM service personnel with problem determination.

FOR pathname REJECTED: RC,RSN=n n

Diagnostic data that is provided to assist IBM service personnel with problem determination.

FOR pathname REJECTED: TRANSPORT CLASS classname NOT DEFINED

The operator entered a SETXCF MODIFY command to modify an outbound signalling path, but the transport class name, *classname*, is not defined to the system.

FOR pathname REJECTED: MAXMSG MUST BE AT LEAST minimum

The MAXMSG specified on the SETXCF MODIFY command was not large enough for the transport class.

The MAXMSG value for any outbound signalling path must provide enough message buffer space for at least one message as long as the class length for the transport class to which the signalling path is assigned. If the CLASS keyword was not explicitly coded, the signalling path was assigned to the default transport class. To modify a signalling path in the indicated transport class, the MAXMSG value must be greater than or equal to *minimum*.

REJECTED: TRANSPORT CLASS classname NOT DEFINED

The operator entered a SETXCF MODIFY command to modify an outbound signalling path, but the transport class name, *classname*, is not defined to the system.

REJECTED: MAXMSG MUST BE AT LEAST minimum

The MAXMSG specified on the MODIFY command was not large enough for the transport class.

The MAXMSG value for any outbound signalling path or LOCALMSG parameter must provide enough message buffer space for at least one message as long as the class length for the transport class to which the signalling path or LOCALMSG parameter is assigned. To modify a signalling path or LOCALMSG parameter, the MAXMSG value must be greater than or equal to *minimum*.

System action: The system ignores the modify command. Processing continues.

Operator response: Depending on the message text, do one of the following:

**USE PATHOUT TO MODIFY OUTBOUND PATH
NOT IN USE AS INBOUND PATH**

Enter the SETXCF MODIFY,PATHOUT command to modify the outbound path definition.

**USE PATHIN TO MODIFY INBOUND PATH
NOT IN USE AS OUTBOUND PATH**

Enter the SETXCF MODIFY,PATHIN command to modify the inbound path definition.

UNKNOWN DEVICE**UNKNOWN STRUCTURE****UNKNOWN PATH**

If the signalling path was not correctly specified, enter a SETXCF MODIFY path command for the correct signalling path. Enter the DISPLAY

XCF,PATHIN command to list the signalling paths defined to XCF for inbound use. Enter the DISPLAY XCF,PATHOUT command to list the signalling paths defined to XCF for outbound use.

UNEXPECTED ERROR

Enter the DISPLAY XCF specifying the indicated signalling path or LOCALMSG as appropriate to get detailed information concerning the indicated object. Note that information will only be displayed if the object is defined to XCF for signalling. Enter the SETXCF MODIFY command again. If the command continues to be rejected with this response, inform the system programmer. Provide the result of the DISPLAY XCF command if the object is defined to XCF for signalling, as well as any diagnostic data presented as part of this modify rejected message.

TRANSPORT CLASS *classname* NOT DEFINED

The transport class must be defined to XCF before any signalling paths or LOCALMSG parameters can be assigned to that class. Enter the DISPLAY XCF,CLASSDEF command to obtain a list of the transport classes currently defined to the system. If needed, use the SETXCF START,CLASSDEF command to define the transport class. Then enter the SETXCF MODIFY command with a valid transport class name.

System programmer response: Examine the listed operator responses for an appropriate action.

In the case of an *UNEXPECTED ERROR*, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Supply any diagnostic data presented as part of the modify rejected message, any output from the DISPLAY XCF command issued for the object, and the XCF component trace table. The trace table must be obtained within 30 seconds of completion of the command if XCF detail tracing is enabled, and within a few minutes if just XCF default tracing is in effect. Default tracing is sufficient to resolve this problem.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCT1FSS, IXCT1MOD

Routing Code: 1,2

Descriptor Code: 5

IXC305I {SETXCF START|START} *dir REQUEST FOR pathname WAS NOT SUCCESSFUL: text*

Explanation: The request to start an XCF signalling path was not successful.

During XCF initialization, message IXC305I may or may not be displayed on an operator console when a CTC device cannot be started as a signalling path.

- The message is not displayed on an operator console the first time XCF initialization runs during an IPL.

- If XCF initialization is to be restarted for an issue not related to signalling connectivity problems, the message is not displayed on an operator console.
- If XCF initialization is to be restarted for an issue related to signalling connectivity, message IXC207A prompts the operator to respecify the COUPLExx parmlib member. The response to message IXC207A determines whether message IXC305I is displayed on an operator console. If the same COUPLExx parmlib member is specified, message IXC305I will be displayed. If a different COUPLExx parmlib member is specified, message IXC305I will not be displayed on the operator console, but IXC305I will always be displayed on the hardcopy log.

In the message text:

SETXCF START

An operator entered a SETXCF START path command.

START

The system initiated a start path request in response to some event or circumstance. System initiated start requests do not cause paths to become defined to XCF for signalling, but are otherwise functionally equivalent to SETXCF START path commands entered by an operator.

dir The path direction specified for the unsuccessful start request. An inbound signalling path is used to receive signals from another system in the sysplex. An outbound signalling path is used to send signals to another system in the sysplex.

PATHIN

Indicates the path was to be started for inbound signal traffic.

PATHOUT

Indicates the path was to be started for outbound signal traffic.

PATH

Indicates the path direction was not specified or could not be determined. For system initiated requests, the existing XCF path definition was to be used to determine the direction(s) in which to start the path.

pathname

The name of the signalling path.

DEVICE *dev*

Indicates the CTC device with device number *dev*.

STRUCTURE *strname*

Indicates the XES list structure whose name is *strname*. A list structure can contain one or more individual list signalling paths.

**STRUCTURE *strname* LIST *num* TO
COMMUNICATE WITH SYSTEM *sysname***

Indicates the list signalling path using list number *num* within the XES list structure named *strname* to communicate with the system named *sysname*. The list number is zero if the path was not yet assigned a list within the structure, or if the initiator of the request could not determine which list was assigned for the path.

UNABLE TO ALLOCATE DEVICE

XCF was unable to allocate a device, probably because it is allocated to another component, such as global resource serialization, JES3, or Virtual Telecommunications Access Method (VTAM). XCF will not use a device that is already allocated.

INVALID DEVICE NUMBER

The device number in the message text is not defined to the system.

DEVICE IS NOT A CTC ADAPTER

The unit type for the device is not a channel to channel (CTC) adapter. The unit type must be a CTC adapter in order for XCF to use the device as a signalling path.

STOP IS REQUESTED

A stop path command was initiated for the signalling path by either the operator or XCF. All processing for the start request is ended.

CHANNEL PATH VERIFICATION FAILED

An unrecoverable error interrupted XCF's verification process for the device.

**I/O TIMEOUT DURING CHANNEL PATH
VERIFICATION**

The command failed during verification for the device's channel paths because of an I/O timeout.

**NO CHANNEL PATHS LOGICALLY DEFINED FOR
DEVICE**

The command failed because the device has no logical channel paths leading to it.

**NO CHANNEL PATHS PHYSICALLY DEFINED TO
DEVICE**

The command failed because the device has no usable physical channel paths leading to it.

DEVICE IS IN A PERMANENT ERROR STATE

The command failed because the device is in a permanent error state.

DEVICE NOT CONNECTED TO ANY SUBCHANNEL

The command failed because the device is not connected to a subchannel.

DEVICE IS NOT ONLINE

The device must be online if it is to be used by XCF for signalling. Start path processing was unable to vary the device online. If the device is varied online, XCF automatically attempts to start the signalling path.

SENSE ID CHANNEL PROGRAM FAILED

A request for sense data from the device failed. XCF must have the sense data to operate the CTC adapter correctly.

UNSUPPORTED CTC DEVICE TYPE

The device is not a CTC adapter type supported by XCF.

PATH UNCONDITIONALLY STOPPED

A stop command with UNCOND=YES was entered for the signalling path. The unconditional stop path request was initiated by either the operator or the system. All processing for the start command is ended.

UNEXPECTED ERROR

An unexpected failure occurred while processing the command.

NO CONNECTIVITY TO COUPLING FACILITY

The system processing the start command does not have connectivity to the coupling facility containing the specified structure. This situation could be due to operator commands such as VARY PATH OFFLINE, CONFIG CHP OFFLINE or hardware errors such as facility or path failures.

NO CONNECTION AVAILABLE FOR XCF

XCF was unable to connect to the structure. There was no connection available for XCF to use. Possible explanations include:

- The maximum number of connectors to a structure has been reached for the CFRM active policy.
- The model dependent limit on the maximum number of connectors to a list structure has been reached for the coupling facility that contains the list structure.
- Some non-XCF connector is connected to the structure. A non-XCF connector can prevent XCF from connecting to a structure even though not all the connections are in use.

IXLCONN SERVICE COULD NOT CONNECT

An unexpected return and reason code was returned by the IXLCONN service when XCF attempted to connect to the structure.

DELAYED UNTIL STOP COMPLETES

A system initiated start command is delayed until stop path processing completes. The system will automatically start the path upon successful completion of the stop, provided the path remains defined to XCF for signalling.

**UNABLE TO ALLOCATE A LIST FOR A SIGNALLING
PATH**

An unexpected error occurred while attempting to allocate a specific list within the structure for the list signalling path to use.

REMOTE SYSTEM NO LONGER USING STRUCTURE

The system to which the list path was to establish signalling connectivity is no longer using the structure for signalling.

STRUCTURE FAILURE

The structure failed.

SYSTEMS NO LONGER USING STRUCTURE IN OPPOSITE DIRECTIONS

The system with which the list path was to establish signalling connectivity is no longer using the structure for signalling in the opposite direction. List paths are established between those pairs of systems for which the structure has been defined for outbound use on one system and inbound use on the other system.

TOO FEW LISTS IN STRUCTURE

A list could not be allocated for the list path. Either the list structure was not allocated with enough lists for all the desired list paths or there is a list path in the midst of stop processing that has not yet deallocated its list.

LIST NOTIFICATION VECTOR TOO SMALL

The list notification vector for the list structure is not large enough for all the lists that need to be monitored for list transitions. There was not enough storage available in the Hardware System Area (HSA) for a larger vector.

REMOTE SYSTEM STOPPED USING LIST

The system to which the list path was to establish signalling connectivity is stopping its side of the list path.

DELAYED UNTIL STRUCTURE UNQUIESCED

The system processing the start command has quiesced all I/O operations to the structure. The start of the list path is delayed until I/O to the structure is again permitted.

UNEXPECTED HARDWARE ERROR

The signalling path could not be started due to an unexpected hardware error.

STRUCTURE NOT DEFINED IN ACTIVE POLICY

The indicated structure name is not defined in the CFRM active policy. The structure must be defined in the active policy in order to connect to the structure.

NEW CONNECTIONS TO STRUCTURE BEING PREVENTED

New connections to the requested structure are being prevented at this time for one of the following reasons:

- All active connectors have confirmed the rebuild quiesce event. New connections will not be permitted until the rebuild or rebuild stop is completed
- The structure is allocated in a coupling facility that is failed. New connections will not be

permitted until the structure is rebuilt, or all connections disconnect causing the structure to be deallocated.

- The coupling facility containing the structure is not available for use because policy reconciliation is in progress. New connections will not be permitted until policy reconciliation is complete.
- New structure allocations for this structure name are not permitted because there is a pending policy change for this structure. New connections will not be permitted until the change is complete.

UNABLE TO DEFINE LOCAL LIST NOTIFICATION VECTOR

The list notification vector used to monitor list transitions could not be defined. The situation is most likely caused by a lack of storage in the Hardware System Area (HSA).

OTHER SYSTEMS USING STRUCTURE INCOMPATIBLY

Some other system is using the structure in ways that are not compatible with the protocols used by the system that processed the start command. The signalling path is stopped to avoid interfering with those systems.

COPPLE DATA SET FOR CFRM NOT AVAILABLE

The couple data set for CFRM is not available to this system. In order to connect to structures, the couple data set for CFRM must be available.

For a system that is IPLing into an existing sysplex, this failure also arises when the indicated structure is not defined in the CFRM active policy.

DELAYED UNTIL STRUCTURE DUMP COMPLETES

The connect to the structure could not complete because SVC Dump holds serialization on the structure.

STRUCTURE'S DISPOSITION IS KEEP

The structure already exists but was created with a disposition that allows it to persist (remain allocated) when there are no defined connections. Since the system that processed the start command does not use persistent structures, the structure is being used in ways that are not compatible with its protocols. The signalling path is stopped to avoid interfering with the other systems using the structure.

STRUCTURE'S LIST ENTRY SIZE TOO SMALL

The structure already exists but was created with a maximum size list entry that is not large enough to contain 65536 bytes of data. Since the system that processed the start command creates list entries containing up to 65536 bytes of data, the structure is being used in ways that are not compatible with its protocols. The signalling path is stopped to avoid interfering with the other systems using the structure.

STRUCTURE DOES NOT USE ADJUNCT DATA

The structure already exists but does not use adjunct data. Since the system that processed the start command uses adjunct data for its list entries, the structure is being used in ways that are not compatible with its protocols. The signalling path is stopped to avoid interfering with the other systems using the structure.

STRUCTURE DOES NOT USE DATA ELEMENTS

The structure already exists but does not use data elements. Since the system that processed the start command uses list entries containing data elements, the structure is being used in ways that are not compatible with its protocols. The signalling path is stopped to avoid interfering with the other systems using the structure.

STRUCTURE DOES NOT COUNT LIST ENTRIES

The structure already exists but does maintain list counts on a list entry basis. Since the system that processed the start command uses list entry counts, the structure is being used in ways that are not compatible with its protocols. The signalling path is stopped to avoid interfering with the other systems using the structure.

IPLING SYSTEM UNABLE TO WRITE STRUCTURE

XCF connected to the structure before the IPLing system became active in the sysplex. It is not possible to make any updates to the structure until after the system becomes active in the sysplex. However, once the IPLing system became active in the sysplex, it still could not make updates.

XES FUNCTION NOT AVAILABLE

XES functions are not available. This situation can arise when the hardware necessary to provide XES functions is not present.

STRUCTURE IN USE BY A NON-XCF CONNECTOR

The structure already exists, but one or more of the connectors is not XCF. Since it appears that the structure is in use by some other application, XCF disconnects from the structure to avoid interfering with that application. Structures to be used by XCF for signalling should be dedicated exclusively to XCF in order to ensure correct operation of the signalling service. Message IXC452I is issued to identify the non-XCF connectors.

DELAYED UNTIL REBUILD COMPLETES

The structure already exists, but there is a rebuild in progress. The system processing the start command elected not to participate in the rebuild.

DELAYED UNTIL AN ACTIVE SYSTEM ALLOCATES STRUCTURE

An system cannot allocate a structure for signalling until after the system is active in the sysplex and XES services are available. Systems attempting to IPL into a sysplex may be able to connect to an existing structure in use by XCF for signalling, but

cannot create such a structure. The indicated structure does not yet exist.

USER SYNC POINT SET

The structure already exists, but there is a user sync point set. Sync points are set during rebuild processing, but are otherwise unexpected. If there is a rebuild in progress, the start is delayed until the rebuild completes. If there is no rebuild in progress, an unexpected error has occurred. The error could be caused by a non-XCF connector using the structure.

STRUCTURE IN USE BY ANOTHER SYSPLEX

The structure already exists, but appears to be in use by systems in a different sysplex. Signalling paths are only permitted between systems participating in the same sysplex.

NOT ENOUGH FREE SPACE IN STRUCTURE FOR SIGNALLING

There is not enough space available in the structure for XCF to use it for signalling. After connecting to the structure, XCF verifies that there is enough space available to manage the structure and to be able to send at least one signal of the maximum supported message length. If the size of the structure is greater than or equal to the maximum structure size defined in the CFRM active policy, the size specified in the policy must be increased so that a larger structure can be allocated. If the allocated structure size is less than the size defined in the policy for the structure, the coupling facility containing the structure did not have enough space available to allocate the structure as large as the policy allowed. Either more space needs to be made available in the coupling facility, or the structure needs to be allocated in a coupling facility that can accommodate it.

UNABLE TO ALLOCATE STRUCTURE

Structure could not be allocated. Message IXC463I is written to the system log to explain why the allocation failed in each of the coupling facilities that was tried. The preference list and exclusion list in the CFRM active policy determines which coupling facilities are allowed to contain the structure.

DIAG073=n n n n n

Diagnostic data that is provided to assist IBM service personnel with problem determination.

RC=n, RSN=n

Diagnostic data that is provided to assist IBM service personnel with problem determination.

System action: The signalling path remains defined to XCF as a signalling path (provided the system has not processed a SETXCF STOP path operator command). The signalling path is considered to be in an INOPERATIVE state. If the problems that prevent the path from starting are resolved, a new start command

can be entered. In many cases, the system is able to detect circumstances for which the problems may have been resolved and automatically initiates a new start request. In the case of a list structure, the system may attempt to rebuild the structure.

Operator response: If the path was specified incorrectly, enter a SETXCF STOP path command so that the path is no longer defined to XCF for signalling. The stop prevents the system from using resources to manage the path definition and prevents attempts to start a path that is not intended to be used for signalling. Then enter a SETXCF START path command with the path specified correctly.

For a path that was correctly specified, any hardware, definitional, or capacity problems must be resolved before the path can be used for signalling. In some cases these problems are resolved automatically by the system. For other cases, manual intervention is required. The type of manual intervention needed varies according to the message text (see below). After the problem is resolved, it is often the case that no further action is necessary as the system automatically starts the path again. If needed or desired, enter a SETXCF START path command to manually reinitiate start processing for the path. If the problem persists, do the following:

1. Record the name of the signalling path, the text explaining why the start was not successful, and any diagnostic data presented with this message. The system programmer will need this information if it becomes necessary to contact IBM service for problem resolution.
2. Enter the display commands appropriate to the particular type of signalling path. Record the results of the display commands to assist with problem determination.
3. Contact hardware support as needed.
4. Contact the system programmer as needed.

The following commands are useful for investigating unsuccessful start path requests for devices:

- DISPLAY U,CTC,ALLOC,*dev* to display the allocation information for a CTC device with device number *dev*.
- DISPLAY U,CTC,,*dev* to display the status of the device.
- Enter a DISPLAY M=DEV(*dev*) to display the state of the channel paths to the device with device number *dev*.

The following commands are useful for investigating unsuccessful start path requests for structures and list paths. In some cases, it may be helpful to enter these commands on systems in the sysplex other than the one that was processing the start path request.

- DISPLAY XCF,PATHOUT,STRNAME=*strname* to display detailed information about the use of the

structure for signalling, including the state of the outbound list paths that have been started.

- DISPLAY XCF,PATHIN,STRNAME=*strname* to display detailed information about the use of the structure for signalling, including the state of the inbound list paths that have been started.
- DISPLAY XCF,STRUCTURE to display summary information about the structures defined in this sysplex.
- DISPLAY XCF,STRUCTURE,STRNAME=*strname* to display detailed information about the indicated structure.
- DISPLAY XCF,CF to display summary information about the coupling facilities defined in this sysplex.
- DISPLAY XCF,CF,CFNAME=*cfname* to display detailed information about the indicated coupling facility as defined to the sysplex.
- DISPLAY CF to display summary hardware information about the coupling facilities connected to a system.
- DISPLAY CF,CFNAME=*cfname* to display detailed hardware information about the indicated coupling facility connected to a system.
- DISPLAY M=CHP(*chp*) to display the state of the channel paths connecting a system to a coupling facility.

Depending on the message text, do the following manual intervention:

UNABLE TO ALLOCATE DEVICE

Display the allocation information for the device by entering the DISPLAY U,CTC,ALLOC,*dev* command. If appropriate, deallocate the device from the indicated user.

If the device is used by global resource serialization and is to be made available to XCF, deallocate it by entering the VARY *dev*,OFFLINE,FORCE command. Enter the command from both systems attached to that device.

NO CHANNEL PATHS PHYSICALLY DEFINED TO DEVICE

Enter the VARY command to make sure there are channel paths online for this device.

DEVICE IS NOT ONLINE

Enter the VARY command to vary the device online.

NO CONNECTIVITY TO COUPLING FACILITY

Enter a DISPLAY XCF,STRUCTURE,STRNAME=*strname* for information about which coupling facility contains the indicated structure. Enter a DISPLAY CF,CFNAME=*cfname* command to display the status of that coupling facility and the channel paths that connect the system to it, (*cfname* is the name of the coupling facility that contains the structure).

Enter a CONFIG CHP command to configure channel paths to the coupling facility, if needed. Enter a VARY PATH command to vary the channel paths online to the system, if needed.

NO CONNECTION AVAILABLE FOR XCF

Enter a DISPLAY

XCF,STRUCTURE,STRNAME=*strname* command for information about the connectors to the structure. Enter a DISPLAY XCF,POLICY,TYPE=CFRM command for information about the CFRM active policy. Consult the system programmer as needed to determine whether to:

- Perform the steps needed to activate a CFRM policy that has been formatted to support more connectors.
- Enter a SETXCF START,REBUILD command to rebuild the structure in a coupling facility that supports more connectors.
- Perform the steps needed to cause the non-XCF connector to disconnect from the structure.

**LIST NOTIFICATION VECTOR TOO SMALL
UNABLE TO DEFINE LOCAL LIST NOTIFICATION
VECTOR**

Enter a DISPLAY XCF,STR command to determine which structures are in use. For each structure that is in use, enter a DISPLAY,XCF,STR,STRNAME=*inusestr*, where *inusestr* is the name of an in use structure, to determine which applications are connected to the structure from this system. Consult the system programmer as needed to determine whether to reduce the number of connectors connected to structures from the system that processed the start command, or to modify the way in which the connectors are using the structure, or to perform the steps needed to increase the amount of storage in the Hardware System Area (HSA).

STRUCTURE NOT DEFINED IN ACTIVE POLICY

Consult the system programmer as needed to determine which CFRM policy should be made active. Enter a SETXCF START,POLICY,TYPE=CFRM,POLNAME=*polname* to activate the policy named *polname* which defines the structure.

COUPLE DATA SET FOR CFRM NOT AVAILABLE

Enter a DISPLAY XCF,COUPLE,TYPE=CFRM command to list the couple data set in use for CFRM. Consult the system programmer as needed to determine which coupling data set should be made available for CFRM. As needed, enter a SETXCF COUPLE command for a couple data set to be used for CFRM.

DELAYED UNTIL STRUCTURE DUMP COMPLETES

The system automatically starts the path again when the dump completes. However, if the dump does not complete within a reasonable time, enter a DISPLAY,XCF,STRNAME=*strname* command for

information about the structure dump. To force the dump serialization to be released, enter a SETXCF FORCE,STRDUMPSERIAL command. Note however, that the requested structure dump may then fail to contain the data needed for problem determination.

DELAYED UNTIL REBUILD COMPLETES

The system automatically starts the path again when rebuild completes. However, if the rebuild does not complete within a reasonable time, enter a DISPLAY,XCF,STRNAME=*strname* command for information about the state of the structure and rebuild processing. One possible source of rebuild delay is a connector failing to respond to a rebuild event. Ensure that all connectors are operational and that there is signalling connectivity between all the systems in the sysplex so that responses can be processed. It may be necessary to force a connector to disconnect, which causes an implicit response to be made. Use the SETXCF STOP path command for each applicable direction to force XCF to disconnect from the structure on the system that processes the stop path command.

**DELAYED UNTIL AN ACTIVE SYSTEM ALLOCATES
STRUCTURE**

Usually, no action is needed since the system automatically starts the path again once the system becomes active in the sysplex and XES services become available. So if an IPLing system is able to establish signalling connectivity with the other systems in the sysplex, no action is needed.

If an IPLing system is not able to establish signalling connectivity with the other systems in the sysplex, action may be needed on one or more of the systems already active in the sysplex before the IPL can proceed. Message IXC454I lists the systems for which signalling connectivity cannot be established. Consult the system programmer as needed to determine which of the these systems are to use the indicated structure to establish signalling connectivity with the IPLing system. The structure must be started as an XCF signalling path on those systems. If the active systems are themselves IPLing, the indicated structure will be started as a consequence of being defined as a signalling path in the COUPLExx parmlib member. If not, enter a SETXCF START path command on the active systems as needed to start the structure for signalling in the appropriate directions. Message IXC306I is issued when the structure is successfully started for signalling. After the active systems successfully start the structure for signalling, respond to message IXC455D on the IPLing system that needs to establish signalling connectivity.

System programmer response: Do the following:

1. Examine the information provided by the operator.

2. Ensure that the signalling path is correctly defined to XCF.
3. Ensure that the hardware is correctly configured, defined to the system, and operational.
4. Perform the actions suggested below for the indicated message text.
5. Examine logrec error records for I/O errors or other hardware problems related to the signalling path.
6. Examine the system log for other messages related to the signalling path. In the case of a list structure, messages IXC452I, IXC457I, and IXC463I are especially relevant.
7. Obtain the following additional diagnostic information as appropriate for problem determination:
 - The XCF component trace table. The trace table must be obtained within 30 seconds of completion of the command if XCF detail tracing is enabled, and within a few minutes if just XCF default tracing is in effect. Default tracing is sufficient to resolve this problem.
 - For list structures, the XES component trace tables. Obtain both the global trace buffer and the connection related trace buffer.
 - A GTF I/O trace of the device.

If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Supply any diagnostic data presented as part of the start failed message, any output from the DISPLAY commands issued while investigating the problem, the system log(s), and any of the traces that were obtained.

Depending on the message text, the following actions are appropriate:

ALL CONNECTIONS TO STRUCTURE ARE IN USE

If the maximum number of connectors to a structure has been reached for the CFRM active policy, use the XCF couple data set format utility to create a new couple data set that supports more connectors. Run the XCF Administrative Data Utility to recreate the CFRM policy in the new couple data set. Have the operator make this couple data set available to the sysplex.

If the model dependent limit on the maximum number of connectors to a list structure has been reached for the coupling facility that contains the list structure, have the operator rebuild the structure into some other coupling facility that can support the required number of connectors. If so, consider modifying the preference list in the CFRM policy so that the structure is allocated in coupling facilities that can support the required number of connectors. If no suitable coupling facility is available, consider defining more list structures for signalling so that each list structures provides signalling connectivity for a subset of systems in the sysplex. The structures together can provide for

full signalling connectivity but the number of connectors need not exceed the model dependent limits on the number of connectors.

If some non-XCF connector is connected to the structure, take whatever steps are needed to force that connector to disconnect.

LIST NOTIFICATION VECTOR TOO SMALL UNABLE TO DEFINE LOCAL LIST NOTIFICATION VECTOR

There was not enough storage available in the Hardware System Area (HSA) of the system that processed the start command to allow a list notification vector of the required length to be defined. Either reduce the amount of storage being used in the HSA, or increase the amount of storage available in the HSA for creating list notification vectors. Reduce the amount of HSA storage being used by decreasing the number of connectors or changing the way connectors make use of their structure. For example, the size of the list notification vector required by the XCF signalling service is determined by the number of inbound list paths to be started. As another example, changing the number of buffers associated with a XES cache structure changes the amount of HSA storage required by the connector.

STRUCTURE NOT DEFINED IN ACTIVE POLICY

A CFRM policy containing a definition for the structure must be made active. As needed, run the XCF Administrative Data Utility to define the structure in a policy. Have the operator enter a SETXCF START,POLICY command to activate a policy that defines the structure.

COUPLE DATA SET FOR CFRM NOT AVAILABLE

Use the XCF format utility program to format a couple data set for CFRM. Ensure that the couple data set formatted for CFRM is available to the system.

NOT ENOUGH FREE SPACE IN STRUCTURE FOR SIGNALLING

If the size of the structure is greater than or equal to the maximum structure size defined in the CFRM active policy, use the XCF Administrative Data Utility to increase the structure size specified in a policy. Have the operator activate the updated policy.

If the allocated structure size is less than the size defined in the policy for the structure, the coupling facility containing the structure did not have enough space available to allocate the structure as large as the policy allowed. Either more space needs to be made available in the coupling facility, or the structure needs to be allocated in a coupling facility that can accommodate it. More space can be made available in a coupling facility by causing structures to be deallocated from that facility, or by decreasing the amount of space reserved for structure dumps. It may be necessary to modify the preference list or

the exclusion list defined in the CFRM policy to allow the structure to be allocated in a more suitable coupling facility. Alternatively, it may be necessary to make a new coupling facility available for the sysplex to use.

UNABLE TO ALLOCATE STRUCTURE

Examine the system log for instances of message IXC463I for explanations of why the structure could not be allocated. Message IXC463I is issued for each coupling facility that was considered. Resolve the problems indicated by message IXC463I or make a suitable coupling facility available for use.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCT1FSR, IXCT1FSS, IXCT1ISS, IXCT1PCC

Routing Code: 1,2

Descriptor Code: 5,12.

IXC306I {SETXCF STARTSTART} *dir* REQUEST FOR *pathname* COMPLETED SUCCESSFULLY: *text*

Explanation: The signalling path was successfully started. This means that the signalling path appears to be suitable for use. It does not mean that the signalling path is engaged in signal delivery.

In the message text:

SETXCF START

An operator entered a SETXCF START path command.

START

The system initiated a start path request in response to some event or circumstance. System initiated start requests do not cause paths to become defined to XCF for signalling, but are otherwise functionally equivalent to SETXCF START path commands entered by an operator.

dir The path direction specified for the start request. An inbound signalling path is used to receive signals from another system in the sysplex. An outbound signalling path is used to send signals to another system in the sysplex.

PATHIN

Indicates the path was started for inbound signal traffic.

PATHOUT

Indicates the path was started for outbound signal traffic.

PATH

Indicates the path direction was not specified or could not be determined. For system initiated requests, the existing XCF path definition was used to determine the direction(s) in which to start the path.

pathname

The name of the signalling path.

DEVICE *dev*

Indicates the CTC device with device number *dev*.

STRUCTURE *strname*

Indicates the XES list structure whose name is *strname*. A list structure can contain one or more individual list signalling paths.

STRUCTURE *strname* LIST *num* TO**COMMUNICATE WITH SYSTEM *sysname***

Indicates the list signalling path using list number *num* within the XES list structure named *strname* to communicate with the system named *sysname*.

PARMLIB SPECIFICATION

The signalling path was started because it was defined in the COUPLExx parmlib member used to initialize XCF when the system IPLed.

DEVICE CAME ONLINE

The signalling path was started because the device was varied online.

DEVICE BECAME AVAILABLE TO MVS

The signalling path was started because the device became available to the system. For example, a logical path to the device may have been established, or the device may have become connected to a subchannel.

DEFERRED UNTIL STOP COMPLETED

The path was stopped before start processing could complete. The system automatically starts the path again upon successful completion of stop processing, provided the path remains defined to XCF for signalling and the circumstances that caused the stop are resolved.

PATH TO DEVICE CAME ONLINE

The signalling path was started because a channel path to the device was varied online.

NEEDED SIGNALLING CONNECTIVITY

The system lost signalling connectivity with some other system in the sysplex. In an attempt to re-establish signalling connectivity, the path is started.

SYSTEM STARTED TO USE STRUCTURE

This system detected that system *sysname* intends to use the structure for signalling in the opposite direction. The list path was started in order to establish signalling connectivity via the list structure.

SYSTEM SIGNALLED USE OF STRUCTURE

This system received a signal from system *sysname* requesting that signalling path(s) be started through list structure *strname*.

STRUCTURE NOW AVAILABLE

Event code 35 was presented by the Event Notification Facility (ENF). Structure *strname* is available for use.

COUPLING FACILITY RESOURCES AVAILABLE

Event code 35 was presented by the Event Notification Facility (ENF). New coupling facility resources are available to this system.

DIAG037: *n*

Diagnostic data provided to assist IBM service personnel with problem determination.

System action: The system initiates restart processing for the signalling path.

For a CTC signalling path or a list signalling path, restart processing attempts to establish signalling connectivity via the path. Message IXC466 is written to the system log when the path establishes signalling connectivity and becomes capable of transferring signals.

For a list structure, restart processing determines which systems are using the structure for signalling and starts or stops list signalling paths as needed.

Operator response: None required. To determine the status of the path, enter a DISPLAY XCF path command for the indicated path.

System programmer response: If the signalling path was not defined to XCF at IPL time, update the COUPLExx parmlib member(s) so that this path is defined to XCF when the system next IPLs.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCT1PCC

Routing Code: 1,2

Descriptor Code: 5

**IXC307I {SETXCF STOPSTOP} *dir*
 {UNCOND=YES} REQUEST FOR
 pathname COMPLETED
 SUCCESSFULLY: *text***

Explanation: XCF successfully stopped a signalling path.

In the message text:

SETXCF STOP

An operator entered a SETXCF STOP path command.

STOP

The system initiated a stop path request in response to some event or circumstance. System initiated stop requests do not cause paths to become undefined to XCF for signalling, but are otherwise functionally equivalent to SETXCF STOP path commands entered by an operator.

dir The path direction specified for the stop request. An

inbound signalling path is used to receive signals from another system in the sysplex. An outbound signalling path is used to send signals to another system in the sysplex.

PATHIN

Indicates the path was stopped for inbound signal traffic.

PATHOUT

Indicates the path was stopped for outbound signal traffic.

PATH

Indicates the path direction was not specified or could not be determined. For system initiated requests, the existing XCF path definition is used to determine the direction(s) in which to stop the path.

UNCOND=YES

UNCOND=YES was coded on the SETXCF command, indicating that the stop was performed unconditionally. An unconditional stop may have abnormally terminated other tasks in the midst of processing requests (such as a stop) for the indicated path. An unconditional stop attempts to force stop path processing to run to completion, and may not wait for an orderly shutdown of the signalling path. For example, an unconditional stop could prevent XCF from delivering a signal to its intended target.

pathname

The name of the signalling path.

DEVICE *dev*

Indicates the CTC device with device number *dev*.

STRUCTURE *strname*

Indicates the XES list structure whose name is *strname*. A list structure can contain one or more individual list signalling paths.

**STRUCTURE *strname* LIST *num* TO
COMMUNICATE WITH SYSTEM *sysname***

Indicates the list signalling path using list number *num* within the XES list structure named *strname* to communicate with the system named *sysname*.

RETRY LIMIT EXCEEDED

The retry count for the signalling path exceeded the retry limit. The path is stopped because it is considered to be non-operational. The problem can be:

- I/O errors occurred on the path.
- An incorrect COUPLExx parmlib member was specified.
- The specified COUPLExx parmlib member had signalling path definition errors. For instance, the retry limit can be exceeded if both sides of a signalling path were started in the same

direction. See the explanation for the message text **OTHER SIDE IS SAME DIRECTION**.

SYSPLEX PARTITIONING OF LOCAL SYSTEM

The path was stopped because the local system is no longer in the sysplex. If the local system was active in the sysplex, it enters a wait-state upon completion of sysplex partitioning. If the system was attempting to IPL into a sysplex but never became active, all paths are stopped before the operator is prompted by message IXC207A to respecify a new COUPLExx parmlib member.

SYSPLEX PARTITIONING OF REMOTE SYSTEM

The system to which the path had last established signalling connectivity is being removed from the sysplex. The initiator of the partitioning request specifies whether the systems remaining in the sysplex are to retain the signalling paths used to communicate with the removed system. If the paths are not to be retained, this path becomes undefined to XCF for signalling upon completion of the stop. To redefine the path to XCF for signalling, the operator must enter a SETXCF START path command. If the paths are to be retained after the system is removed from the sysplex, this path remains defined to XCF for signalling.

OTHER SIDE IS SAME DIRECTION

XCF tried to establish signalling connectivity between two systems, but the signalling path was defined in the same direction on both systems. A signalling path must have an outbound side and an inbound side. If both sides are defined in the same directions, messages cannot travel between the two systems involved.

Either of the two systems involved can detect the problem. However the message appears only on one system. No response or acknowledgment is provided about this condition to the other system involved.

SUBCHANNEL NOT OPERATIONAL FOR RESUME

The subchannel is not operational for one of the following reasons:

- No subchannel is provided.
- The subchannel did not have a valid device number assigned.
- The subchannel is not enabled.

START REQUEST FAILED

A request to start a signalling path failed. Message IXC305I explains why the start request failed.

CONNECTED TO NON-XCF SIGNALLER

The other end of this signalling path is not under XCF control. Either the signalling path is not connected to a system in the sysplex, or another application is trying to use the signalling path. A signalling path can only be used for communication between two systems active in the same sysplex and both ends of the path must be under XCF's

exclusive control in order to ensure correct operation of the signalling service.

NON-XCF SIGNALLER USING PATH

A non-XCF application tried to use this system's signalling path. Paths used by XCF must be dedicated exclusively to XCF in order to ensure correct operation of the signalling service.

HALT I/O FAILED

The system tried to stop all I/O through this path, but the request failed. For a CTC signalling path, The CTC device is probably in a permanent error state.

PURGE I/O FAILED

An attempt to remove all I/O queued for the signalling path failed.

CONTROL OPERATION FAILED

XCF performs various to read and write operations to manage use of a list structure for signalling. One of these control operations failed.

INTERNAL ERROR

An XCF internal error occurred.

CONNECT TOKEN NO LONGER VALID

The connect token used when invoking XES services to access the list structure is no longer valid. The connect token is returned by the IXLCONN service.

LOST CONNECTIVITY TO STRUCTURE

This system lost connectivity to the coupling facility that contains the structure.

STRUCTURE FAILURE

Use of the list structure for signalling is stopped due to a structure failure.

PROPAGATING STOP OF STRUCTURE

A stop request is in progress for a list structure. All the associated list paths must be stopped as well.

OTHER SYSTEM STOPPING ITS SIDE OF PATH

The other system to which the signalling path is connected is stopping its side of the path. Since the path is no longer needed, this system also stops its side of the path. For example, if a system stops using a list structure for outbound signal traffic, all the systems using the structure for inbound signal traffic can stop their inbound list paths.

NO LIST AVAILABLE FOR USE

A list path no longer has a list allocated within the list structure for it to use. For example, a rebuilt structure may not have a list for the list path to use, whereas the original structure did.

REBUILD FAILED, UNABLE TO USE ORIGINAL

A structure rebuild was initiated. The rebuild attempt failed and this system is unable to use the original list structure.

NOT DEFINED AS PATHOUT OR PATHIN

The list structure is defined for neither outbound

signal traffic nor inbound signal traffic. XCF disconnects from the structure.

UNABLE TO START LIST MONITORING

XCF was unable to start monitoring a list for from empty to non-empty. The signalling service cannot deliver signals without the ability to monitor list transitions. Depending on the list involved, failure to establish monitoring may impact a particular list path or use of the whole structure.

UNABLE TO USE REBUILT STRUCTURE

The list structure has been rebuilt, but this system cannot use the rebuilt structure. Although this system may lose signalling capacity by stopping its use of the list structure, it does not lose signalling connectivity. So the other systems in the sysplex are permitted to continue on with the rebuilt structure, and this system disconnects from the structure.

UNABLE TO START REBUILD

The list structure is not usable. An attempt was made to rebuild the structure, but the rebuild could not be started.

NO SIGNALLING CONNECTIVITY

A signalling path in the midst of stop processing was unconditionally stopped due to a lack of signalling connectivity. The unconditional stop forces stop processing to complete so that the path can be started again. It is hoped that the path will re-establish signalling connectivity after it is started. Such an unconditional stop is performed only if the path would remain defined to XCF upon completion of the stop and only if the path is connected to a system running MVS/ESA SP510 (or later).

STOP STRUCTURE PROCESSING

A stop request is in progress for a list structure, so all the associated list signalling paths must be stopped. An unconditional stop request was already initiated for the list path. To ensure the stop structure processing completes, a new unconditional stop request is initiated for the list path.

REASON UNKNOWN

XCF cannot determine why the signalling path was stopped.

DIAG039: *n*

Diagnostic data provided to assist IBM service personnel with problem determination.

DIAG040: *n*

Diagnostic data provided to assist IBM service personnel with problem determination.

System action: The signalling path is not used for delivering signals. For an operator initiated stop command, the signalling path is no longer defined to XCF in the indicated direction(s). For a system initiated stop request, the signalling path remains defined to XCF

in an INOPERATIVE state. Since a list signalling path is implicitly defined to XCF by virtue of how other systems use the list structure for signalling, it is placed in an INOPERATIVE state only to highlight the failure of a path that should be in use. If the list path is stopped as the result of normal processing, it becomes undefined.

If the path remains defined to XCF for signalling the system may automatically start the path again as a result of various events or circumstances. This applies to list paths that are implicitly defined as well.

Operator response: Depending on the message text, do one of the following:

SUBCHANNEL NOT OPERATIONAL FOR RESUME HALT I/O FAILED PURGE I/O FAILED

Contact hardware support.

OTHER SIDE SAME DIRECTION

Correct the signalling path that is going in the wrong direction as follows:

- If the path is not defined to XCF, enter a SETXCF START path command to start the path in the correct direction.
- To correct a signalling path that is still defined to XCF, enter a SETXCF STOP path command to stop the path. Then enter a SETXCF START path command to start the path in the correct direction.

If the path was stopped due to a failure, enter a SETXCF START path command to try starting the path again. If the problem persists, notify the system programmer.

System programmer response: For each of the systems that were to use the signalling path:

- Make sure that the signalling path is correctly defined to XCF. The path was defined either in the COUPLExx parmlib member used to initialize XCF, or with a SETXCF START path operator command.
- Make sure that the correct COUPLExx parmlib member was specified.
- Make sure that the path is being used only by XCF.
- Examine the logrec error records for I/O errors related to this path.
- Examine the system log for other messages related to this path.
- Ask the operator to enter DISPLAY XCF path commands to obtain detailed status information about the signalling path.

If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide XCF component trace data, any logrec error records, and the system logs. Provide any dump taken as the result of an internal XCF error.

IXC308I

Source: Cross System Coupling Facility (SCXCF)
Detecting Module: IXCT1FSP, IXCT1FSS, IXCT1PCC
Routing Code: 1,2
Descriptor Code: 5

**IXC308I {SETXCF STOPSTOP} *dir*
{UNCOND=YES} REQUEST FOR
pathname WAS NOT SUCCESSFUL: *text***

Explanation: A request to stop a signalling path used by XCF was not successful.

In the message text:

SETXCF STOP

An operator entered a SETXCF STOP path command.

STOP

The system initiated a stop path request in response to some event or circumstance. System initiated stop requests do not cause paths to become undefined to XCF for signalling, but are otherwise functionally equivalent to SETXCF STOP path commands entered by an operator.

dir The path direction specified for the unsuccessful stop request. An inbound signalling path is used to receive signals from another system in the sysplex. An outbound signalling path is used to send signals to another system in the sysplex.

PATHIN

Indicates the path was to be stopped for inbound signal traffic.

PATHOUT

Indicates the path was to be stopped for outbound signal traffic.

PATH

Indicates the path direction was not specified or could not be determined. For system initiated requests, the existing XCF path definition is used to determine the direction(s) in which to stop the path.

UNCOND=YES

UNCOND=YES was coded on the SETXCF command, indicating that the stop was to be performed unconditionally. An unconditional stop may cause the abnormal termination of other tasks currently in the midst of processing requests (such as a stop) for the indicated path. An unconditional stop attempts to force stop path processing to run to completion, and may not wait for an orderly shutdown of the signalling path. For example, an unconditional stop could prevent XCF from delivering a signal to its intended target.

pathname

The name of the signalling path.

DEVICE *dev*

Indicates the CTC device with device number *dev*.

STRUCTURE *strname*

Indicates the XES list structure whose name is *strname*. A list structure can contain one or more individual list signalling paths.

STRUCTURE *strname* LIST *num* TO COMMUNICATE WITH SYSTEM *sysname*

Indicates the list signalling path using list number *num* within the XES list structure named *strname* to communicate with the system named *sysname*. The list number is zero if the path was not yet assigned a list within the structure, or if the initiator of the request could not determine which list was assigned for the path.

AN UNCONDITIONAL STOP PREEMPTED THIS REQUEST

An unconditional stop request for this path ended the stop request. The unconditional stop request will complete stop path processing.

AN UNEXPECTED ERROR OCCURRED

XCF experienced an unexpected error. Diagnostic data is provided to help IBM service personnel with problem determination.

NO LONGER IN USE

The indicated path is no longer in use by XCF for signalling in the indicated direction. Between the time this stop request was created and the time it was processed, the signalling path was stopped as the result of some other stop request.

PURGE I/O FAILED

Stop path processing could not ensure that all I/O on the signalling path had stopped.

PURGE I/O FAILED, DID STOP ANYWAY

Stop path processing could not ensure that all I/O on the signalling path had stopped. However processing continued so that the path was stopped despite the failure.

STOP NOTIFICATION FAILED

Stop path processing could not ensure that other systems would recognize that this system is stopping its use of the structure for signalling in the indicated direction.

STOP NOTIFICATION FAILED, DID STOP ANYWAY

Stop path processing could not ensure that other systems would recognize that this system is stopping its use of the structure for signalling in the indicated direction. However processing continued so that the path was stopped despite the failure.

This failure can occur normally for a system that must disconnect from a structure that it cannot use.

STOP LIST PATHS FAILED

Stop structure processing could not stop one or more of the list paths started through the structure.

DIAG037=n n n n n

Diagnostic data that is provided to assist IBM service personnel with problem determination.

System action: Processing of the stop request terminates.

For preempted requests, the unconditional stop request will force the signalling path to stop. Message IXC307I is issued upon successful completion of the preempting unconditional stop request.

In the case of an unexpected error, the path may or may not have been stopped successfully. If not, the state of the path is unpredictable.

If the signalling path is no longer in use, no further action is needed.

If the stop was performed despite the failure, the system was able to complete the request. However, resources may still be associated with the signalling path. Although stop processing completed, it is considered unsuccessful because these resources were not released. For shared resources, other systems in the sysplex may release the resources. For local resources, the system continues to monitor the associated resources and releases them when they are no longer in use. For operator initiated stop requests, the path is no longer defined to XCF for signalling in the indicated direction. For system initiated stop requests, the path remains defined to XCF, and may be started anew automatically as a result of various events or circumstances.

For other failures, the signalling path is left in a STOPFAILED state. It remains in this state until successfully stopped.

Operator response: Depending on the message text, do one of the following:

AN UNCONDITIONAL STOP PREEMPTED THIS REQUEST

If message IXC307I is issued to indicate that the unconditional stop completed successfully, no action is needed.

Otherwise enter a DISPLAY XCF path command to obtain detailed information for the signalling path. If the signalling path is not listed in the display output, it has been removed from service and no further action is needed.

If the signalling path status displayed by message IXC356I indicates STOPPING, allow additional time for the stop to complete. Completion of the stop could be delayed if the system to which the stopping path is connected is non-operational, or if signalling connectivity with that system has been lost. If needed, use the SETXCF START path command to start additional signalling paths to

establish signalling connectivity or use the VARY XCF command to remove the non-operational system from the sysplex. Alternatively, enter a SETXCF STOP path command specifying UNCOND=YES to force completion of stop processing for the STOPPING path.

If the signalling path status displayed by message IXC356I indicates STOPFAILED, enter a SETXCF STOP command to try stopping the path again.

Note that for a list path, the SETXCF STOP command can only be applied to the structure as a whole, so the stop command should be issued only if the intent is to stop the system from using the structure for signalling in the indicated direction.

For any other signalling path status, no action is needed.

AN UNEXPECTED ERROR OCCURRED

Enter a DISPLAY XCF path command to obtain detailed information for the signalling path. Record the display output for the path along with any diagnostic data contained in this message in case the system programmer must contact IBM service personnel for problem determination.

If the signalling path is not listed in the display output, it has been removed from service and no further action is needed.

If the signalling path status displayed by message IXC356I indicates STOPPING enter a SETXCF STOP path command specifying UNCOND=YES to force completion of stop processing for the STOPPING path.

If the signalling path status displayed by message IXC356I indicates STOPFAILED enter a SETXCF STOP path command to try stopping the path again. Note that for a list path, the SETXCF STOP path command can only be applied to the structure as a whole, so the stop command should be issued only if the intent is to stop the system from using all of its list paths through the structure in the indicated direction.

If unable to stop the signalling path after several attempts, try entering a SETXCF STOP path command on the system(s) to which the signalling path is connected in order to stop the other side of the path. Successfully stopping the other side of the path is one way to ensure that I/O is no longer in progress. After the other side of the path is stopped, try entering the SETXCF STOP path command again. If the path stop again fails due to an unexpected error, try stopping the path unconditionally by entering a SETXCF STOP path command with the UNCOND=YES specification. The unconditional stop should be tried at least twice.

If the signalling path status displayed by message IXC356I is anything other than STOPPING or STOPFAILED no action is needed.

PURGE I/O FAILED**STOP NOTIFICATION FAILED****STOP LIST PATHS FAILED**

Enter a SETXCF STOP path command to try stopping the path again. Note that for a list path, the SETXCF STOP path command can only be applied to the structure as a whole, so the stop command should be issued only if the intent is to stop the system from using all of its list paths through the structure in the indicated direction.

If unable to stop the signalling path after several attempts, try entering a SETXCF STOP path command on the system(s) to which the signalling path is connected in order to stop the other side of the path. Successfully stopping the other side of the path is one way to ensure that I/O is no longer in progress. After the other side of the path is stopped, try entering the SETXCF STOP path command again. If the path stop again fails due to an unexpected error, try stopping the path unconditionally by entering a SETXCF STOP path command with the UNCOND=YES specification. The unconditional stop should be tried at least twice.

For any other *text*, no action is needed.

System programmer response: Examine the listed operator responses for an appropriate action.

In the case of failures, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Supply any diagnostic data presented as part of the start rejected message, any output from the DISPLAY XCF command issued for the signalling path, and the XCF component trace table. The trace table must be obtained within 30 seconds of completion of the command if XCF detail tracing is enabled, and within a few minutes if just XCF default tracing is in effect. Default tracing is sufficient to resolve this problem.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCT1PCC

Routing Code: 1,2

Descriptor Code: 5,12

IXC309I SETXCF COUPLE,*text*

Explanation: XCF successfully processed a SETXCF COUPLE command to change a couple data set option in the COUPLExx parmlib member.

In the message text:

typename

The type for which the SETXCF COUPLE command was processed.

INTERVAL REQUEST WAS ACCEPTED

The failure detection interval for the system was updated to the value specified on the SETXCF COUPLE command.

CLEANUP REQUEST WAS ACCEPTED

XCF updated the time interval that the sysplex removing process will wait for sysplex members to perform cleanup functions.

OPNOTIFY REQUEST WAS ACCEPTED

XCF updated the time interval that the system will use to determine when to notify the operator when a system appears inoperative.

MAXMSG REQUEST WAS ACCEPTED

XCF updated the default maxmsg value. This value is used if the MAXMSG keyword is not specified on the SETXCF START command.

RETRY REQUEST WAS ACCEPTED

XCF updated the default retry limit used by the system to monitor a signalling path. This value is used if the RETRY keyword is not specified on the SETXCF START command.

CLASSLEN REQUEST WAS ACCEPTED

XCF updated the default CLASSLEN value. This value is used if the CLASSLEN keyword is not specified on the SETXCF START,CLASSDEF command.

PCOUPLE REQUEST FOR *typename* WAS ACCEPTED

XCF defines a data set to be used as the primary couple data set for the specified type. If the type is already operational in the sysplex, then the data set specified is ignored and message IXC285I is issued.

ACOUPLE REQUEST FOR *typename* WAS ACCEPTED

XCF defines a data set as an alternate couple data set. The system issues message IXC251I when the switch to the new alternate couple data set is complete.

PSWITCH REQUEST FOR *typename* WAS ACCEPTED

If the request is successful, XCF makes the alternate couple data set the primary one, and stops using the current primary couple data set.

System action: XCF changed the option as requested.

For option **ACOUPLE** and **PSWITCH**, the system issues IXC251I when the switch to the new alternate couple data set is complete.

For option **PSWITCH**, the system issues:

- Message IXC386I, if there is no alternate couple data set defined.
- Message IXC253I, if a primary or alternate couple data set failed or is no longer in the sysplex.

Operator response: Notify the system programmer.

System programmer response: Update the COUPLExx parmlib member to reflect the SETXCF request.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1ASY

Routing Code: 1,2

Descriptor Code: 5

**IXC310I SETXCF MODIFY *option* REQUEST
COMPLETED SUCCESSFULLY
*pathname***

Explanation: The system successfully processed a SETXCF MODIFY command to change an XCF resource.

In the message text:

option

The option specified for the completed modify request. *Option* is one of the following:

PATHIN	Indicates the definition of a signalling path used for inbound signal traffic was modified. An inbound signalling path is used to receive signals from another system in the sysplex.
PATHOUT	Indicates the definition of a signalling path used for outbound signal traffic was modified. An outbound signalling path is used to send signals to another system in the sysplex.
LOCALMSG	Indicates that the definition of signalling resources used for local signal traffic was modified. Local signal traffic is sent and received within the same system.

pathname

The name of the signalling path, if applicable.

FOR DEVICE *dev*

Indicates the CTC device with device number *dev*.

FOR STRUCTURE *strname*

Indicates the XES list structure whose name is *strname*. A list structure can contain one or more individual list signalling paths.

System action: XCF made the requested changes.

System programmer response: Update the COUPLExx parmlib member to reflect the changes, if appropriate.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCT1FSS, IXCT1MOD

Routing Code: 1,2

Descriptor Code: 5

**IXC311I SETXCF START CLASSDEF REQUEST
FOR TRANSPORT CLASS *classname* IS
REJECTED: *text***

Explanation: A SETXCF START,CLASSDEF command to start a transport class was unsuccessful.

In the message text:

classname

The name of the transport class.

minimum

The minimum usable value for MAXMSG.

DEFINITION ALREADY EXISTS

The transport class *classname* is already defined.

MAXIMUM NUMBER OF DEFINITIONS (62) EXIST

This command request would bring the total number of transport classes past the allowable maximum of 62 non-default class definitions.

INSUFFICIENT SPACE

XCF could not get the storage needed to create the transport class definition requested in the command.

MAXIMUM NUMBER OF GROUPS (2045) ASSIGNED

The command requested that one or more groups be assigned to transport class *classname* but this would bring the total number of groups past the allowable maximum of 2045.

MAXMSG MUST BE AT LEAST *minimum*

The MAXMSG value defined for transport class *classname* is not large enough. MAXMSG must be large enough to provide for at least one message as large as the class length. For this transport class, the MAXMSG value must be greater than or equal to *minimum*.

System action: SETXCF command processing ends.

Operator response: Depending on the message text, do one of the following:

DEFINITION ALREADY EXISTS

Enter DISPLAY XCF,CLASSDEF to list the transport classes currently defined to the system. Make sure the correct class name was entered. If so, enter SETXCF MODIFY,CLASSDEF to change the definition.

MAXIMUM NUMBER OF DEFINITIONS (62) EXIST

Enter the SETXCF STOP,CLASSDEF command to delete an existing definition if necessary.

MAXMSG MUST BE AT LEAST *minimum*

If MAXMSG or CLASSLEN was not specified, the values used were the current default MAXMSG and CLASSLEN values. Enter the DISPLAY

XCF,COUPLE command to list the current default values for these parameters.

INSUFFICIENT SPACE

Do one of the following:

- Reenter the command. The storage constraint will probably resolve itself.
- Enter the SETXCF MODIFY,CLASSDEF command with the DELGROUP keyword to delete an explicitly assigned group from each transport class. This may alleviate the storage problem.

MAXIMUM NUMBER OF GROUPS (2045) ASSIGNED

Enter the SETXCF MODIFY,CLASSDEF command with the DELGROUP keyword to delete an explicitly assigned group from each transport class to which it is assigned to reduce the total number of explicitly assigned groups. Then try reissuing the SETXCF START,CLASSDEF command.

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

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1ASY, IXCO1SCP

Routing Code: 1,2

Descriptor Code: 5

IXC312I SETXCF STOP CLASSDEF REQUEST FOR TRANSPORT CLASS *classname* IS REJECTED: *text*

Explanation: The system could not successfully process a SETXCF,STOP CLASSDEF command to stop a transport class.

In the message text:

classname

The name of the transport class.

NOT DEFINED

The transport class, *classname*, is not defined to XCF.

DEFAULT CLASS CANNOT BE STOPPED

The command was entered for the default transport class. The system does not allow the default transport class to be stopped.

FIRST REMOVE ALL SIGNALLING PATHS FROM CLASS

When a transport class has signalling paths assigned to it, the system does not allow it to be stopped.

System action: The status of the class definition is not changed by the command.

Operator response: Depending on the message text, do one of the following

NOT DEFINED

Enter the DISPLAY XCF,CLASSDEF command to list the names of the transport classes currently defined.

FIRST REMOVE ALL SIGNALLING PATHS FROM CLASS

Enter SETXCF STOP,PATHOUT commands to stop all the signalling paths in the class, or enter SETXCF MODIFY,PATHOUT commands to reassign the signalling paths to a different class. Then reenter the SETXCF STOP,CLASSDEF command.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1ASY

Routing Code: 1,2

Descriptor Code: 5

IXC313I SETXCF MODIFY CLASSDEF REQUEST FOR TRANSPORT CLASS *classname* IS REJECTED: *text*

Explanation: XCF could not successfully process a SETXCF,MODIFY CLASSDEF command to change a transport class definition.

In the message text:

classname

The name of the transport class.

minimum

The minimum usable value for MAXMSG.

NOT DEFINED

The transport class, *classname*, is not defined to XCF.

MAXMSG MUST BE AT LEAST *minimum*

The MAXMSG value defined for transport class *classname* is not large enough. MAXMSG must provide enough message buffer space for at least one message as long as the class length. For this transport class, the MAXMSG value must be greater than or equal to *minimum*.

The system issues this *text* only if one or both of the MAXMSG and CLASSLEN keywords was specified on the command. If one of the keywords was not specified, the value used to test the condition was the current value for the transport class.

OUTBOUND PATHS MUST HAVE MAXMSG OF AT LEAST *minimum*

The command specified a larger CLASSLEN value for the transport class, but there are one or more outbound signalling paths with a MAXMSG value too small for the larger class length. Each outbound signalling path assigned to this class must have a MAXMSG value equal to or greater than *minimum*.

Note that using the *minimum* value for MAXMSG may not provide sufficient buffer space for good signalling performance.

System action: The system ignores the SETXCF MODIFY,CLASSDEF command.

Operator response: Depending on the message text, do one of the following:

NOT DEFINED

Enter the DISPLAY XCF,CLASSDEF command to list the names of the transport classes currently defined. Reenter the command with the correct class name.

MAXMSG MUST BE AT LEAST *minimum*

Enter the DISPLAY XCF,CLASSDEF,CLASS=(*classname*) command to display the values of the unspecified parameters for the transport class.

To change the transport class definition to the desired class length, the MAXMSG value must be equal to or greater than *minimum*.

OUTBOUND PATHS MUST HAVE MAXMSG OF AT LEAST *minimum*

Enter the DISPLAY XCF,PATHOUT,CLASS=(*classname*) command to list the MAXMSG values for all the outbound signalling paths assigned to this class. Each signalling path listed must have a MAXMSG value greater than or equal to *minimum* before the CLASSLEN can be set to the requested value. Use the SETXCF MODIFY,PATHOUT command to change the MAXMSG values for any signalling paths that are not equal to or greater than *minimum*.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1ASY, IXCO1SCP

Routing Code: 1,2

Descriptor Code: 5

**IXC314I REQUEST TO ASSIGN GROUP
groupname TO TRANSPORT CLASS
classname IS REJECTED: *text***

Explanation: XCF could not successfully process a SETXCF MODIFY,CLASSDEF command to assign a group to a transport class.

In the message text:

groupname

The name of the group being assigned to this transport class.

classname

The name of the transport class to which the group is being added.

GROUP ALREADY ASSIGNED

The group is already assigned to this transport class.

INSUFFICIENT SPACE

XCF was unable to obtain the storage to assign the group to the transport class.

MAXIMUM NUMBER OF GROUPS (2045) ASSIGNED

Adding the requested group would bring the total above the allowable maximum number of groups assignable to transport classes. At most, 2045 unique groups can be explicitly assigned to all the transport classes.

System action: The system does not assign the group to the transport class.

Operator response: Depending on the message text, do one of the following:

GROUP ALREADY ASSIGNED

Enter the DISPLAY XCF,CLASSDEF command with the CLASS keyword to list the groups currently assigned to the transport class.

INSUFFICIENT SPACE

Do one of the following:

- Repeat the command. The storage constraint may have been resolved.
- Enter the SETXCF MODIFY,CLASSDEF command with the DELGROUP keyword to delete an explicitly assigned group from each transport class. This might alleviate the storage problem.

MAXIMUM NUMBER OF GROUPS (2045) ASSIGNED

Enter the SETXCF MODIFY,CLASSDEF command with the DELGROUP keyword to delete an explicitly assigned group from each transport class to reduce the total number of explicitly assigned groups. Then repeat the SETXCF MODIFY,CLASSDEF command.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1ASY, IXCO1SCP

Routing Code: 1,2

Descriptor Code: 5

**IXC315I REQUEST TO DELETE GROUP
groupname FROM TRANSPORT CLASS
classname IS REJECTED: *text***

Explanation: The system rejected a request to delete a group from a transport class.

In the message text:

groupname

The name of the group being deleted from a transport class.

classname

The name of the transport class.

correct syntax. If the command fails a second time notify the system programmer.

System programmer response: 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: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1STL

Routing Code: #

Descriptor Code: 5

IXC320I SETXCF PRSMPOLICY IS ONLY SUPPORTED UNDER PR/SM WITH THE CROSS LPAR FUNCTION INSTALLED. POLICY IGNORED.

Explanation: An operator entered a SETXCF command to define the XCF processor resource/systems manager (PR/SM) POLICY parmlib member, XCFPOLxx. However, the system does not have PR/SM cross logically partitioned mode (LPAR) support. XCF cannot process any PR/SM policy actions.

System action: The SETXCF command ends without changing any XCF processing.

Operator response: Notify the system programmer.

System programmer response: Make sure the system has cross logically partitioned mode (LPAR) support installed for PR/SM.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1SCP

Routing Code: #

Descriptor Code: 5

IXC321 XCF PR/SM POLICY *memname* IS NOW IN EFFECT

Explanation: The operator entered a SETXCF PRSMPOLICY,ACTIVATE=*memname* command to specify the XCF PR/SM POLICY parmlib member. Parmlib member *memname* was successfully processed and is now active.

In the message text:

memname

The name of the parmlib member.

System action: The new XCF PR/SM POLICY parmlib member is now in effect.

Operator response: If necessary, enter the DISPLAY XCF,PRSMPOLICY command to confirm the name of the new parmlib member.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS2PIT

Routing Code: #

Descriptor Code: 5

IXC322I XCF PR/SM POLICY HAS BEEN DEACTIVATED

Explanation: The operator successfully entered a SETXCF PRSMPOLICY,DEACTIVATE command to specify that the XCFPOLxx parmlib member be deactivated.

System action: Processing continues without the XCFPOLxx parmlib member.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS2PIT

Routing Code: #

Descriptor Code: 5

**IXC323I SYNTAX ERROR IN LINE *nn* OF XCF PR/SM PARMLIB MEMBER *memname*:
*text***

Explanation: The operator entered a SETXCF PRSMPOLICY,ACTIVATE=*memname* command to activate the XCFPOLxx parmlib member, but the syntax of the parmlib member was in error.

In the message text:

nn The line in the parmlib member containing the error.

memname

The name of the parmlib member containing a syntax error.

keyword

The duplicate keyword.

FAILSYS FOR A NOSTATUS STATEMENT WAS NOT VALID

The system name specified was incorrect.

RESETTIME WAS NOT VALID

The RESETTIME value must be in the range of 0-86400 seconds.

DEACTTIME WAS NOT VALID

The DEACTTIME value must be in the range 0-86400 seconds.

KEYWORD WAS NOT VALID

One of the keywords was unrecognizable.

FAILSYS FOR A SYSGONE STATEMENT WAS NOT VALID

The system name specified in the SYSGONE keyword was incorrect.

SYSNAME(SYSNAME) WAS NOT VALID

The system name specified in the SYSTEM keyword was incorrect.

DEACTIVATE(OTHERSYS) WAS NOT VALID

The system name specified was incorrect.

STORE VALUE WAS NOT VALID

The value specified in the STORE keyword is incorrect. YES or NO are the only allowed options.

ESTORE VALUE WAS NOT VALID

The value specified in the ESTORE keyword is incorrect. YES or NO are the only allowed options.

MISSING PARENTHESIS

A closing parenthesis was expected but not found.

IMPROPER USE OF COMMENTS

Comments encountered in the parmlib member were incorrect.

RESETTIME AND DEACTTIME CANNOT BOTH BE SPECIFIED

NOSTATUS statements can have only one DEACTTIME or RESETTIME specified.

MISSING REQUIRED RESETTIME OR DEACTTIME

NOSTATUS statements requires a RESETTIME or DEACTTIME.

A DUPLICATE NOSTATUS STATEMENT WAS FOUND

Only one NOSTATUS statement is allowed for a system name within a policy member.

MAXIMUM NUMBER OF SYSTEMS FOR POLICY EXCEEDED

The maximum number of systems allowed in a policy is 16.

A SYSTEM CANNOT DEACTIVATE ITSELF FROM SYSGONE

A SYSGONE statement was detected where the sysname specified on the SYSTEM keyword and the DEACTIVATE keyword were the same.

A SYSTEM CANNOT TAKE ACTION FOR ITSELF ON SYSGONE

A SYSGONE statement was detected where the system name specified on the SYSTEM keyword was the same as the failing system.

A SYSGONE STATEMENT WAS MISSING REQUIRED KEYWORDS

SYSGONE requires both the SYSTEM and DEACTIVATE keywords.

KEYWORD *keyword* IS A DUPLICATE KEYWORD.

Keyword *keyword* is a duplicate for a NOSTATUS or SYSGONE statement.

System action: The SETXCF command ends. The specified XCFPOLxx parmlib member is not activated.

Operator response: Fix the syntax of the policy parmlib member and reenter the command.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS2PIT

Routing Code: #

Descriptor Code: 5

**IXC324I ERROR WHILE PROCESSING XCF PR/SM PARMLIB MEMBER *memname*:
*text***

Explanation: The operator entered a SETXCF PRSMPOLICY,ACTIVATE=XCFPOLxx command to activate the XCF processor resource/systems manager (PR/SM) POLICY parmlib member. XCF encountered an error while processing the parmlib member.

In the message text:

memname

The XCF PR/SM parmlib member.

PARMLIB READ ROUTINE COULD NOT BE LOADED

The system could not read the PR/SM POLICY parmlib member.

I/O ERROR

The system encountered an I/O error while processing the PR/SM POLICY parmlib member.

UNEXPECTED ERROR

The system encountered an unexpected error while processing the PR/SM POLICY parmlib member.

MEMBER IS EMPTY

The PR/SM POLICY parmlib member contains no data.

MEMBER COULD NOT BE FOUND

The system could not find the specified parmlib member XCFPOLxx.

System action: The SETXCF command ends. The PR/SM POLICY parmlib member is not activated.

Operator response: If the parmlib member was empty or could not be found, fix the parmlib member and reenter the command. Otherwise notify the system programmer.

System programmer response: 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: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS2PIT

Routing Code: #

Descriptor Code: 5

IXC326I hh.mm.ss DISPLAY XCF

text

Explanation: In the message, *text* is:

[WARNING: INFORMATION MAY NOT BE CURRENT]
MEMBER *membername* IS NOT DEFINED TO GROUP *groupname*

In response to a DISPLAY XCF command, this message displays the status of a member in a specific

group. The message indicates that the specified group does not contain the specified member.

If the **WARNING: INFORMATION MAY NOT BE CURRENT** message appears in the message text, the system was unable to obtain the most current data from the sysplex couple data set. The system uses a local copy of the sysplex couple data set information instead, which may not have the most current data. The data will be current for members on the system where the DISPLAY command was issued.

When the WARNING message appears, you can still obtain current information for a particular member by issuing the DISPLAY command from the system that the member is on. To find which system the member is on, use one of the DISPLAY XCF, GROUP commands to display the system corresponding to the member. This display may also not have the most current data.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY XCF command.

membername

The name of the member that cannot be found in group *groupname*.

groupname

The name of the group specified.

System action: The system ends the processing of the DISPLAY command.

Operator response: Enter the DISPLAY XCF, GROUP, *groupname* command without a member name to display the names of the members within a group.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1DCP

Routing Code: #

Descriptor Code: 5,8,9

IXC327I *hh.mm.ss DISPLAY XCF DISPLAY COMMAND FAILED: text*

Explanation: The DISPLAY XCF command failed for one of the following reasons.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY XCF command.

text

is one of the following:

INTERNAL XCF COMPONENT ERROR

An XCF error caused the failure.

ERROR IN DISPLAY XCF PROCESSING

A requested system service returned a nonzero return code.

UNEXPECTED PARSING ERROR

An error occurred during the parsing of the command syntax.

System action: The system ends processing of the DISPLAY command.

Operator response: If **UNEXPECTED PARSING ERROR** appears in the text, check the command syntax and enter the command again.

If the problem persists, notify the system programmer.

System programmer response: 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: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1DCP, IXCO1DC2, IXCO1DC3, IXCO1DC4

Routing Code: #M

Descriptor Code: 5,8,9

IXC328I DISPLAY XCF SYNTAX IS NOT VALID: *text*

Explanation: XCF detected incorrect syntax or options on the DISPLAY command. The message text shows the syntax error.

In the message text:

ILLEGAL DEVICE NUMBER SPECIFIED: *n*

An incorrect device number was specified on the DISPLAY XCF command. The error message text contains the incorrect device number.

ILLEGAL DEVICE RANGE SPECIFIED: *n*

An incorrect range was specified on the DISPLAY XCF command. The error message text contains the incorrect range.

ILLEGAL GROUP NAME SPECIFIED: *n*

An incorrect group name was specified on the DISPLAY XCF command. The error message text contains the incorrect group name.

ILLEGAL MEMBER NAME SPECIFIED: *n*

An incorrect member name was specified on the DISPLAY XCF command. The error message text contains the incorrect member name.

ILLEGAL SYSTEM NAME SPECIFIED: *n*

An incorrect system name was specified on the DISPLAY XCF command. The error message text contains the incorrect system name.

ILLEGAL TYPE NAME SPECIFIED: *n*

An incorrect type name was specified on the

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DISPLAY XCF command. The error message text contains the incorrect type name.

ILLEGAL COUPLING FACILITY NAME SPECIFIED: *n*

An incorrect coupling facility name was specified on the DISPLAY XCF command. The error message text contains the incorrect coupling facility name.

ILLEGAL STRUCTURE NAME SPECIFIED: *n*

An incorrect structure name was specified on the DISPLAY XCF command. The error message text contains the incorrect structure name.

ILLEGAL CLASS NAME SPECIFIED: *n*

An incorrect class name was specified on the DISPLAY XCF command. The error message text contains the incorrect class name.

ILLEGAL ELEMENT NAME SPECIFIED: *n*

An incorrect element name was specified on the DISPLAY XCF command. The error message text contains the incorrect element name.

ILLEGAL RESTART GROUP NAME SPECIFIED: *n*

An incorrect restart group name was specified on the DISPLAY XCF command. The error message text contains the incorrect restart group name.

ILLEGAL JOB NAME SPECIFIED: *n*

An incorrect job name was specified on the DISPLAY XCF command. The error message text contains the incorrect job name.

System action: The system ends the processing of the DISPLAY command.

Operator response: Correct the error indicated in the message text and reenter the DISPLAY command. If the problem persists after the syntax is corrected, notify the system programmer.

System programmer response: If the DISPLAY command syntax is correct and the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1DCP

Routing Code: #

Descriptor Code: 5,8,9

IXC330I *hh.mm.ss* DISPLAY XCF

**SYSTEM *sysname* IS NOT DEFINED
TO THIS SYSPLEX**

Explanation: The operator entered a DISPLAY XCF command to display information about a specific system, but the system is not a member of the sysplex.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY XCF command.

sysname

The name of system that was to be displayed.

System action: The system continues processing.

Operator response: Make sure that the system name was specified correctly in the DISPLAY command. Enter the command again. If the DISPLAY command was correct, notify the system programmer.

System programmer response: If the DISPLAY command was entered correctly, make sure the system is specified to the sysplex correctly.

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: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1DCP

Routing Code: #

Descriptor Code: 5,8,9

IXC331I *hh.mm.ss* DISPLAY XCF

**[WARNING: INFORMATION MAY
NOT BE CURRENT]**
text

Explanation: In the message, *text* is:

GROUPS(SIZE): *groupname(size)* *groupname(size)* *groupname(size)*
 groupname(size) *groupname(size)* *groupname(size)*

:

In response to a DISPLAY XCF command, this message displays group data. The system repeats the display lines as many times as necessary to provide all known group names.

If the **WARNING: INFORMATION MAY NOT BE CURRENT** message appears in the message text, the system was unable to obtain the most current data from the sysplex couple data set. The system uses a local copy of the sysplex couple data set information instead, which may not have the most current data. The data will be current for members on the system where the DISPLAY command was issued.

If the *** INDICATES STALLS ON LOCAL SYSTEM** message appears in the message text, there is a stalled member. Local members that are considered stalled will be flagged with an asterisk.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY XCF command.

groupname

- The name of each group defined to the sysplex.
- A group that has no stalled local members will not be flagged with an asterisk.
 - A group that has a local member that XCF considers to be stalled will be flagged with an asterisk.

size

The number of members defined to the group.

System action: The system continues processing.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXC01DCP

Routing Code: #

Descriptor Code: 5,8,9

IXC332I hh.mm.ss DISPLAY XCF

[WARNING: INFORMATION MAY NOT BE CURRENT]
GROUP *groupname*:
memname.....
memname.....

Explanation: In response to a DISPLAY XCF command, this message displays information about sysplex members for a specific group. The system displays up to three members per line.

If the **WARNING: INFORMATION MAY NOT BE CURRENT** message appears in the message text, the system was unable to obtain the most current data from the sysplex couple data set. The system uses a local copy of the sysplex couple data set information instead, which may not have the most current data. The data will be current for members on the system where the DISPLAY command was issued.

If the *** INDICATES STALLS ON LOCAL SYSTEM** message appears in the message text, there is a stalled member. Local members that are considered stalled will be flagged with an asterisk.

When the WARNING message appears, you can still obtain current information for a particular member by issuing the DISPLAY command from the system that the member is on. To find which system the member is on, use one of the DISPLAY XCF, GROUP commands to display the system corresponding to the member. This display may also not have the most current data.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY XCF command.

groupname

The group specified in the DISPLAY XCF command.

- A member that is not considered stalled will not be flagged with an asterisk.
- A local member that XCF considers to be stalled will be flagged with an asterisk.

memname

A member of the specified group.

System action: The system continues processing.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXC01DCP

Routing Code: #

Descriptor Code: 5,8,9

IXC333I hh.mm.ss DISPLAY XCF*text*

Explanation: In the message, *text*

```
{INFORMATION FOR GROUP groupname
WARNING: INFORMATION FOR GROUP groupname MAY NOT BE CURRENT}
MEMBER NAME: SYSTEM: JOB ID: STATUS:
memname            sysname jobid status
{INFORMATION for GROUP grpname MEMBER memname

* INDICATES STALLS
MEMTOKEN: memtoken1 memtoken2 ASID: asid

SIGNALLING SERVICE
MSG0 ACCEPTED: msg0accepted NOBUFFER: msg0nobuffer
MSG0 XFER CNT: msg0xfer LOCAL CNT: msg0local BUFF LEN: msg0hlen
MSG1 RECEIVED: msg1recv PENDINGQ: msg1pendq
MSG1 XFER CNT: msg1xfercnt XFERTIME: msg1xfertm

EXIT msgxtkn: extime efc eytime
ITEM itemtkn: ixtime ifc SEQ: iseqn

GROUP SERVICE
EVENT RECEIVED: grpereceived PENDINGQ: grpependingq
EXIT grpxtkn: grextime grefc greytime
ITEM grpitemtkn: grpixtime grpifc SEQ: grpiseqn
```

In response to a DISPLAY XCF command, this message displays member information for one or more members in a specific group. The system displays one line of data per member.

If the **WARNING: INFORMATION FOR GROUP *groupname* MAY NOT BE CURRENT** message appears in the message text, the system was unable to obtain the most current data from the sysplex couple data set. The system uses a local copy of the sysplex couple data set information instead, which may not have the most current data. The data will be current for members on the system where the DISPLAY command was issued.

When the WARNING message appears, you can still obtain current information for a particular member by issuing the DISPLAY command from the system that the member is on. To find which system the member is on, use the DISPLAY XCF, GROUP command that yielded this message to display the system corresponding to the member. This display may also not have the most current data.

IXC333I

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY XCF command.

groupname

The name of the group being displayed.

memname

The name of a group member.

sysname

The system on which the member was last running. If the member is in the created state, this field is left blank.

jobid

The MVS job name. If the member is in the created state, this field is left blank.

status

One of the following:

ACTIVE

A member running normally on the specified system.

CREATED

A member that has never been active in the sysplex but is predefined in the group.

STOPPED DUE TO SYSTEM

This member is on a system that is running abnormally. This can mean that:

- The system is issuing an SVC dump.
- The system is going through reconfiguration.
- A spin loop is occurring.
- The operator pressed stop.
- The system is in a restartable wait state.
- The system lost access to the couple data set.

MONITOR-DETECTED STOP

A member that has stopped processing. This member did not end abnormally and the condition may be temporary.

SYSTEM TERMINATING

A member on a system that XCF is removing from the sysplex. XCF will eventually end all members on this system.

QUIESCED

A member that has voluntarily given up control and is in a dormant state.

FAILED

A member that the system ended without performing normal cleanup procedures.

INFORMATION FOR GROUP

Identifies the group and member that is the subject of the detailed information.

grpname

Name of the XCF group

memname

Name of the member

* INDICATES STALLS

If the member is considered stalled by XCF an asterisk will appear next to the item that is stalled. This line will not appear if the member is not considered stalled.

memtoken1

XCF Member token part 1

memtoken2

XCF Member token part 2

asid

Hexadecimal ASID of the address space from which the member joined the XCF group.

SIGNALLING SERVICE

The data that follows describes the use of the XCF Signalling Service by the member. One such line will appear for each different signal size used by the member.

msgaccepted

Count of the number of IXCMSCO requests issued by this member that were accepted by XCF for delivery. This number may wrap.

msgonobuffer

Count of the number of IXCMSCO requests issued by this member that were rejected due to a lack of a signal buffer. Since applications may repeatedly reissue the IXCMSCO request when rejected, this count may not accurately portray the number of messages that were impacted by the lack of buffers. This number may wrap.

msgoxfer

Count of the number of signals of the indicated size that were sent to other systems on behalf of the IXCMSCO requests issued by the member. The number of signals sent may differ from the number of IXCMSCO requests accepted because, for example, more than one signal may be sent for a particular message. Also the number of IXCMSCO requests accepted includes messages sent to target members that reside on the same system. If the member starts sending messages before XCF is ready to accumulate the signal counts, they will not be included in the signal counts though they will be included in the IXCMSCO request count. Discrepancies can also arise because the counts are not serialized (due to performance concerns). This number may wrap.

msgolocal

Count of the number of signals of the indicated size that were sent to the local system on behalf of the IXCMSCO requests issued by the member. The number of signals sent may differ

from the number of IXCMMSGO requests accepted because, for example, more than one signal may be sent for a particular message. Also the number of IXCMMSGO requests accepted includes messages sent to target members that reside on other systems. If the member starts sending messages before XCF is ready to accumulate the signal counts, they will not be included in the signal counts though they will be included in the IXCMMSGO request count. Discrepancies can also arise because the counts are not serialized (due to performance concerns). This number may wrap.

msgoblen

Indicates the signal buffer size used for the signals. The buffer length denotes the maximum number bytes of message data that signal buffers of this size can transfer.

msgirecv

Count of the number of messages that were received on behalf of the member. This number may wrap.

msgipendq

Indicates the number of work items currently pending for the member. Generally these work items are signals containing message data to be delivered to the member. The items can also include internal work items that XCF performs to manage message delivery on behalf of the member.

msgixfercnt

Count of the number of signals received on behalf of the member from other systems. The number of signals received may differ from the number of messages received because, for example, more than one signal may be sent for a particular message. Also the number of messages received includes messages sent by members that reside on the same system. Discrepancies can also arise because the counts are not serialized (due to performance concerns). This number may wrap.

msgixfertm

The average signal transfer time, in microseconds, for signals recently received on behalf of the member from some other system in the sysplex. Signal transfer is measured from the time that XCF accepts the message for delivery to the time that the signal(s) arrive on the target system. For messages that require multiple signals, each signal contributes individually to the average (they are not aggregated to provide one single transfer time for the message as a whole). The transfer time does not include the time spent on the receiving system after the signal arrives but

before the message is presented to the signal exit routine of the target member.

Up to 64 of the latest signals received are considered when computing the average transfer time. Signals received more than a minute ago are excluded from the average. For an infrequent receiver, excluding old signals can make it appear that its transfer time is changing even though it is not receiving any new signals. N/A is displayed if no data is available (no signals recently received or the sending system does not provide the necessary data). Average transfer times in excess of one second are displayed as 999999.

EXIT

An exit routine that is not considered stalled by XCF will not be flagged with an asterisk. An exit routine that is considered stalled by XCF will be flagged with an asterisk. An exit is considered stalled if it has not made progress in a reasonable amount of time.

msgxtkn

Hexadecimal token used by XCF to identify an exit routine.

extime

The date and time when XCF most recently started some phase of exit processing (mm/dd/yyyy hh:mm:ss:dddddd). Usually this time will be when XCF last called the exit routine. If the exit is PENDING, this time indicates when XCF scheduled an SRB to give control to the exit routine. If the exit is PREPARING, this time indicates when XCF started doing setup work prior to calling the exit routine. If XCF has not initiated processing for the exit routine, a dash will appear.

efc A mnemonic code indicating the function that the exit routine is to perform. These codes have significance to IBM Service personnel.

- ME - standard message delivery
- OM - ordered message delivery
- CR - response collection
- MC - notification of message completion
- CX - recall signal exit per user request
- SP - large signal delivery (send)
- RP - large signal delivery (receive)

eyetime

If the exit routine has completed, the amount of time the exit routine spent processing the work item (hh:mm:ss:dddddd) is shown. If the time spent exceeds 24 hours, the time spent is listed as "--over 24 hrs--". If the exit routine has not finished processing, then one of the following will be listed:

- PENDING to indicate that the work unit for the exit routine has not received control. For example, an SRB routine was scheduled to call the user message exit routine but has not yet been dispatched.
- PREPARING to indicate that the work unit is running but XCF is doing setup work needed for processing the work item.
- RUNNING to indicate that the exit routine is currently processing the work item.

If the processing state is not known, a dash will appear.

ITEM

A work item that is not considered stalled by XCF will not be flagged with an asterisk. A work item that is considered stalled by XCF will be flagged with an asterisk. A work item is considered stalled if it has been pending for an unreasonable amount of time.

Not all pending work items will necessarily appear in the display. If more than one work item is pending, at least the first and last work items will be shown.

itemtkn

Hexadecimal token used by XCF to identify the work item.

ixtime

The date and time when XCF created the work item (mm/dd/yyyy hh:mm:ss:dddddd).

ifc A mnemonic code indicating the function of the work item. These codes have significance to IBM Service personnel. The codes directly related to delivery of a message are:

- ME - standard message delivery
- OM - ordered message delivery
- CR - response collection
- MC - notification of message completion
- CX - recall signal exit per user request
- SP - large signal delivery (send)
- RP - large signal delivery (receive)

iseqn

Sequence number assigned to the work item.

GROUP SERVICE

The data that follows describes the use of the XCF Group Service by the member. Pending events will not necessarily appear in the display, regardless of how many are queued for delivery.

grpereceived

Count of the number of events that were received on behalf of the member. This number may wrap.

grpepending

Indicates the number of group events that are currently pending delivery to the member.

EXIT

An exit routine that is not considered stalled by XCF will not be flagged with an asterisk. An exit routine that is considered stalled by XCF will be flagged with an asterisk. An exit is considered stalled if it has not made progress in a reasonable amount of time.

grpxtn

Hexadecimal token used by XCF to identify an exit routine.

grextime

The date and time when XCF most recently started some phase of exit processing (mm/dd/yyyy hh:mm:ss:dddddd). Usually this time will be when XCF last called the exit routine. If the exit is PENDING, this time indicates when XCF scheduled an SRB to give control to the exit routine. If the exit is PREPARING, this time indicates when XCF started doing setup work prior to calling the exit routine. If XCF has not initiated processing for the exit routine, a dash will appear.

grefc

A mnemonic code indicating the function that the exit routine is to perform. These codes correspond to the group event numbers defined in the macro IXCYGEPL for the GEPLTYPE field.

greytime

If the exit routine has completed, the amount of time the exit routine spent processing the work item (hh:mm:ss:dddddd) is shown. If the time spent exceeds 24 hours, the time spent is listed as "--over 24 hrs--". If the exit routine has not finished processing, then one of the following will be listed:

- PENDING to indicate that the work unit for the exit routine has not received control. For example, an SRB routine was scheduled to call the user message exit routine but has not yet been dispatched.
- PREPARING to indicate that the work unit is running but XCF is doing setup work needed for processing the work item.
- RUNNING to indicate that the exit routine is currently processing the work item.

If the processing state is not known, a dash will appear.

ITEM

A work item that is not considered stalled by

XCF will not be flagged with an asterisk. A work item that is considered stalled by XCF will be flagged with an asterisk. A work item is considered stalled if it has been pending for an unreasonable amount of time.

grpitemtkn

Hexadecimal token used by XCF to identify the work item.

grpixtime

The date and time when XCF created the work item (mm/dd/yyyy hh:mm:ss:dddddd).

grpifc

A hexadecimal code indicating the function of the work item. These codes correspond to the group event numbers defined in the macro IXCYGEPL for the GEPLTYPE field.

grpiseqn

Sequence number assigned to the work item.

System action: The system continues processing.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1DCP

Routing Code: #

Descriptor Code: 5,8,9

IXC334I *hh.mm.ss DISPLAY XCF*

SYSPLEX *sysplex-name:*
sysname sysname
sysname sysname

Explanation: In response to a DISPLAY XCF command, this message displays sysplex data. This message lists all the systems known within the sysplex.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY XCF command.

sysplex-name

The sysplex being displayed.

sysname

The system in the sysplex.

System action: The system continues processing.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1DCP

Routing Code: #

Descriptor Code: 5,8,9

IXC335I *hh.mm.ss DISPLAY XCF****text***

Explanation: In the message, *text* is:

SYSTEM	TYPE	SERIAL	LPAR	STATUS	TIME	SYSTEM	STATUS
sysname	type	serial	LPAR	mm/dd/yyyy	hh:mm:ss	status	

In response to a DISPLAY XCF command, this message displays sysplex data for a specific system or all systems.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY XCF command.

sysname

The system being displayed.

type

The type of the system being displayed.

serial

The serial number of the system being displayed.

LPAR

The LPAR number of the system being displayed. If the system is running under VM, N/A is displayed.

mm/dd/yyyy hh:mm:ss

The last time stamp recorded for status monitoring on this system.

status

is one of the following:

BEING REMOVED — MONITORSYSNAME

XCF is removing the system from the sysplex. This can mean:

- A VARY XCF,sysname command was entered to remove the system from the sysplex.
- The system lost signalling connectivity to the other systems in the sysplex.
- The system lost access to the common clock being used by the sysplex.

MONITORSYSNAME is the system name of the system that is monitoring the removal of system SYSNAME from the SYSPLEX. If the monitoring system cannot be determined, MONITORSYSNAME will appear as N /A.

MONITOR-DETECTED STOP

The system has not updated its status on the couple data set within the time interval specified on that system's COUPLExx parmlib member. This can mean that:

- The system is issuing an SVC dump.
- The system is going through reconfiguration.
- A spin loop is occurring.
- The operator pressed stop.
- The system is in a restartable wait state.

- The system lost access to the couple data set.

XCF-LOCAL MODE

The system is running in XCF-local mode. No other systems can join a sysplex in XCF-local mode. The sysplex is not using couple data sets.

XCF-LOCAL MODE TM=SIMETR

The system is running in XCF-local mode. No other systems can join a sysplex in XCF-local mode. The sysplex is not using couple data sets. This system's TOD clock is synchronized by simulated ETR.

XCF-LOCAL MODE TM=ETR

The system is running in XCF-local mode. No other systems can join a sysplex in XCF-local mode. The sysplex is not using couple data sets. This system's TOD clock is synchronized by stepping to the ETR Sysplex Timer.

XCF-LOCAL MODE TM=STP

The system is running in XCF-local mode. No other systems can join a sysplex in XCF-local mode. The sysplex is not using couple data sets. This system's TOD clock is synchronized by steering to the ETR Sysplex Timer or to the STP Facility.

XCF-LOCAL MODE TM=LOCAL

The system is running in XCF-local mode. No other systems can join a sysplex in XCF-local mode. The sysplex is not using couple data sets. This system's TOD clock is not synchronized to any external time source.

MONOPLEX MODE

The system is running in monplex mode which prevents any other systems from joining this sysplex. The sysplex is using couple data sets.

MONOPLEX MODE TM=SIMETR

The system is running in monplex mode which prevents any other systems from joining this sysplex. The sysplex is using couple data sets. This system's TOD clock is synchronized by simulated ETR.

MONOPLEX MODE TM=ETR

The system is running in monplex mode which prevents any other systems from joining this sysplex. The sysplex is using couple data sets. This system's TOD clock is synchronized by stepping to the ETR Sysplex Timer.

MONOPLEX MODE TM=STP

The system is running in monplex mode which prevents any other systems from joining this sysplex. The sysplex is using couple data sets. This system's TOD clock is synchronized by steering to the ETR Sysplex Timer or to the STP Facility.

MONOPLEX MODE TM=LOCAL

The system is running in monplex mode which prevents any other systems from joining this sysplex. The sysplex is using couple data sets. This system's TOD clock is not synchronized to any external time source.

PARTITIONING CLEANUP

XCF is in the process of removing a system from the sysplex.

ACTIVE

The system is running and has updated its status on the couple data set within the last time interval as defined in the system's COUPLExx parmlib member.

ACTIVE TM=ETR

The system is running and has updated its status on the couple data set within the last time interval as defined in the system's COUPLExx parmlib member. This system's TOD clock is synchronized by stepping to the ETR Sysplex Timer.

ACTIVE TM=SIMETR

The system is running and has updated its status on the couple data set within the last time interval as defined in the system's COUPLExx parmlib member. This system's TOD clock is synchronized by simulated ETR.

ACTIVE TM=STP

The system is running and has updated its status on the couple data set within the last time interval as defined in the system's COUPLExx parmlib member. This system's TOD clock is synchronized by steering to the ETR Sysplex Timer or to the STP Facility.

ACTIVE TM=LOCAL

The system is running and has updated its status on the couple data set within the last time interval as defined in the system's COUPLExx parmlib member. This system's TOD clock is not synchronized to any external time source.

System action: The system continues processing.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1DCP

Routing Code: #

Descriptor Code: 5,8,9

IXC339I hh.mm.ss DISPLAY XCF

[WARNING: INFORMATION MAY NOT
BE CURRENT]
THERE ARE NO GROUPS DEFINED
TO THIS SYSPLEX

Explanation: A DISPLAY XCF, GROUP command was

entered to display the groups in this sysplex, but no groups are defined to this sysplex.

If the **WARNING: INFORMATION MAY NOT BE CURRENT** message appears in the message text, the system was unable to obtain the most current data from the sysplex couple data set. The system uses a local copy of the sysplex couple data set information instead, which may not have the most current data. The data will be current for members on the system where the DISPLAY command was issued.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY XCF command.

System action: The system continues processing.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1DCP

Routing Code: #

Descriptor Code: 5,8,9

IXC340I *hh.mm.ss DISPLAY XCF*

[**WARNING: INFORMATION MAY NOT BE CURRENT**]
GROUP *groupname* **IS NOT DEFINED TO THIS SYSPLEX**

Explanation: A DISPLAY XCF, GROUP, *groupname* command was entered to display a specific group. The requested group is not defined to XCF.

If the **WARNING: INFORMATION MAY NOT BE CURRENT** message appears in the message text, the system was unable to obtain the most current data from the sysplex couple data set. The system uses a local copy of the sysplex couple data set information instead, which may not have the most current data. The data will be current for members on the system where the DISPLAY command was issued.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY XCF command.

groupname

The group name specified in the DISPLAY command.

System action: The system continues processing.

Operator response: Enter a DISPLAY XCF, GROUP command to get a list of groups currently defined to the sysplex.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1DCP

Routing Code: #

Descriptor Code: 5,8,9

IXC341I *hh.mm.ss DISPLAY XCF*

LOCALMSG	CLASS	MAXMSG
	<i>classname</i>	<i>maxmsg</i>

Explanation: In response to a DISPLAY XCF command, this message displays signalling resources for the local system.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY XCF command.

CLASS *classname*

The transport class.

MAXMSG *maxmsg*

The current amount of message buffer space, in kilobytes, provided in addition to the default defined for local message traffic in this class.

System action: The system continues processing.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1DCP, IXCO1DC2

Routing Code: #.

Descriptor Code: 5,8,9

IXC343I *hh.mm.ss DISPLAY XCF*

TRANSPORT CLASS:	
<i>classname</i> <i>classname</i>

Explanation: In response to a DISPLAY XCF command, this message displays the transport classes currently defined to the sysplex. This message lists all the transport class names.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY XCF command.

classname

The transport class name.

System action: The system continues processing.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1DCP, IXCO1DC2

Routing Code: #

Descriptor Code: 5,8,9

IXC344I hh.mm.ss DISPLAY XCF

text

Explanation: In the message, *text* is:

TRANSPORT	CLASS	DEFAULT	ASSIGNED
CLASS	LENGTH	MAXMSG	GROUPS
classname	classln	maxmsg	groupname groupname groupname

tclassname TRANSPORT CLASS USAGE FOR SYSTEM
sysname SUM: MAXMSG: *maxmsgavail* IN USE:
 maxmsginuse NOBUFF: *msgnobuffer*

In response to a DISPLAY XCF,CLASSDEF command, this message displays detailed data for specific transport classes.

If the GROUP keyword was used with the DISPLAY XCF,CLASSDEF command, but the requested group name was not explicitly assigned to a transport class, then the classes for the undesignated groups are displayed. **UNDESIG** appears as one of the assigned groups for each of the transport classes listed.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY XCF command.

TRANSPORT CLASS *classname*

The transport class name.

CLASS LENGTH *classln*

The current length, in bytes, of messages allowed for this transport class. *classln* is defined either when the transport class is defined or with the SETXCF MODIFY,CLASSDEF command.

DEFAULT MAXMSG *maxmsg*

The amount of space, in kilobytes, of message buffer space defined for this transport class.

ASSIGNED GROUPS *groupname*

A group that has been assigned to this transport class. The **UNDESIG** is used in place of group names for all the undesignated groups assigned to the class.

***tclassname* TRANSPORT CLASS USAGE FOR**

SYSTEM *sysname*

Identifies the transport class and target system that is the subject of the detailed information. The following information will appear for each class and possible target system where the D XCF,CLASSDEF,... was issued.

tclassname

Name of the XCF Transport Class

sysname

Name of the target system

SUM: MAXMSG: *maxmsgavail* IN USE: *maxmsginuse*

NOBUFF: *msgnobuffer*

Summarizes the buffer use for each system. The following information will appear for each target system.

maxmsgavail

Amount of message buffer space in 1K units that can be used for messages targeted to the indicated system.

maxmsginuse

Amount of message buffer space in 1K units that is currently in use.

msgonobuffer

Count of the number of IXCMSCO requests that attempted to use this transport class but were rejected due to a lack of a signal buffer. Since applications may repeatedly reissue the IXCMSCO request when rejected, this count may not accurately portray the number of messages that were impacted by the lack of buffers. This number may wrap.

SEND CNT: *signalcnt* BUFFLEN (*bufftype*):

msgobufflen

One such line will appear for each different signal size that was used. A line appears for the defined transport class size, even if it was not used.

signalcnt

Count of the number of signals of the indicated size that were sent to the indicated target system on behalf of IXCMSCO requests issued by an XCF member. The number of signals sent may differ from the number of IXCMSCO requests accepted because, for example, more than one signal may be sent for a particular message. This number may wrap.

bufftype

One of the following:

- SML - Signal size is smaller than the defined transport class size.
- FIT - Signal size is the defined transport class size.
- BIG - Signal size is bigger than the defined transport class size.

msgobufflen

Indicates the signal buffer size used for the signals. The buffer length denotes the maximum number bytes of message data that signal buffers of this size can transfer. Note that the classification of the buffer length as SML, FIT, or BIG is determined by the current transport class definition. If the CLASSLEN specification for the transport class is modified, the buffer classification may change. Changes to the classification do not affect the counts for a particular buffer size.

System action: The system continues processing.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1DCP, IXCO1DC2

Routing Code: #

Descriptor Code: 5,8,9

IXC345I hh.mm.ss DISPLAY XCF

**SPECIFIED TRANSPORT CLASSES
NOT DEFINED TO XCF**

Explanation: The operator entered a DISPLAY XCF command to display transport classes, but the transport classes requested were not defined to XCF.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY XCF command.

System action: The system continues processing.

Operator response: Enter the DISPLAY XCF,CLASSDEF command without specifying transport classes to display the transport classes defined to XCF.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1DCP

Routing Code: #

Descriptor Code: 5,8,9

IXC346I hh.mm.ss DISPLAY XCF

**SPECIFIED GROUP IS NOT
ASSIGNED TO ANY TRANSPORT
CLASSES**

Explanation: The operator entered a DISPLAY XCF,CLASSDEF command, but the group requested is not assigned to any of the transport classes.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY XCF command.

System action: The system continues processing.

Operator response: If the response is unexpected, reenter the DISPLAY command with the correct group name. If the problem persists after the name is corrected, notify the system programmer.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1DCP, IXCO1DC2

Routing Code: #

Descriptor Code: 5,8,9

**IXC348I hh.mm.ss DISPLAY XCF XCF PR/SM
POLICY IS NOT ACTIVE**

Explanation: The operator entered a DISPLAY XCF,PRSMOPOLICY command to display the XCF processor resource/systems manager (PR/SM) parmlib member in use, however there is no XCF PR/SM parmlib member in use.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY XCF command.

System action: Processing continues.

Operator response: Enter the SETXCF PRSMOPOLICY,ACTIVATE=*memname* to activate a XCF PR/SM parmlib member.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1DCP

Routing Code: #

Descriptor Code: 5,8,9

**IXC349I hh.mm.ss DISPLAY XCF CURRENT
ACTIVE XCF PR/SM POLICY IS
*memname***

Explanation: The operator entered a DISPLAY XCF,PRSMOPOLICY command to display the XCF PR/SM parmlib member currently in use.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY XCF command.

memname

The name of the parmlib member currently in use.

System action: Processing continues.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1DCP

Routing Code: #

Descriptor Code: 5,8,9

**IXC351I DISPLAY XCF COMMAND SYNTAX
ERROR IN OPTIONS SPECIFIED.
COULD NOT RECOGNIZE THE
FOLLOWING: *string*.**

Explanation: In response to a DISPLAY XCF command, this message indicates that a certain keyword or symbol had been expected, but that instead a string that was not expected in this context was found.

In the message text:

System action: The SETXCF FORCE command was completed, rejected or accepted. This message displays the results of the command.

Operator response: If the SETXCF FORCE command was rejected, then use the DISPLAY XCF command with the STRUCTURE or CF options to verify the name and state of the structure you want to delete.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2RHT, IXCO1SCP

Routing Code: #

Descriptor Code: 5

IXC354I THE SETXCF FORCE REQUEST FOR CONNECTION *connname* IN STRUCTURE *strname* WAS {COMPLETED | REJECTED | ACCEPTED}: *text*

Explanation: An operator entered a SETXCF FORCE, CONNECTION command to delete a connection. This message displays the results of the command.

In the message text:

connname

The name of the connection.

strname

The name of the structure.

COMPLETED

The system successfully deleted the connection.

REJECTED

The system rejected the SETXCF FORCE command to delete the connection.

ACCEPTED

The request to force the connection was accepted.

USER DOES NOT HAVE SAF AUTHORIZATION

The user trying to delete the connection did not have the required SAF authorization.

STRUCTURE NOT DEFINED IN THE CFRM ACTIVE POLICY

The structure is not defined in the CFRM active policy.

STRUCTURE NOT ALLOCATED OR IS PENDING DEALLOCATION

The structure is either not allocated in any coupling facility or is pending deallocation.

AN UNEXPECTED ERROR OCCURRED

An unexpected error occurred during force processing.

CONNECTION WAS DELETED

The system successfully deleted the connection.

XES FUNCTION NOT AVAILABLE

XES functions are not available. This can be because the hardware necessary to provide XES functions is not present.

COUPLE DATA SET FOR CFRM NOT AVAILABLE

The couple data set for CFRM is not available to this system.

REQUEST WILL BE PROCESSED ASYNCHRONOUSLY

One or more of the coupling facility operations resulting from this SETXCF FORCE request cannot be performed immediately. These operations will remain pending until XCF is able to process them from some system in the sysplex.

CONNECTION DELETED BUT ALSO RESULTED IN STRUCTURE DEALLOCATION

The connection was deleted. Additionally, the structure was deallocated because this was the last connection to a non-persistent structure.

CONNECTION NOT DEFINED

The connection is not defined in the active policy.

REBUILD IN PROGRESS

The specified structure is being rebuilt. A connection cannot be deleted while rebuild is in progress.

ACTIVE CONNECTION SPECIFIED

The connection specified is in the active state. A connection must be in the failed-persistent state to be deleted.

RECOVERY PROCESSING IN PROGRESS FOR CONNECTION

Recovery processing has not completed for the specified connection. All related connections have not provided an Event Exit Response for the connection's failure event.

FORCE CONNECTION NOT PERMITTED FOR PERSISTENT LOCK OR SERIALIZED LIST

For a persistent lock or serialized list structure, forcing a failed-persistent connection is not permitted because undetected loss of data can occur.

System action: The SETXCF FORCE command was completed, rejected or accepted.

Operator response: If the SETXCF FORCE command was rejected, use the DISPLAY XCF command with the STRUCTURE or CF options to verify the name and state of connections to the structure.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1SCP

Routing Code: #

Descriptor Code: 5

IXC355I hh.mm.ss DISPLAY XCF

text

Explanation: In the message, *text* is:

IXC356I

```
direction sysname
DEVICE (LOCAL/REMOTE): 1dev/rdev 1dev/rdev 1dev/rdev
1dev/rdev
STRNAME: structurename
[NO SIGNALLING PATHS MATCH THE SPECIFIED CRITERIA]
[THERE ARE NO bound PATHS DEFINED TO THIS SYSTEM]
```

In response to a DISPLAY XCF command, this message displays signalling paths leading to and from systems in a sysplex. The system repeats this message text as many times as necessary to report all available signalling paths.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY XCF command.

direction

One of the following:

PATHIN FROM SYSNAME:

Inbound paths will be displayed for the given sysname.

PATHOUT TO SYSNAME:

Outbound paths will be displayed for the given sysname.

sysname

The name of the system being displayed.

- For inbound signalling paths, *sysname* is the source system.
- For outbound signalling paths, *sysname* is the destination system.
- For new signalling paths, *sysname* is ??????? because they have not established a connection to a system.

ldev

The device number for the inbound or outbound signalling path on the local system.

rdev

The device number for the associated inbound or outbound signalling path on the remote system. Question marks are listed if unknown, that is, if there is no associated remote system.

structurename

Users system is connected to this system via the named structure.

bound

One of the following:

INBOUND

Inbound paths were specified, but none are defined.

OUTBOUND

Outbound paths were specified, but none are defined.

System action: The system continues processing.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1DC2

Routing Code: #

Descriptor Code: 5,8,9

IXC356I *hh.mm.ss DISPLAY XCF*

text

Explanation: In the message, *text* is:

```
LOCAL DEVICE REMOTE PATHIN REMOTE LAST MXFER
PATHIN  SYSTEM STATUS PATHOUT RETRY MAXMSG RECVD TIME
1dev   sysname status rdev  retry maxmsg lastrcvd xfertime
```

```
LOCAL REMOTE REMOTE PATHIN DELIVRY BUFFER MSGBUF SIGNL
PATHIN PATHOUT SYSTEM STATUS PENDING LENGTH IN USE NUMBR NOBUF
1dev   rdev   sysname status pndmsg bflen in-use sgnl# nobuf
```

```
LOCAL DEVICE REMOTE PATHOUT REMOTE TRANSPORT
PATHOUT SYSTEM STATUS PATHIN RETRY MAXMSG CLASS
1dev   sysname status rdev  retry maxmsg classname
```

```
LOCAL REMOTE REMOTE PATHOUT TRANSFER BUFFER MSGBUF SIGNL MXFER
PATHOUT PATHIN SYSTEM STATUS PENDING LENGTH IN USE NUMBR TIME
1dev   rdev   sysname status pndmsg bflen in-use sgnl# ioxfr
```

```
STRNAME   REMOTE PATHIN UNUSED LAST MXFER
PATHIN   SYSTEM STATUS PATHS RETRY MAXMSG RECVD TIME
strname  sysname status numopen retry maxmsg lastrcvd xfertime
```

```
STRNAME   REMOTE PATHIN DELIVRY BUFFER MSGBUF SIGNL
PATHIN LIST  SYSTEM STATUS PENDING LENGTH IN USE NUMBR NOBUF
strnm  listnbr sysname status pndmsg bflen in-use sgnl# nobuf
```

```
STRNAME   REMOTE PATHOUT UNUSED TRANSPORT
PATHOUT SYSTEM STATUS PATHS RETRY MAXMSG CLASS
strname  sysname status numopen retry maxmsg classname
```

```
STRNAME   REMOTE PATHOUT TRANSFER BUFFER MSGBUF SIGNL MXFER
PATHOUT LIST  SYSTEM STATUS PENDING LENGTH IN USE NUMBR TIME
strnm  listnbr sysname status pndmsg bflen in-use sgnl# ioxfr
```

[NO SIGNALLING PATHS MATCH THE SPECIFIED CRITERIA]

[THERE ARE NO bound PATHS DEFINED TO THIS SYSTEM]

[pathtype REQUESTED BUT NOT SHOWN
ARE NOT DEFINED TO XCF AS bound
optionaltrailer]

[TRANSPORT CLASSES REQUESTED BUT NOT SHOWN
DO NOT HAVE DEVICES OR STRUCTURES ASSIGNED TO
THEM, OR ARE NOT DEFINED]

In response to a DISPLAY XCF command, this message displays detailed signalling path data for specific signalling path(s). The Device and Structure tables above are shown for both Pathin and Pathout, although we will not see both in one display. A selection type query of Device or Structure will yield only the one appropriate table, while listing both Device and Structure will in general yield two tables. Listing neither Device nor Structure, but listing Class (for Pathout), will in general yield two tables. If, for example, no devices meet the collective criteria, then we may see the structure table but no devices. If no paths at all meet the criteria, we see that reflected in the first trailer message above. If, irrespective of other criteria, there are no paths in the requested direction, the second trailer message appears.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY XCF command.

ldev

The device number for the inbound or outbound signalling path on the local system.

sysname

The name of the system connected to the signalling path. If the system is not known, ??????? is displayed for the system name.

status

One of the following:

STARTING

The system is verifying that the signalling path is suitable for XCF.

RESTARTING

XCF is restarting a failed signalling path.

WORKING

The signalling path is capable of message transfer.

STOPPING

XCF is removing the signalling path from the signalling service.

LINKING

XCF is establishing communication links between systems for this signalling path.

INOPERATIVE

The signalling path is defined to XCF but not usable until hardware and/or definition problems are resolved.

STOPFAILED

XCF was removing the signalling path from the signalling service, but there was a failure during removal.

REBUILDING

Rebuild has been initiated for the associated list structure.

QUIESCING

The signalling path is operational but no new I/O operations are being initiated. I/O operations may or may not have completed.

QUIESCED

The signalling path is operational but all I/O operations have completed and no new I/O operations are being initiated.

rdev

The device number for the associated inbound or outbound signalling path on the remote system. If the device number is not known, question marks are listed.

retry

The retry limit for the path. The retry limit is used to determine whether a signalling path should be removed.

maxmsg

The amount of space, in kilobytes, of message buffer space defined to the signalling service for the path.

lastrcvd

Signal number of the last signal received over the signalling path. As each signal is queued for transfer over a signalling path, it is assigned an over increasing number (subject to wrap). That signal number, modulo 100,000 is displayed for the latest signal to be received. Signal numbers may be reset to lower values when the signalling path is restarted.

xftime

The average transfer time, in microseconds, for signals recently received over the signalling path. Up to 64 of the latest signals received over the path are considered when computing the average transfer time. Signals received more than a minute ago are excluded from the average. For a seldom used path, excluding old signals can make it appear that its transfer time is changing even though it is not receiving any new signals. A dash is displayed if no data is available (no signals recently received or the sending system does not provide the necessary data). Average transfer times in excess of a tenth of a second are displayed as 99999. The transfer time shown is recomputed using the data that is current at the time the display command is processed.

pndmsg

For an outbound path, indicates the number of signals queued to the path for which I/O transfer appears to be pending. Since notification of I/O completion is asynchronous to the actual I/O transfer, the signals may in fact have been transferred to the target system even though the count is not zero.

For an inbound path, indicates the number of signal buffers associated with the path that are engaged in some stage of message delivery. An idle inbound CTC path will usually have four signals pending. An idle inbound list path will usually have no signals pending. Delivery counts will be greater than the idle values when the signal buffers are in the midst of delivering a message to a user signal exit routine. Delivery counts smaller than the idle value (for a CTC path) may be indicative of a signal buffer shortage, which in turn could cause signalling performance degradation. Note that some combinations of current buffer length and MAXMSG specifications can cause a CTC path to run idle with fewer than four buffers.

For an inbound path, the number of signal buffers that are pending delivery may be less than the number of work items pending delivery to the XCF group members (as shown by the DISPLAY XCF, GROUP, grpname, memname command). The

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difference arises from the fact that messages are not the only work items that can be queued for a member. Also, XCF does not necessarily use signal I/O buffers to queue messages for delivery.

bflen

The maximum number of bytes of message data that will fit in the size signal buffer that is currently in use by the signalling path. The buffer length used by the signalling path is adjusted dynamically by XCF in response to the message traffic load.

in_use

The amount of message buffer space, in kilobytes, currently associated with the signalling path.

Note that for an outbound path, this value may exceed the MAXMSG value specified for the path since outbound buffer pools are not managed on a path basis but on a transport class basis. The current path value may also include signal buffers from other transport classes that do not have their own signalling paths. Signal buffers for internal XCF signals, which are managed separately from customer defined transport classes may also be included.

sgnl#

Each signal sent over a signalling path is assigned a signal number (subject to wrap). That signal number, modulo 100,000 is displayed.

For an outbound signalling path, this value will be the signal number of the last signal queued for transfer over the path. For an inbound signalling path, this value will be the signal number of the latest signal received over the path. The signal number of the outbound side of a path can be compared to the signal number of the inbound side of the path to gauge activity of the signalling path.

Signal numbers may be reset to lower values when the signalling path is started, restarted, or stopped.

nobuff

For an inbound path, indicates the number of times (modulo 100,000) that lack of a signal buffer prevented a new read operation from being initiated over the path. This count is cumulative for the life of the path so a nonzero value does not imply that the path is currently experiencing a buffer shortage. The value should be compared to the data from a subsequent display command to determine whether the path had buffer shortages recently.

classname

The name of the transport class to which this signalling path is assigned. *classname* is only displayed for outbound signalling paths, and only if a signalling path is assigned to the class. Transport classes without devices assigned are not displayed.

strname

Name of structure defined for use as a signalling path.

numopen

Number of lists in the list structure that are available for use as signalling paths.

ioxfr

For an outbound path, indicates the transfer time value that is currently being used to determine which outbound signalling paths are most likely to provide the fastest signal delivery. The average transfer time is measured by the inbound side of the path and periodically sent back to the system on the outbound side. The value shown in the display is the average transfer time that was most recently received from the inbound side. In contrast, the transfer time displayed for an inbound path is recomputed each time the display command is issued.

A dash is displayed if no data is available (no signals recently received or the sending system does not provide the necessary data). Average transfer times in excess of a tenth of a second are displayed as 99999.

listnbr

The decimal list number of the list being used for the signalling path.

bound

One of the following:

INBOUND

Inbound paths were specified, but none are defined.

OUTBOUND

Outbound paths were specified, but none are defined.

PATHIN

Inbound paths were specified, but were not displayed.

PATHOUT

Outbound paths were specified, but were not displayed.

pathtype

One of the following:

DEVICES

Devices were specified.

STRUCTURES

Structures were specified.

optionaltrailer

One of the following:

OR ARE NOT IN REQUESTED TRANSPORT CLASS

Specified paths may not have been displayed because they were not in the requested transport class.

OR DO NOT HAVE REQUESTED STATUS

Specified paths may not have been displayed because they did not have the requested status.

**ARE NOT IN REQUESTED TRANSPORT CLASS,
OR DO NOT HAVE REQUESTED STATUS**

Specified paths may not have been displayed either because they were not in the requested transport class or because they did not have the requested status.

System action: The system continues processing.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1DCP, IXCO1DC2

Routing Code: #

Descriptor Code: 5,8,9

IXC357I hh.mm.ss DISPLAY XCF

text

Explanation: In the message, *text* is:

```
SYSTEM sysname DATA
  INTERVAL OPNOTIFY MAXMSG CLEANUP RETRY CLASSLEN
  interval opnotify maxmsg cleanup retry classlen

  SSUM ACTION      SSUM INTERVAL          WEIGHT
  action           sfminterval         weight

  MAX SUPPORTED CFLEVEL: maxcflevel

  MAX SUPPORTED SYSTEM-MANAGED PROCESS LEVEL: maxprocesslevel

  CF REQUEST TIME ORDERING FUNCTION: NOT-INSTALLED
  CF REQUEST TIME ORDERING FUNCTION: INSTALLED
  SYSTEM NODE DESCRIPTOR: type.mfg.plant.sequence
    PARTITION: partition side CPCID: cpcid
    SYSTEM IDENTIFIER: sysid
  COUPLEXX PARMLIB MEMBER USED AT IPL: COUPLEXX

  SYSPLEX COUPLE DATA SETS
  PRIMARY   DSN: dname

  VOLSER: prisysvol  DEVN: prisysdev
  FORMAT TOD      MAXSYSTEM MAXGROUP(Peak) MAXMEMBER(Peak)
  mm/dd/yyyy hh:mm:ss maxsys maxgroup(maxgrpmem) maxmember(maxmem)

  ALTERNATE DSN: dname

  VOLSER: altsysvol  DEVN: altsysdev
  FORMAT TOD      MAXSYSTEM MAXGROUP MAXMEMBER
  mm/dd/yyyy hh:mm:ss maxsys maxgroup maxmember

  [SYNCHRONIZATION WITH PRIMARY IN PROGRESS]

cdstype COUPLE DATA SETS
PRIMARY   DSN: dname

  VOLSER: privol    DEVN: privedv
  FORMAT TOD      MAXSYSTEM
  mm/dd/yyyy hh:mm:ss maxsys

  [DATA SET BEING REMOVED]
  ALTERNATE DSN: dname
    VOLSER: altvol   DEVN: altdev
    FORMAT TOD      MAXSYSTEM
    mm/dd/yyyy hh:mm:ss maxsys

  [SYNCHRONIZATION WITH PRIMARY IN PROGRESS]

  [DATA SET BEING REMOVED]
```

[cdstype NOT IN USE BY THE SYSTEM]

[THERE ARE NO COUPLE DATA SETS DEFINED TO THE SYSPLEX]

A DISPLAY XCF,COUPLE command was entered to display summary information about the couple data sets. Information about the primary and alternate data sets is displayed.

DISPLAY XCF,COUPLE also displays Sysplex Failure Management-related information and information about the system parameters set by the COUPLE statement in the COUPLEXX parmlib member.

The DATA SET BEING REMOVED message may appear for the primary couple data set because of an error with the data set or because the SETXCF command with the PSWITCH keyword was entered by the operator, causing the alternate couple data set to become the primary couple data set. The message may appear for the alternate couple data set because of an error with the data set or because the SETXCF command with the ACOUPLE keyword was entered by the operator, causing the alternate couple data set to be replaced.

The presence of couple data set information in the display output does not necessarily imply that the system can access the couple data set. A couple data set may be physically inaccessible (such as no paths to it available from the displaying system), but the system does not become aware of the problem until an attempt is made to perform I/O to the data set. The frequency of I/O varies with couple data set type. The sysplex couple data set is updated every few seconds, but functional couple data sets may be accessed only infrequently. For example, some types of functional couple data sets are only accessed when a new policy is started.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY XCF command.

sysname

The name of the system that issued the command

interval

The system failure detection interval in seconds. This interval is the time XCF lets elapse without a status update before assuming that the system failed.

opnotify

The time, in seconds, XCF waits before notifying the operator of a potential system problem.

maxmsg

The default value for the maximum amount, in kilobytes, of message buffer space. This default value is used when MAXMSG is not specified on SETXCF START commands.

cleanup

The time, in seconds, XCF waits for cleanup of members.

retry

The default value for the retry limit. This value is used when the RETRY keyword is not specified on SETXCF START commands.

classlen

The default length, in bytes, of messages allowed for a transport class. This value is used when CLASSLEN is not specified on the SETXCF START CLASSDEF command.

action

- Define action. *action* can be one of the following:
- ISOLATE
 - DEACTIVATE
 - RESET
 - PROMPT
 - N/A

sfrminterval

The SSUM interval as specified in the current SFM policy. This interval is the time elapsed after a system has become status update missing before the SSUM action is attempted.

weight

The SSUM weight as specified in the current SFM policy. This weight is used in sysplex reconfigurations after a signalling connectivity failure.

maxcflevel

The maximum CFLEVEL supported by this system.

maxprocesslevel

The maximum level of system-managed process, if any, supported by the system. For a system to participate in system-managed processing (for example, rebuild) against a structure, this value must be greater than or equal to the level required by that structure as reported (for allocated structures) by IXC360I in response to a D XCF,STR command.

This value is meaningful only if the CFRM couple data set is formatted to support system-managed processes.

CFRM EVENT MANAGEMENT:

CFRM event management protocol as viewed only by this system from local in-storage control blocks. This line is displayed only when a CFRM couple data set is available and may not reflect the most current event management protocol information. Use the D XCF,STR command to view CFRM event management protocol information from the CFRM active policy.

CF REQUEST TIME ORDERING FUNCTION:**NOT-INSTALLED**

The CF Request Time Ordering function is not

installed on this machine. Operations to the CF may not request time ordering.

CF REQUEST TIME ORDERING FUNCTION:**INSTALLED**

The CF Request Time Ordering function is installed on this machine. Operations to the CF may request time ordering.

type

Node type (see ndetype in IXLYNDE)

mfg

Node manufacturer ID (see ndemfg in IXLYNDE)

plant

Node manufacturer plant ID (see ndeplant in IXLYNDE)

sequence

Node sequence number (see ndesequence in IXLYNDE)

partition

Node LPAR partition number (see ndepartition in IXLYNDE)

side

The node PP/SI mode indicator and configuration code from the IXLYNDE are used to determine the value for *side*. *side* is one of the following:

- **SIDE: 0** - The coupling facility is on SIDE 0 of a partitionable CPC.
- **SIDE: 1** - The coupling facility is SIDE 1 of a partitionable CPC.
- blank - The coupling facility is in a non-partitionable CPC.

cpcid

Node Central Processor Complex (CPC) ID. (see ndecpcid in IXLYNDE.)

sysid

The system identifier used to identify the system at the sender end of a CF link.

xx COUPLEXX parmlib member XX value used for the current IPL.

dsname

The name of the couple data set. The primary sysplex couple data set must be defined to XCF via the COUPLEXX parmlib member. All other couple data sets can be defined via the COUPLEXX parmlib member or the SETXCF command.

prisysvol

The volume on which the primary sysplex couple data set resides.

prisysdev

The device address of the device on which the primary sysplex couple data set resides.

mm/dd/yyyy

The date when the primary couple data set was formatted. The date is in months (01-12), days (01-31), and years.

hh:mm:ss

The time when the primary couple data set was formatted. The time is in hours (00-23), minutes (00-59), and seconds (00-59). This is used to guarantee data set uniqueness.

maxsys

The maximum number of systems that the couple data set can support.

maxgroup

The maximum number of groups that the couple data set can support.

peakgrp

The peak number of groups ever in use in the sysplex.

maxmember

The maximum number of members that the primary couple data set can support in one group.

peakmem

The greatest number of members ever in use in the largest group in the sysplex.

altsysvol

The volume on which the alternate sysplex couple data set resides.

altsysdev

The device address of the device on which the alternate sysplex couple data set resides.

cdstype

The type name associated with the couple data sets.

privol

The volume on which the primary couple data set resides.

pridev

The device address of the device on which the primary couple data set resides. A value of "N/A" means that the device address is not available on the displaying system, either because the function is not active on that system, or because the data set is being removed due to PSWITCH or an I/O error.

altvol

The volume on which the alternate couple data set resides.

altdev

The device address of the device on which the alternate couple data set resides. A value of 'N/S' means that the device address is not available on the displaying system because the function is not active on that system.

System action: The system continues processing.

Operator response: If the display indicates that the sysplex needs a larger maximum number of groups or members, or a larger maximum number of members possible in a group, then notify the system programmer.

System programmer response: Do one of the following:

- If the sysplex needs a larger maximum number of members possible in a group, format a new, larger sysplex couple data set. Then ask the operator to make the new sysplex couple data set the alternate using the SETXCF COUPLE,ACOUPLE command, and perform a data set switch with the SETXCF COUPLE,PSWITCH command. If more groups are also desired, allocate more space to the data set.
- If the peak number of groups, *peakgrp*, is close to the value of MAXGROUPS, a larger sysplex couple data set might be needed to contain growth.
- If the peak number of members, *peakmem*, is close to the value of MAXMEMBERS, a larger sysplex couple data set might be needed to contain growth.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1DCP

Routing Code: #

Descriptor Code: 5,8,9

IXC358I *hh.mm.ss DISPLAY XCF*

text

Explanation: In the message, *text* is:

```
SYSPLEX COUPLE DATA SETS
PRIMARY DSN: dsname
VOLSER: prisyvol DEVN: prisydev
FORMAT TOD MAXSYSTEM MAXGROUP(PEAK) MAXMEMBER(PEAK)
mm/dd/yy hh:mm:ss maxsys maxgroup(peakgrp) maxmember(peakmem)
ADDITIONAL INFORMATION:
sysplexfunction
```

```
ALTERNATE DSN: dsname
VOLSER: altsysvol DEVN: altsysdev
FORMAT TOD MAXSYSTEM MAXGROUP MAXMEMBER
mm/dd/yy hh:mm:ss maxsys maxgroup maxmember
ADDITIONAL INFORMATION:
sysplexfunction
```

```
cdstype COUPLE DATA SETS
PRIMARY DSN: dsname
VOLSER: privol DEVN: pridev
FORMAT TOD MAXSYSTEM
mm/dd/yy hh:mm:ss maxsys
ADDITIONAL INFORMATION:
typeinfo
```

[DATA SET BEING REMOVED]

```
ALTERATE DSN: dsname
VOLSER: altvol DEVN: altdev
FORMAT TOD MAXSYSTEM
mm/dd/yy hh:mm:ss maxsys
ADDITIONAL INFORMATION:
typeinfo
```

[SYNCHRONIZATION WITH PRIMARY IN PROGRESS]

[DATA SET BEING REMOVED]

[cdstype IN USE BY ALL SYSTEMS]

[SYSTEMS USING cdstype:
dsname sysname sysname sysname sysname sysname]

IXC358I

```
[SYSTEMS NOT USING cdstype:  
    sysname sysname sysname sysname sysname sysname]  
  
[THERE ARE NO COUPLE DATA SETS DEFINED TO THE SYSPLEX]  
  
[THE FOLLOWING REQUESTED TYPES  
ARE NOT DEFINED TO THE SYSPLEX:  
    ndeftype ndeftype ndeftype ndeftype ndeftype ndeftype]  
  
[cdstype NOT IN USE BY ANY SYSTEM]
```

A DISPLAY XCF,COUPLE command was entered to display detailed information about couple data sets. Information about the primary and alternate data sets is displayed.

The DATA SET BEING REMOVED message may appear for the primary couple data set because of an error with the data set or because the SETXCF command with the PSWITCH keyword was entered by the operator, causing the alternate couple data set to become the primary couple data set. The message may appear for the alternate couple data set because of an error with the data set or because the SETXCF command with the ACOUPLE keyword was entered by the operator, causing the alternate couple data set to be replaced.

If one or more types are used by ALL systems, the list of all systems in the sysplex may be displayed by issuing the DISPLAY XCF,SYSPLEX command.

The presence of couple data set information in the display output does not necessarily imply that the system can access the couple data set. A couple data set may be physically inaccessible (such as no paths to it available from the displaying system), but the system does not become aware of the problem until an attempt is made to perform I/O to the data set. The frequency of I/O varies with couple data set type. The sysplex couple data set is updated every few seconds, but functional couple data sets may be accessed only infrequently. For example, some types of functional couple data sets are only accessed when a new policy is started.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY XCF command.

dsname

The name of the couple data set. The primary sysplex couple data set must be defined to XCF via the COUPLExx parmlib member. All other couple data sets can be defined via the COUPLExx parmlib member or the SETXCF command.

prisysvol

The volume on which the primary sysplex couple data set resides.

prisysdev

The device address of the device on which the primary sysplex couple data set resides.

mm/dd/yyyy

The date when the primary couple data set was formatted. The date is in months (01-12), days (01-31), and years.

hh:mm:ss

The time when the primary couple data set was formatted. The time is in hours (00-23), minutes (00-59), and seconds (00-59). This is used to guarantee data set uniqueness.

maxsys

The maximum number of systems that the couple data set can support.

maxgroup

The maximum number of groups that the couple data set can support.

peakgrp

The peak number of groups ever in use in the sysplex.

maxmember

The maximum number of members per group that the primary couple data set can support in one group.

peakmem

The greatest number of members ever in use in the largest group in the sysplex.

ADDITIONAL INFORMATION:

The lines following this header are supplied by the component owning the couple data set.

sysplexfunction

The level of function for which the couple data set is formatted. *sysplexfuntion* has the following format:

- One of the following two statements appears:

SYSPLEX-ONLY COUPLE DATA SET SUPPORTED

The couple data set supports only the use of the sysplex couple data set itself.

ALL TYPES OF COUPLE DATA SETS SUPPORTED

The couple data set supports the use of additional couple data sets such as CFRM, SFM, etc.

- The following line may also appear:

GRS STAR MODE IS SUPPORTED

The couple data set supports GRS star mode operations.

altsysvol

The volume on which the alternate sysplex couple data set resides.

altsysdev

The device address of the device on which the alternate sysplex couple data set resides.

cdstype

The type name associated with the couple data sets.

privol

The volume on which the primary couple data set resides.

pridev

The device address of the device on which the primary couple data set resides. A value of 'N/A' means that the device address is not available on the displaying system, either because the function is not active on that system, or because the data set is being removed due to PSWITCH or an I/O error.

typeinfo

Additional information provided by the component owning the couple data set. It may describe, for example, the level of specialized function for which the couple data set is formatted.

If *cdstype* is CFRM, *typeinfo* has the following format:

```
FORMAT DATA
POLICY(n) CF(n) STR(n) CONNECT(n)
[SMREBLD(1) SMDUPLEX(1) MSGBASED(1)
```

The FORMAT DATA lines represent the IXCL1DSU control statements that would be required to format a couple data set equivalent to the one described.

If *cdstype* is not CFRM, *typeinfo* is one of the following:

NOT PROVIDED

The component that owns the couple data set did not supply additional information.

Component-supplied information

Information supplied by the component that owns the couple data set. See the documentation associated with the owning component for an explanation.

If *cdstype* is LOGR, *typeinfo* has the following format:

```
LOGR COUPLE DATA SET FORMAT LEVEL: formatlvl
LSR(lsrnum) LSTR(istrnum) DSEXTENT(dsextentnum)
SMDUPLEX(smduplexnum)
```

The *typeinfo* lines indicate the format level, the type, and the number of records found in the LOGR couple data set, where:

formatlvl

Indicates the format level of this couple data set. HBB5220 indicates this LOGR CDS was formatted at a release level prior to HBB6603. HBB6603 indicates this LOGR CDS was formatted at release HBB6603 or higher. HBB7705 indicates this LOGR CDS was formatted at release HBB7705 or higher.

lsrnum

Indicates the number of LSR type records formatted in this LOGR couple data set.

istrnum

Indicates the number of LSTRR type records formatted in this LOGR couple data set.

dsextentnum

Indicates the number of DSEXTENT type records formatted in this LOGR couple data set. This type of record is supported with a LOGR CDS format level of at least HBB6603.

smduplexnum

Specifies whether Logger should support XES system-managed structure duplexing:

- 0 indicates Logger will not support system-managed structure duplexing. Results in LOGR CDS format level of HBB6603.
- 1 indicates Logger will support system-managed structure duplexing. Results in LOGR CDS format level of HBB7705.

altvol

The volume on which the alternate couple data set resides.

altddev

The device address of the device on which the alternate couple data set resides. A value of 'N/A' means the device address is not available on the displaying system because the function is not active on that system.

sysname

The name of the system using, or not using, a type. If a type is used by all systems, or by no systems, then this line is not displayed. Instead, the preceding line will be replaced by *cdstype* IN USE BY ALL SYSTEMS or by *cdstype* NOT IN USE BY ANY SYSTEM, whichever is appropriate.

ndecltype

Name of a requested type which is not defined to the sysplex.

System action: The system continues processing.

Operator response: Not applicable.

System programmer response: Not applicable.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1DCP

Routing Code: #

Descriptor Code: 5,8,9

IXC359I hh.mm.ss DISPLAY XCF*text***Explanation:** In the message, *text* is:

[LARGER CFRM COUPLE DATA SET REQUIRED.

FORMAT A NEW COUPLE DATA SET

FOR CFRM USING AT LEAST THE FOLLOWING:

ITEM NAME(STR) NUMBER(str#)

ITEM NAME(CONNECT) NUMBER(conn#)]

[THE COUPLE DATA SET
FOR CFRM SUPPORTS THE MAXIMUM NUMBER OF STR
RECORDS.. *totalstr*
STRUCTURE(S) MUST BE DELETED FROM THE POLICY TO
ACCOMMODATE STRUCTURES ALLOCATED IN THE
COUPLING FACILITY.][*totalstr* STRUCTURE(S) MUST ALSO
BE DELETED FROM THE POLICY TO
ACCOMMODATE STRUCTURES ALLOCATED IN THE
COUPLING FACILITY.]
[THE REALLOCATE PROCESS IS IN PROGRESS.]
[THE REALLOCATE PROCESS IS STOPPING.]

STRNAME strname	ALLOCATION TIME mm/dd/yyyy hh:mm:ss	STATUS status	TYPE strtype
--------------------	--	------------------	-----------------

[THE CFRM ACTIVE POLICY IS EMPTY]

[NO STRUCTURES MATCH THE SPECIFIED CRITERIA]

EVENT MANAGEMENT: evtmgmt[mgrsysname]

- | A DISPLAY XCF,STRUCTURE command was entered to display summary information about the structures defined in the CFRM active policy in use by this sysplex. The system will repeat the message text to report all requested structures. The status of a single structure may also extend to several message lines.
- | Additionally, a message will be displayed to provide the CFRM event management protocol in use by this sysplex.

If no structures are displayed, then one of the trailer messages shown above will be displayed instead to explain the absence of structures.

If the CFRM Couple Data Set needs to be reformatted, then a message will be displayed before any structures are listed. This message will specify the minimum numbers to be used in reformatting the data set.

If the REALLOCATE process has been initiated, then a message is displayed before any structures are listed. This message indicates the current state of the REALLOCATE process. The REALLOCATE process is in progress if a SETXCF START,REALLOCATE operator command has been issued. The REALLOCATE process is stopping if a SETXCF STOP,REALLOCATE operator command has been issued. Once started, the REALLOCATE process evaluates each allocated structure to determine the need for activation of a pending policy and/or location adjustment of instance(s) allocated in CF(s). REALLOCATE processing ends either when all allocated structures have been evaluated with appropriate action taken or when the REALLOCATE process was stopped and relocation steps for the current target structure have finished.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY XCF command.

str#

The STR number to be used in reformatting the CFRM Couple Data Set. If the current number is adequate, then this line will not be displayed.

conn#

The CONNECT number to be used in reformatting the CFRM Couple Data Set. If the current number is adequate, then this line will not be displayed.

totalstr

The total number of structures that should be deleted from the CFRM active policy.

THE REALLOCATE PROCESS IS IN PROGRESS.

The REALLOCATE process is initiated by the SETXCF START,REALLOCATE operator command. Once started, the REALLOCATE process examines each allocated structure to determine whether the location of any instance needs to be adjusted and/or a pending policy activated. The evaluation process uses the XCF allocation algorithm which factors in the CFRM active policy information and current set of active connections to make the determination.

THE REALLOCATE PROCESS IS STOPPING.

The REALLOCATE process is stopped by the SETXCF STOP,REALLOCATE operator command. Once stopped, the structure, which is the current target of the REALLOCATE process, will complete the relocation steps prior to ending the REALLOCATE process.

strname

The name of a structure.

mm/dd/yyyy

The date when the structure was allocated. The date is in months (01-12), days (01-31), and years (0000-9999). If the structure is not allocated, dashes are displayed instead.

hh:mm:ss

The time when the structure was allocated. The time is in hours (00-23), minutes (00-59), and seconds (00-59). This is used to guarantee structure uniqueness. If the structure is not allocated, dashes are displayed instead.

status

One or more of the following:

ALLOCATED

The structure is allocated in a coupling facility.

NOT ALLOCATED

The structure is not allocated.

ALLOCATED (NEW)

A structure rebuild process is in progress and

two instances of the structure are allocated. This is the new instance of the structure. The structure rebuild process type is either rebuild or duplexing rebuild.

ALLOCATED (OLD)

A structure rebuild process is in progress and two instances of the structure are allocated. This is the old instance of the structure. The structure rebuild process type is either rebuild or duplexing rebuild.

DEALLOCATION PENDING:

Possible reasons for structure deallocation pending are:

DEALLOCATING SYSTEM LOST CONNECTIVITY

The system attempting to deallocate the structure lost connectivity to the coupling facility containing the structure. The structure deallocation may remain pending if the coupling facility containing the structure is not connected to any system. Use either the DISPLAY XCF,CF or the DISPLAY CF command to show the connectivity status of the coupling facility.

STRUCTURE DUMP EXISTS WITH STRUCTURE DUMP ID *nnnn*

Deallocation is pending for this structure because a structure dump is associated with this structure. The structure deallocation remains pending until the structure dump is either forced or written to a dump data set. The structure dump id *nnnn* is given for use in the SETXCF FORCE,STRDUMP command.

TRANSITIONING: CONNECT OR DISCONNECT IN PROGRESS

The structure is either being allocated in a coupling facility or deallocated from a coupling facility. The structure deallocation may remain pending if the coupling facility containing the structure is not connected to any system. Use the DISPLAY XCF,CF or DISPLAY CF command to show the connectivity status of the coupling facility.

STRUCTURE FAILED

The structure has failed.

POLICY CHANGE PENDING - CHANGE

There is an administrative policy change pending. The pending change is to change the policy definition for the structure.

POLICY CHANGE PENDING - DELETE

There is an administrative policy change pending. The pending change is to delete the policy definition for the structure.

STRUCTURE NOT DEFINED IN POLICY

The structure is not defined in the active policy and therefore cannot be connected to. This scenario can only occur when all instances of the structure are either deallocation pending or in transition.

FAILED-PERSISTENT CONNECTIONS

UNAVAILABLE DUE TO LARGER CFRM

COUPLE DATA SET REQUIRED

The CFRM Couple Data Set must be reformatted to correct this unavailability.

STRUCTURE DUMP EXISTS WITH STRUCTURE DUMP ID *nnnn*

There is a structure dump associated with this structure, and the structure dump ID *nnnn* is given for use in the SETXCF FORCE,STRDUMP command.

ALTER IN PROGRESS

Structure alter has been initiated.

POPULATECF REBUILD PENDING FOR *cfname*

The structure is pending rebuild for the current PopulateCF rebuild. *cfname* is the name of the coupling facility specified for the PopulateCF rebuild request.

POPULATECF REBUILD IN PROGRESS FOR *cfname*

The structure is being rebuild for the current PopulateCF rebuild. *cfname* is the name of the coupling facility specified for the PopulateCF rebuild request.

REALLOCATE EVALUATION PENDING

The allocated structure is pending evaluation of its current location. The REALLOCATE process initiated by the SETXCF START,REALLOCATE operator command examines each allocated structure to determine whether the location of any of the instance(s) needs to be adjusted and/or a pending policy activated. The evaluation process uses the XCF allocation algorithm, which factors in the CFRM active policy information and current set of connections, to make the determination.

TARGET OF REALLOCATE PROCESS

The structure was selected by the REALLOCATE process to have its location adjusted and/or pending policy activated. The REALLOCATE process was initiated by the SETXCF START,REALLOCATE operator command. Once marked as the target of the REALLOCATE process, the structure remains the target until one of the following occurs:

- The REALLOCATE process evaluates the next structure or completes.
- The structure is reduplicated, deallocated, or forced.

REBUILDING	The structure rebuild process type is rebuild.	ALLOCATE	The structure rebuild process is in the allocate phase.
REBUILD STOPPING	The structure rebuild process type is rebuild. The process is being stopped.	ATTACH	The structure rebuild process is in the attach phase.
DUPLEXING REBUILD	The structure rebuild process type is duplexing rebuild.	COPY	The structure rebuild process is in the copy phase.
DUPLEXING REBUILD STOPPING	The structure rebuild process type is duplexing rebuild. The process is being stopped to fall back to the old structure.	COPY STOP	The structure rebuild process is in the copy stop phase.
DUPLEXING REBUILD SWITCHING	The structure rebuild process type is duplexing rebuild. The process is being stopped to switch to the new structure.	QUIESCE FOR STOP	The structure rebuild process is in the quiesce for stop phase.
METHOD: method	The method used to manage the current process (for example, rebuilding, rebuild stopping, or duplexing rebuild) is one of the following:	STOP	The structure rebuild process is in the stop phase.
SYSTEM-MANAGED	The system is managing the process.	<i>strtype</i>	One of the following:
USER-MANAGED	The connected users are managing the process.	LOCK	The structure type is lock.
PHASE: phase	The phase of the current process (for example, rebuilding, rebuild stopping, or duplexing rebuild) is one of the following:	SLIST	The structure type is serialized list.
WAITING FOR QUIESCE	The structure rebuild process is in the quiesce phase.	LIST	The structure type is list.
WAITING FOR COMPLETE	The structure rebuild process is in the complete phase.	CACHE	The structure type is cache.
WAITING FOR CLEANUP	The structure rebuild process is in the cleanup phase.	<i>blank</i>	The structure type is only applicable when status is one of the following: <ul style="list-style-type: none">• ALLOCATED• ALLOCATED (NEW)• ALLOCATED (OLD)
DUPLEX STARTUP	The structure rebuild process is in the startup phase.	EVENT MANAGEMENT:	The CFRM event management protocol according to the CFRM active policy. Except for XCF signaling structures, message-based processing can be used for any allocated structure. When the CFRM event management protocol is message-based, message-based processing is enabled for an allocated structure during event processing. When the CFRM event management protocol is policy-based, event processing is policy-based for all allocated structures.
DUPLEX ESTABLISHED	The structure rebuild process is in the duplex established phase.	<i>evtmgmt</i>	One of the following:
DUPLEX SWITCHING	The structure rebuild process is in the duplex switching phase.	POLICY-BASED	For the sysplex, event management for an allocated structure, is controlled on each system having a structure connection and the CFRM active policy is accessed to obtain event data.
STARTUP	The structure rebuild process is in the startup phase.		

MESSAGE-BASED MANAGER SYSTEM**NAME:** *mgrsysname*

For the sysplex, allocated structures enabled for message-based processing have event processing managed by an event manager system using messages sent via XCF signaling for communication with the participant system(s). The manager system updates the CFRM active policy once all participant system(s) distribute the event to active connections. The event manager system is identified by *mgrsysname*.

MESSAGE-BASED TRANSITIONING TO NEW MANAGER

For the sysplex, allocated structures enabled for message-based processing have event processing managed by an event manager system but the sysplex is transitioning to a new manager system. Once the new manager system is assigned the name of the event manager system can be displayed. The sysplex changes to a new manager system as the result of removing the prior manager system from the sysplex.

mgrsysname

When event processing is policy-based, no system name is displayed. When event processing is message-based, the manager system name (*mgrsysname*) is displayed. When transitioning to a new manager system, no system name is displayed.

System action: The system continues processing.**Source:** Cross System Coupling Facility (SCXCF)**Detecting Module:** IXCO1DC3**Routing Code:** #**Descriptor Code:** 5,8,9**IXC360I hh.mm.ss DISPLAY XCF***text***Explanation:** In the message, *text* is:

[LARGER COUPLE DATA SET FOR CFRM REQUIRED.
FORMAT A NEW COUPLE DATA SET FOR CFRM
USING AT LEAST THE FOLLOWING:
 ITEM NAME(STR) NUMBER(str#)
 ITEM NAME(CONNECT) NUMBER(conn#)]

[THE COUPLE DATA SET
FOR CFRM SUPPORTS THE MAXIMUM NUMBER OF STR
RECORDS. totalstr
STRUCTURE(S) MUST BE DELETED FROM THE POLICY TO
ACCOMMODATE STRUCTURES ALLOCATED IN THE
COUPLING FACILITY.]

[totalstr STRUCTURE(S) MUST ALSO
BE DELETED FROM THE POLICY TO
ACCOMMODATE STRUCTURES ALLOCATED IN THE
COUPLING FACILITY.]

[THE REALLOCATE PROCESS IS IN PROGRESS.]

[THE REALLOCATE PROCESS IS STOPPING.]

STRNAME: strname

STATUS:	status				
EVENT MANAGEMENT:	strem				
TYPE:	strtype				
POLICY INFORMATION:					
POLICY SIZE:	policysize				
POLICY INITSIZE:	policyinitsize				
POLICY MINSIZE:	policyminsize				
FULLTHRESHOLD:	fullthreshold				
ALLOWAUTOALT:	allowautoalt				
REBUILD PERCENT:	rebuildpercent				
DUPLEX:	duplexstatus				
PREFERENCE LIST:	pref-cf pref-cf pref-cf pref-cf pref-cf				
ENFORCEORDER:	enforceorder				
EXCLUSION LIST:	excl-str excl-str excl-str				
header					
[PENDING POLICY INFORMATION:]					
[REASON PENDING : pendrsn]					
[REASON IN TRANSITION: CONNECT OR DISCONNECT IN PROGRESS]					
[STRUCTURE DUMP EXISTS WITH STRUCTURE DUMP ID dumpid]					
[STRUCTURE FAILED]					
ALLOCATION TIME:	mm/dd/yyyy hh:mm:ss				
CFCNAME:	cfcname [NO SYSTEMS CONNECTED TO COUPLING FACILITY]				
COUPLING FACILITY:	type.mfg.plant.sequence				
	PARTITION: partition side CPCID: cpcid				
ACTUAL SIZE:	actualsize				
STORAGE INCREMENT SIZE:	stgincrment				
ENTRIES: IN-USE:	inuseentrycnt TOTAL: totalentrycnt, pctfull % FULL				
ELEMENTS: IN-USE:	inuseelementcnt TOTAL: totalelementcnt, pctfull % FULL				
EMCS: IN-USE:	inusemcnt TOTAL: totalmcnt, pctfull % FULL				
LOCKS:	TOTAL: totallocknt				
LOGICAL VERSION:	logicalver1 logicalver2				
PHYSICAL VERSION:	physicalver1 physicalver2				
SYSTEM-MANAGED PROCESS LEVEL:	processlevel				
XCF GRPNAME:	xcfgpname				
DISPOSITION:	disp				
ACCESS TIME:	accesstime				
NUMBER OF RECORD DATA LISTS PER CONNECTION:	rdatalistspercon				
MAX CONNECTIONS:	maxconns				
# CONNECTIONS:	conns				
STR ALLOW RATIO:	strratio				
STR ALTER STATE:	alterstate				
STR MINENTRY:	strminentry				
STR MINELEMENT:	strminelement				
STR MINEMC:	strminemc				
COMPLETED USYNC:	usynccompleted				
EVENT:					
COMPLETED USYNC	completedcode				
COMP CODE:					
COMPLETED USYNC	completedinfo				
STATE :					
NEXT USYNC EVENT:	usyncnext				
NEXT USYNC	nextcompcode				
COMP CODE :					
NEXT USYNC STATE	usyncnextinfo				
CONNECTION ID(S) OWNING A RESPONSE FOR THIS CONNECTION					
connectionids					
* ASTERISK DENOTES	asterisk				
& AMPERAND DENOTES	CONNECTOR WHO LOST CONNECTIVITY TO STRUCTURE				
CONNECTION NAME ID	VERSION	SYSNAME	JOBNAME	ASID	STATE
-----	-----	-----	-----	-----	-----
connection-name id	version	sysname	jobname	asid	constate
CONNECTION NAME:	connection-name				
ID:	id				
VERSION:	version				
CONNECT DATA:	condata				
DISCONNECT DATA:	discdata				
SYSNAME:	connssysname				
JOBNAME:	jobname				
ASID:	asid				
STATE:	constate				
CONNECTOR HAS LOST PHYSICAL CONNECTIVITY	additionalinfo				
moreinfo					
REBUILD WAIT:	rebldwait				
CONNECT LEVEL:	connect-level1	connect-level2			
INFO LEVEL:	info-level				
CLEVEL REQ:	clevel				
NONVOLATILE REQ:	nonvolrequest				
CONDISP:	condisp				
ALLOW REBUILD:	allowrebl				
ALLOW DUPREBUILD:	allowduprebl				
ALLOW AUTO:	allowauto				
SUSPEND:	autosuspend				
ALLOW ALTER:	allowalter				
USER ALLOW RATION:	usrratio				
USERMINENTRY:	userminentry				
UNSERMINELEMENT:	userminelement				
UNSERMINEMC:	userminemc				
USYNC WAIT:	usyncwait				
[THE CFRM ACTIVE POLICY IS EMPTY]					
[NO STRUCTURES MATCH THE SPECIFIED CRITERIA]					
[STRUCTURE NAMES REQUESTED BUT NOT SHOWN ARE NOT DEFINED]					
[EVENT MANAGEMENT: evtmgmt]					

```
[CONNECTION NAMES REQUESTED BUT NOT SHOWN ARE NOT DEFINED]
[SYSTEM-MANAGED PROCESS STATE INFORMATION NOT AVAILABLE FOR THIS SYSTEM]

SYSTEM NAME   SYSTEM TOKEN   SYSTEM-MANAGED PROCESS STATE   COPY ID
-----        -----          -----          -----
sysname      systoken       processstate      processcopyid

[DIAGNOSTIC INFORMATION: STRNUM: strnum  STRSEQ: strseq]
[           MANAGER SYSTEM ID: mgrsysid]

[NAME/MGR   #QUEUED  1STQESN  LASTQESN  CMPESN  NOTIFYESN]
-----        -----      -----      -----      -----      -----
sysnameormgr #queued   hESN     tESN      dESN     nESN
```

| A DISPLAY XCF,STRUCTURE command was entered
| to display detailed information about the structures
| defined in the CFRM active policy in use by this
| sysplex. The system will repeat the message text to
| report all requested structures. The status of a single
| structure may also extend to several message lines.
| Additionally, a message will be displayed to provide the
| CFRM event management protocol in use by this
| sysplex.

For structures that are not allocated, deallocation pending, rebuild old, or in transition, some of the lines displayed in the general case are not applicable, and will not be displayed.

For structures that are rebuilding or rebuild stopping, information will be displayed for both the rebuild new and rebuild old structures, if the rebuild new structure has been allocated.

If no structures are displayed, then one of the trailer messages shown above will be displayed instead to explain the absence of structures.

If the CFRM Couple Data Set needs to be reformatted, then a message will be displayed before any structures are listed. This message will specify the minimum numbers to be used in reformatting the data set.

If the REALLOCATE process has been initiated, then a message is displayed before any structures are listed. This message indicates the current state of the REALLOCATE process. The REALLOCATE process is in progress if a SETXCF START,REALLOCATE operator command has been issued. The REALLOCATE process is stopping if a SETXCF STOP,REALLOCATE operator command has been issued. Once started, the REALLOCATE process evaluates each allocated structure to determine the need for activation of a pending policy and/or location adjustment of instance(s) allocated in CF(s). REALLOCATE processing ends either when all allocated structures have been evaluated with appropriate action taken or when the REALLOCATE process was stopped and relocation steps for the current target structure have finished.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY XCF command.

str#

The STR number to be used in reformatting the CFRM Couple Data Set. If the current number is adequate, then this line will not be displayed.

conn#

The CONNECT number to be used in reformatting the CFRM Couple Data Set. If the current number is adequate, then this line will not be displayed.

totalstr

The total number of structures that should be deleted from the CFRM active policy.

THE REALLOCATE PROCESS IS IN PROGRESS.

The REALLOCATE process is initiated by the SETXCF START,REALLOCATE operator command. Once started, the REALLOCATE process examines each allocated structure to determine whether the location of any instance needs to be adjusted and/or a pending policy activated. The evaluation process uses the XCF allocation algorithm which factors in the CFRM active policy information and current set of active connections to make the determination.

THE REALLOCATE PROCESS IS STOPPING.

The REALLOCATE process is stopped by the SETXCF STOP,REALLOCATE operator command. Once stopped, the structure, which is the current target of the REALLOCATE process, will complete the relocation steps prior to ending the REALLOCATE process.

structure-name

The name of a structure.

status

One or more of the following:

ALLOCATED

The structure is allocated in a coupling facility.

NOT ALLOCATED

The structure is not allocated.

REASON SPECIFIED WITH REBUILD START:

Possible reasons structure rebuild has been initiated are:

STRUCTURE FAILURE

The user who initiated the rebuild has indicated that the structure should be rebuilt because structure failure has occurred. Note that structure failure may or may not have occurred. Rebuild processing does NOT verify the reason indicated by the user.

CONNECTIVITY LOST TO STRUCTURE

The user who initiated the rebuild has indicated that the structure should be rebuilt because loss of connectivity has occurred. Note that loss of connectivity may or may not have occurred. Rebuild processing does

NOT verify the reason indicated by the user. If rebuild was initiated by the system based on the CFRM administrative policy, the following additional text also appears:

- **REBUILD LOSSCONN PERCENTAGE:** *pctlossconn* - where *pctlossconn* is the percentage loss of connectivity which caused the system to initiate a rebuild for the structure.

OPERATOR INITIATED

The user who initiated the rebuild or rebuild stop has indicated that he is the operator. Note that the user who initiated the rebuild / rebuild stop may or may not be the operator. Rebuild processing does NOT verify the reason indicated by the user.

POLICY-INITIATED

A duplexing rebuild has been initiated by the system based on the contents of the CFRM administrative policy.

CONNECTOR REASON: *user reason*

A connector-initiated rebuild, and supplied reason *user reason*.

REASON SPECIFIED WITH REBUILD STOP:

Possible reasons structure rebuild has been stopped are:

OLD STRUCTURE FAILURE

The user who initiated the rebuild stop has indicated that the rebuild should be stopped because the old structure has failed. Note that the old structure may or may not have failed. Rebuild processing does NOT verify the reason indicated by the user.

CONNECTIVITY LOST TO OLD STRUCTURE

The user who initiated the rebuild stop has indicated that the rebuild should be stopped because connectivity to the old structure has been lost. Note that loss of connectivity may or may not have occurred. Rebuild processing does NOT verify the reason indicated by the user.

CONNECTIVITY LOST TO NEW STRUCTURE

The user who initiated the rebuild stop has indicated that the rebuild should be stopped because connectivity to the new structure has been lost. Note that loss of connectivity may or may not have occurred. Rebuild processing does NOT verify the reason indicated by the user.

OPERATOR INITIATED

The user who initiated the rebuild or rebuild stop has indicated that he is the operator. Note that the user who initiated the rebuild / rebuild stop may or may not be the operator. Rebuild processing does NOT verify the reason indicated by the user.

CONNECTOR REASON: *user reason*

A connector initiated rebuild stop, and supplied reason *user reason*.

XES INITIATED REBUILD STOP:

XES has stopped the structure rebuild for the following reason:

NEW STRUCTURE FAILED

The new structure has failed.

NO COUPLING FACILITY PROVIDED BETTER CONNECTIVITY

No other coupling facility has better connectivity than the current one. The rebuild, which was initiated due to a loss of connectivity, would cause a further degradation in connectivity if accepted.

NO COUPLING FACILITY PROVIDED BETTER OR EQUIVALENT CONNECTIVITY

No other coupling facility has better or equivalent connectivity than the current one. The rebuild would cause a degradation in connectivity as determined by SFM system weights, if accepted.

INSUFFICIENT CONNECTIVITY DUE TO CHANGE IN THE SET OF CONNECTORS

A duplexing rebuild was stopped because a connector did not have connectivity to the new structure instance.

POLICY-INITIATED

A duplexing rebuild has been stopped by the system based on the contents of the CFRM administrative policy.

CONNECTIVITY LOST TO STRUCTURE

During a system-managed rebuild, one of more connectors lost connectivity to the coupling facility containing the old or the new structure.

FAILURE OF A SYSTEM-MANAGED PROCESS PHASE

During a system-managed process, a phase was unsuccessful. When the system-managed process was stopped, message IXC522I was issued and supplied a *SYSTEM CODE*. The *SYSTEM CODE* is an

internal value indicating the reason for the stop, and is diagnostic data provided to help IBM service personnel with problem determination. Message IXC573I may have been issued to the hardcopy log to provide additional information.

DUMP SERIALIZATION HELD ON STRUCTURE

During a system-managed process, dump serialization prevented access to either the old or the new instance of the structure.

FAILURE OF A DUPLEXED REQUEST

During a system-managed duplexing rebuild, a duplexed request failed. When the system-managed process was stopped, message IXC522I was issued and supplied a *SYSTEM CODE*. The *SYSTEM CODE* is an internal value indicating the reason for the stop, and is diagnostic data provided to help IBM personnel with problem determination.

DETECTION OF A DUPLEX OUT OF SYNCH CONDITION

During a system-managed duplexing rebuild, a duplex out of synch condition was detected. The condition is detected by a duplexed request issued during the duplex established phase of a system-managed duplexing rebuild. When the system-managed process was stopped, message IXC522I was issued and supplied a *SYSTEM CODE*. The *SYSTEM CODE* is an internal value indicating the reason for the stop, and is diagnostic data provided to help IBM personnel with problem determination.

POLICY CHANGE PENDING — CHANGE

There is an administrative policy change pending for this structure. The pending change is to change the policy definition for the structure. Each policy item that has a different value in the pending policy compared to the active policy will be highlighted in the PENDING POLICY INFORMATION section of the display. Note that there is a period of time during a structure rebuild process where the pending policy information has already been copied over into the active policy, and yet the structure is still marked as policy change pending. In such cases, the PENDING POLICY INFORMATION section of the display will not be provided, since no policy items differ between the active and pending policies at that time.

POLICY CHANGE PENDING - DELETE

There is an administrative policy change pending. The pending policy change is to delete the policy definition for the structure.

STRUCTURE NOT DEFINED IN POLICY

The structure is not defined in the active policy and therefore cannot be connected to. This scenario can only occur when all instances of the structure are either deallocation pending or in transition.

FAILED-PERSISTENT CONNECTIONS UNAVAILABLE DUE TO LARGER CFRM COUPLE DATA SET REQUIRED

The CFRM Couple Data Set must be reformatted to correct this unavailability.

ALTER IN PROGRESS

Structure alter has been initiated. The message text indicates how the alter was initiated:

OPERATOR INITIATED

The operator has initiated structure alter via a SETXCF START,ALTER command.

PROGRAM INITIATED

A program initiated structure alter via an IXLALTER REQUEST=START invocation.

SYSTEM INITIATED

The system initiated structure alter. A system-initiated alter (automatic alter) for an eligible structure will begin when structure full monitoring determines that a structure contains monitored objects that are at or above the structure full threshold specified in the policy by FULLTHRESHOLD. ALLOWAUTOALT(YES) is specified in the policy.

The message text indicates the target values specified when the alter was initiated.

TARGET SIZE: *targetsize K*

The target size for the structure alter, expressed in K. The size was specified either by a program or by the operator, or by the system.

TARGET RATIO: *targetratio*

The target ratio in form entry:element when the entry-to-element ratio is changing. The ratio was specified by a program or by the system.

TARGET EMC STORAGE PERCENT:

targetEMCpct

The EMC storage target as a percentage of total structure storage when the EMC

	<p>storage percent is changing. The percentage was specified by a program or by the system.</p>		DUPLEXING REBUILD SWITCHING
	<p>POPULATECF REBUILD PENDING FOR <i>cfname</i></p> <p>The structure is pending rebuild for the current PopulateCF rebuild. <i>cfname</i> is the name of the coupling facility specified for the PopulateCF rebuild request.</p>		<p>The structure rebuild process type is duplexing rebuild. The process is being stopped to switch to the new structure.</p>
	<p>POPULATECF REBUILD IN PROGRESS FOR <i>cfname</i></p> <p>The structure is being rebuilt for the current PopulateCF rebuild. <i>cfname</i> is the name of the coupling facility specified for the PopulateCF rebuild request.</p>		<p>METHOD: <i>method</i></p> <p>The method used to manage the current process (for example, rebuilding, rebuild stopping, or duplexing rebuild) is one of the following:</p>
	<p>STRUCTURE CLEANUP IN PROGRESS</p> <p>A lock structure is being cleared of residual information.</p>		<p>SYSTEM-MANAGED</p> <p>The system is managing the process.</p>
	<p>REALLOCATE EVALUATION PENDING</p> <p>The allocated structure is pending evaluation of its current location. The REALLOCATE process initiated by the SETXCF START,REALLOCATE operator command examines each allocated structure to determine whether the location of any of the instance(s) needs to be adjusted and/or a pending policy activated. The evaluation process uses the XCF allocation algorithm, which factors in the CFRM active policy information and current set of connections, to make the determination.</p>		<p>AUTO VERSION: <i>procid1 procid2</i></p> <p>The version number of the system-managed process. Used to correlate messages and XCF component trace records associated with the current system-managed process. Where <i>procid1</i> is the first half of the auto version and <i>procid2</i> is the second half.</p>
	<p>TARGET OF REALLOCATE PROCESS</p> <p>The structure was selected by the REALLOCATE process to have its location adjusted and/or pending policy activated. The REALLOCATE process was initiated by the SETXCF START,REALLOCATE operator command. Once marked as the target of the REALLOCATE process, the structure remains the target until one of the following occurs:</p> <ul style="list-style-type: none"> • The REALLOCATE process evaluates the next structure or completes. • The structure is reduplicated, deallocated, or forced. 		<p>USER-MANAGED</p> <p>The connected users are managing the process.</p>
	<p>REBUILDING</p> <p>The structure rebuild process type is rebuild.</p>		<p>PHASE: <i>phase</i></p> <p>The phase of the current process (for example, rebuilding, rebuild stopping, or duplexing rebuild) is one of the following:</p>
	<p>REBUILD STOPPING</p> <p>The structure rebuild process type is rebuild. The process is being stopped.</p>		<p>WAITING FOR QUIESCE</p> <p>The structure rebuild process is in the quiesce phase.</p>
	<p>DUPLEXING REBUILD</p> <p>The structure rebuild process type is duplexing rebuild.</p>		<p>WAITING FOR COMPLETE</p> <p>The structure rebuild process is in the complete phase.</p>
	<p>DUPLEXING REBUILD STOPPING</p> <p>The structure rebuild process type is duplexing rebuild. The process is being stopped to fall back to the old structure.</p>		<p>WAITING FOR CLEANUP</p> <p>The structure rebuild process is in the cleanup phase.</p>
			<p>DUPLEX STARTUP</p> <p>The structure rebuild process is in the startup phase.</p>
			<p>DUPLEX ESTABLISHED</p> <p>The structure rebuild process is in the duplex established phase.</p>
			<p>DUPLEX SWITCHING</p> <p>The structure rebuild process is in the duplex switching phase.</p>
			<p>STARTUP</p> <p>The structure rebuild process is in the startup phase.</p>
			<p>ALLOCATE</p> <p>The structure rebuild process is in the allocate phase.</p>

ATTACH	The structure rebuild process is in the attach phase.	STOP	The structure rebuild process is in the stop phase.
COPY	The structure rebuild process is in the copy phase. This line is followed by additional text:	EVENT MANAGEMENT:	The CFRM event management protocol according to the CFRM active policy. Except for XCF signaling structures, message-based processing can be used for any allocated structure. When the CFRM event management protocol is message-based, message-based processing is enabled for an allocated structure during event processing. When the CFRM event management protocol is policy-based, event processing is policy-based for all allocated structures.
COPY SUBPHASE: <i>subphase</i>	where subphase is one of the following:		
INITIALIZATION	Phase initialization.		
ATTACH	Connection of users to the new instance of the structure.	strem	One of the following:
EXIT	Phase completion	POLICY-BASED	Event management for an allocated structure is controlled on each system having a structure connection and the CFRM active policy is accessed to obtain event data.
CASTOUT CLASS	Copying cache structure directory entries.	MESSAGE-BASED	Event management for the allocated structure is controlled by an event manager system using messages sent by XCF to provide event data and to communicate among the system(s). The manager system updates the CFRM active policy once all participant system(s) distribute the event to active connections.
WRITE WITH CASTOUT	Copying cache structure directory entries.	TYPE:	When the allocated instance displayed is ACTIVE, REBUILD OLD/NEW, or DUPLEXING REBUILD OLD/NEW, the structure type is from the CFRM active policy.
STORAGE CLASS REGISTRATION	Copying cache structure storage class directory entry registration information.	strtype	One of the following:
STORAGE CLASS COUNTERS	Copying cache structure storage class statistical information.	LOCK	The structure type is a lock.
LIST	Copying list or lock structure data.	SERIALIZED LIST	The structure type is a serialized list.
LOCK	Copying lock data for a list or lock structure.	LIST	The structure type is a list.
LOCK CLEANUP	Copying lock data for a list or lock structure.	CACHE	The structure type is cache.
EVENT QUEUE	Copying list structure event monitoring event queue data.	polcysize	The size of the structure as specified in the active policy, expressed in K.
NOT AVAILABLE	Subphase information not available.	policyinitsize	The INITSIZE for the structure as specified in the policy, expressed in K. If no INITSIZE was specified in the policy, then N/A will be displayed.
UNKNOWN	Unknown subphase.	polcyminsize	The MINSIZE for the structure as specified or defaulted to in the policy, expressed in K.
COPY STOP	The structure rebuild process is in the copy stop phase.		
QUIESCE FOR STOP	The structure rebuild process is in the quiesce for stop phase.		

fullthreshold

The FULLTHRESHOLD for the structure as specified or defaulted to in the policy, expressed as a percentage.

allowautoalt

One of the following:

- | **YES** System-initiated alter (automatic alter) of the structure is allowed. For structure alter processing to be started for the structure, connections must also allow alter.
- | **NO** System-initiated alter (automatic alter) of the structure is not allowed.

rebuildpercent

The REBUILDPERCENT for the structure as specified in the policy. If no REBUILDPERCENT was specified in the policy, then N/A will be displayed.

duplexstatus

One of the following:

ENABLED

The CFRM administrative policy specifies DUPLEX(ENABLED) for this structure.

ALLOWED

The CFRM administrative policy specifies DUPLEX(ALLOWED) for this structure.

DISABLED

The CFRM administrative policy specifies or defaults to DUPLEX(DISABLED) for this structure.

pref-cf

The name of a coupling facility in the preference list. The coupling facility names are listed in order of preference (most preferred first). Additional lines may be used to list more names. If the list is empty, the message PREFERENCE LIST IS EMPTY will be displayed instead.

enforceorder

One of the following:

- | **YES** The order of the preference list is to be enforced.
- | **NO** The system may reorder the preference list.

excl-str

The name of a structure in the exclusion list. Additional lines may be used to list more names. If the list is empty, the message EXCLUSION LIST IS EMPTY will be displayed instead.

Header

One of the following:

ACTIVE STRUCTURE

The structure is active.

REBUILD NEW STRUCTURE

The structure is being rebuilt. This is the rebuild new structure.

REBUILD OLD STRUCTURE

The structure is being rebuilt. This is the rebuild old structure.

STRUCTURE PENDING DEALLOCATION

Deallocation is pending for this structure. The structure deallocation may remain pending if the coupling facility containing the structure is not connected to any system. Use the DISPLAY XCF,CF or DISPLAY CF command to show the connectivity status of the coupling facility.

STRUCTURE IN TRANSITION

The structure is either being allocated in a coupling facility or deallocated from a coupling facility. The structure deallocation may remain pending if the coupling facility containing the structure is not connected to any system. Use the DISPLAY XCF,CF or DISPLAY CF command to show the connectivity status of the coupling facility.

DUPLEXING REBUILD NEW STRUCTURE

The structure is undergoing a duplexing rebuild. This is the rebuild new structure.

DUPLEXING REBUILD OLD STRUCTURE

The structure is undergoing a duplexing rebuild. This is the rebuild old structure.

pendrsn

One of the following:

DEALLOCATING SYSTEM LOST CONNECTIVITY

Deallocation is pending for this structure and cannot complete due to a loss of connectivity.

STRUCTURE DUMP EXISTS WITH STRUCTURE DUMP ID nnnn

Deallocation is pending for this structure and cannot complete due to the existence of a structure dump. The structure dump id *nnnn* is given for use in the SETXCF FORCE,STRDUMP command.

REASON IN TRANSITION: CONNECT OR DISCONNECT IN PROGRESS

The structure is either being allocated in a coupling facility or being deallocated in a coupling facility.

STRUCTURE DUMP EXISTS WITH STRUCTURE DUMP ID

There is a structure dump associated with this structure, and the structure dump ID is given for use in the SETXCF FORCE,STRDUMP command.

dumpid

There is a structure dump associated with this

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structure, and the structure dump id is given for use in the SETXCF FORCE,STRDUMP command.

STRUCTURE FAILED

The structure has failed.

mm/dd/yyyy

The date when the structure was allocated. The date is in months (01-12), days (01-31), and years. If the structure is not allocated, dashes are displayed instead.

hh:mm:ss

The time when the structure was allocated. The time is in hours (00-23), minutes (00-59), and seconds (00-59). This is used to guarantee structure uniqueness. If the structure is not allocated, dashes are displayed instead.

cfname

Name of coupling facility in which the structure is allocated in. This name is from the CFRM active policy. If the structure is not allocated, this line is not displayed.

NO SYSTEMS CONNECTED TO COUPLING

FACILITY

No systems have connectivity to this coupling facility.

COUPLING FACILITY:

The coupling facility which this system is able to use is identified by the node descriptor. See mapping IXLYNDE. The format xxxxxx.xxx.xxxxxxxxxxxxxx gives the type, manufacturer ID, manufacturer plant ID, and sequence number.

type

Node type (See ndetype in IXLYNDE).

mfg

Node manufacturer ID (See ndemfg in IXLYNDE).

plant

Node manufacturer plant ID (See ndeplant in IXLYNDE).

sequence

Node sequence number (See ndesequence in IXLYNDE).

partition

Node LPAR partition number (See ndepartition in IXLYNDE).

side

The node PP/SI mode indicator and configuration code from the IXLYNDE are used to determine the value for *side*. Side is one of the following:

- **SIDE: 0** - The coupling facility is on SIDE 0 of a partitionable CPC.
- **SIDE: 1** - The coupling facility is on SIDE 1 of a partitionable CPC.
- blank means the coupling facility is in a non-partitionable CPC.

cpcid

Node Central Processor Complex (CPC) ID.

actualsize

The actual size of the structure, if available. This size will be expressed in K. If the actual size is not available, N/A will be displayed.

stgincrement

Storage increment size for this facility, if available. This size will be expressed in K. If the storage increment size is not available, N/A will be displayed.

inuseentrycnt

The in-use number of entries. For a cache structure, this is the count of in-use changed or locked-for-castout entries.

totalentrycnt

The total number of entries.

pctfull

The percentage full value.

inuseelementcnt

The in-use number of elements. For a cache structure, this is the count of in-use changed or locked-for-castout elements.

totalelementcnt

The total number of elements.

inuseemccnt

The in-use number of EMCs.

totalemccnt

The total number of EMCs.

totallockcnt

The total number of lockentries.

LOGICAL VERSION

Logical structure version number that is used for diagnostic purposes.

logicalver1

First half of the logical structure version number.

logicalver2

Second half of the logical structure version number.

PHYSICAL VERSION

Physical version for the structure. Changes when a new instance of the structure is allocated, as in a user-managed or system-managed rebuild, and there is at least one active connector to observe the allocation.

physicalver1

First half of the physical structure version number.

physicalver2

Second half of the physical structure version number.

processlevel

The level of support required by this structure in order to participate in a system-managed process

(for example, rebuild). Certain phases of system-managed processes (for example, allocation and copy processing) can only occur on systems that support a system-managed process level greater than or equal to the level specified here. The DISPLAY XCF,COUPLE command (message IXC357I) displays the level of support provided by a given system.

processlevel will appear as NOT APPLICABLE if any of the following are true:

- The structure resides in a coupling facility of CFLEVEL less than 8. The CFLEVEL can be determined by issuing the DISPLAY CF command for the coupling facility named on the CFNAME line.
- The structure is a list structure used for XCF signalling.
- The structure is a list structure or a lock structure with record data, and was allowed by a system at a release that does not support system-managed processes.

processlevel will appear as NOT AVAILABLE if the system is unable to access the necessary information.

xcfgrpname

The XCF groupname associated with a serialized list or lock structure.

disp

One of the following:

KEEP

The structure disposition is Keep.

DELETE

The structure disposition is Delete.

accesstime

The length of time that the connector can tolerate not having access to the structure. Access will be denied to connectors when SVC Dump obtains serialization in order to dump data in the structure. The access time is defined by the connector which allocates the structure, and will either be in decimal tenths of seconds, or will be NOLIMIT (indicating that serialization may be held for as long as is required to capture all data requested).

NUMBER OF RECORD DATA LISTS PER CONNECTION

The number of lists per connection for a lock structure with record data. This line is displayed only for a lock structure with record data, which was allocated to support more than one record data list per connection.

rdatalistspercon

The number of lists per connection for this structure.

maxconn

The maximum number of connections for this structure.

conn

The current number of connections for this structure.

strratio

STR ALLOW RATIO will only be displayed when structure alter is in progress. *strratio* is one of the following:

YES

The current set of connectors have indicated that they will permit changes to the entry-to-element ratio.

NO

The current set of connectors have indicated that they will not permit changes to the entry-to-element ratio.

alterstate

One of the following:

IN PROGRESS

This instance of the duplexed structure is currently being altered.

DEFERRED

The alter of this instance of the duplexed structure is deferred, waiting for the alter of the other instance to complete.

strminentry

Maximum for all connections of the connector-specified percentage of currently in-use list or currently in-use-and-changed cache entries that must be available for use at the end of structure alter processing. STR MINENTRY will only be displayed when structure alter is in progress.

strminelement

Maximum for all connections of the connector-specified percentage of currently in-use list or currently in-use-and-changed cache elements that must be available for use at the end of structure alter processing. STR MINELEMENT will only be displayed when structure alter is in progress.

strminemc

Maximum for all connections of the connector-specified percentage of structure storage to be used as Event Monitor Controls that must be available for use at the end of structure alter processing. STR MINEMC will only be displayed when structure alter is in progress.

usynccompleted

Completed user synch point event. Will only be displayed if USYNC processing has been invoked for this structure and has completed.

completedcode

Completed user synch point completion code. Will only be displayed if USYNC processing has been invoked for this structure and has completed.

completedinfo

Completed user synch point user state information. Will only be displayed if USYNC processing has been invoked for this structure and has completed.

usyncnext

Next user synch point event. Will only be displayed if USYNC has been invoked for this structure.

nextcompcode

Next user synch point completion code. Will only be displayed if USYNC processing has been invoked for this structure and has completed.

usyncnextinfo

Next user synch point user state information. Will only be displayed if USYNC processing has been invoked for this structure.

connectionids

Connection ID(s) of users who have not yet provided an event exit response (confirmation) for this disconnecting or failing connector. This connector will remain in the disconnecting or failing state until such responses are received from all connectors that owe them.

asterisk

One of the following:

CONNECTOR WITH OUTSTANDING REBUILD RESPONSE

Rebuild processing is waiting for a response from this connector.

OUTSTANDING REBUILD PROCESSING FOR CONNECTOR

A system-managed rebuild is waiting for a response from the system on behalf of the connector.

connection-name

The name of a connection. The system will repeat the connection message text to report all connections. If there are no connections, then no connection table will be displayed.

id The connection identifier.

version

The connection version number.

connsysname

The name of the system owning the connection.

jobname

The name of the job owning the connection.

asid

The identifier of the address space owning the connection.

constate

One of the following:

FAILED-PERSISTENT

The connection is in the failed-persistent state.

DISCONNECTING

The connection is in the process of disconnecting.

FAILING

The connection is in the process of abnormally ending.

ACTIVE

This connection is in the active state.

ACTIVE &

This connection is in the active state but this connector has physically lost connectivity to the structure.

ACTIVE OLD

The structure is being rebuilt. This connector is connected to the old structure.

ACTIVE &OLD

The structure is being rebuilt. This connector has connected to the old structure but has physically lost connectivity to the structure.

ACTIVE NEW,OLD

The structure is being rebuilt. This connector is connected to both the old structure and the new structure.

ACTIVE NEW,&OLD

The structure is being rebuilt. This connector has connected to both the old structure and the new structure but has physically lost connectivity to the old structure.

ACTIVE &NEW,OLD

The structure is being rebuilt. This connector has connected to both the old structure and the new structure but has physically lost connectivity to the new structure.

ACTIVE &NEW,&OLD

The structure is being rebuilt. This connector has connected to both the old structure and the new structure but has physically lost connectivity to both structures.

REBUILD ACTIVE OLD

The structure is being rebuilt. This connector is connected to the rebuild old structure.

REBUILD ACTIVE NEW

The structure is being rebuilt. This connector is connected to the rebuild new structure.

DUPLEX REBUILD ACTIVE OLD

The structure is in a duplexing rebuild. This connector is connected to the duplexing rebuild old structure.

DUPLEX REBUILD ACTIVE NEW	<i>cflevel</i> Requested coupling facility level.
The structure is in a duplexing rebuild. This connector is connected to the rebuild new structure.	
<i>condata</i>	
Data that is specified by the connector and is provided to the connection's exits.	
<i>discdata</i>	
Data that is specified by the connector and is provided to the connection's exits.	
<i>additionalinfo</i>	
One of the following:	
TO STRUCTURE	
The connector has lost physical connectivity to the structure.	
TO NEW STRUCTURE	
The connector has lost physical connectivity to the rebuild new structure.	
TO OLD STRUCTURE	
The connector has lost physical connectivity to the rebuild old structure.	
<i>moreinfo</i>	
One of the following:	
FAILURE ISOLATED FROM CF	
The system from which this user has connected is failure isolated from this structure.	
NOT FAILURE ISOLATED FROM CF	
The system from which this user has connected is not failure isolated from this structure.	
<i>rebldwait</i>	
REBUILD WAIT will only be displayed when structure rebuild is in progress. <i>rebldwait</i> is one of the following:	
YES - USER	
Rebuild processing is waiting on this connector for a response.	
NO	
This connector has already responded to the current rebuild event.	
YES - SYSTEM	
Rebuild processing is waiting for the system to respond on behalf of this connector.	
<i>connect-level1</i>	
First half of user-specified connection version/release level.	
<i>connect-level2</i>	
Second half of user-specified connection version/release level.	
<i>info-level</i>	
Level of information returned for the connection.	
<i>allowreblid</i>	
One of the following:	
YES	User connected with NONVOLREQ=YES.
NO	User connected with NONVOLREQ=NO.
<i>condisp</i>	
One of the following:	
KEEP	User connected with CONDISP=KEEP.
DELETE	User connected with CONDISP=DELETE.
<i>allowduplicbld</i>	
One of the following:	
YES	Connector specified or defaulted to ALLOWREBUILD=YES
NO	Connector specified ALLOWREBUILD=NO
<i>allowduplicbld</i>	
One of the following:	
YES	Connector specified ALLOWDUPREBLD=YES.
NO	Connector specified or defaulted to ALLOWDUPREBLD=NO.
<i>allowauto</i>	
One of the following:	
YES	Connector specified ALLOWAUTO=YES.
NO	Connector specified or defaulted to ALLOWAUTO=NO.
<i>autosuspend</i>	
One of the following:	
YES	User connected with ALLOWAUTO=YES and SUSPEND=YES.
NO	User connected with ALLOWAUTO=YES and SUSPEND=NO.
FAIL	User connected with ALLOWAUTO=YES and SUSPEND=FAIL.
<i>allowwalter</i>	
One of the following:	

YES	Connector has indicated that it can support structure alter being initiated against this structure.	the CFRM event management protocol is policy-based, event processing is policy-based for all allocated structures.
NO	Connector has indicated that it cannot support structure alter being initiated against this structure.	POLICY-BASED For the sysplex, event management for an allocated structure is controlled on each system having a structure connection and the CFRM active policy is accessed to obtain event data.
<i>userratio</i>	USER ALLOW RATIO will only be displayed when the connector permits structure alter. <i>userratio</i> is one of the following:	MESSAGE-BASED MANAGER SYSTEM NAME: <i>mgrsysname</i> For the sysplex, allocated structures enabled for message-based processing have event processing managed by an event manager system using message sent by XCF signaling for communication with the participant system(s). The manager system updates the CFRM active policy once all participant system(s) distribute the event to active connections.
YES	Connector has indicated that it permits changes to the entry-to-element ratio.	
NO	Connector has indicated that it does NOT permit changes to the entry-to-element ratio.	
<i>userminentry</i>	Connector-specified percentage of currently in-use list or currently in-use-and-changed cache entries that must be available for use at the end of structure alter processing. USER MINENTRY will only be displayed when the connector permits structure alter.	The event manager system is identified by <i>mgrsysname</i> .
<i>userminelement</i>	Connector-specified percentage of currently in-use list or currently in-use-and-changed cache elements that must be available for use at the end of structure alter processing. USER MINELEMENT will only be displayed when the connector permits structure alter.	MESSAGE-BASED TRANSITIONING TO NEW MANAGER For the sysplex, allocated structures enabled for message-based processing have event processing managed by an event manager system but the sysplex is transitioning to a new manager system. Once the new manager system is assigned, the name of the event manager system can be displayed. The sysplex changes to a new manager system as the result of removing the prior manager system from the sysplex.
<i>userminemc</i>	Connector-specified percentage of currently in-use event monitor control storage that must be available for use at the end of structure alter processing. USER MINEMC will only be displayed when the connector permits structure alter.	<i>mgrsysname</i> When event processing is policy-based, no system name is displayed. When event processing is message-based, the message-based manager system name (<i>mgrsysname</i>) is displayed. When transitioning to a new manager system, no system name is displayed.
<i>usyncwait</i>	USYNC WAIT will only be displayed when USYNC is in progress. <i>usyncwait</i> is one of the following:	SYSTEM-MANAGED PROCESS STATE The specified structure is undergoing a system-managed process (for example, rebuild). The current process phase is being coordinated by the listed systems on behalf of the connected users.
YES	USYNC processing is waiting on this connector for a response.	
NO	This connector has already responded to the current USYNC event.	
<i>evtmgmt</i>	The CFRM event management protocol according to the CFRM active policy. Except for XCF signaling structures, message-based processing can be used for any allocated structure. When the CFRM event management protocol is message-based, message-based processing is enabled for an allocated structure during event processing. When	<i>sysname</i> The name of the system participating in the system-managed process. <i>systoken</i> The token of the system participating in the system-managed process. <i>processstate</i> One of the following:

ALLOCATING

The system is in the process of allocating the new structure during the allocate phase of a system-managed process (for example, rebuild).

ATTACHING

The system is in the process of attaching connectors to the new structure during the attach phase of a system-managed process (for example, rebuild).

ATTACHED

The system has successfully attached connectors to the new structure during the attach phase of a system-managed process (for example, rebuild).

COPY WORKING

The system is participating in the copy phase of a system-managed process (for example, rebuild).

COPY WAITING

The system is waiting for working systems to complete the copy phase of a system-managed process (for example, rebuild).

COPY FAILED

The system was participating in the copy phase of a system-managed process (for example, rebuild), but has failed.

COPY STOPPING

The system is waiting for working systems to complete the copy phase of a system-managed process (for example, rebuild), but is now stopping.

COPY STOPPED

The system was participating in the copy phase of a system-managed process (for example, rebuild), but has stopped.

processcopyid

Identifier assigned to this system while participating in the copy phase of a system-managed process. Applicable only when the phase is COPY or COPY STOP.

DIAGNOSTIC INFORMATION

The diagnostic data is provided to help IBM service personnel with problem determination.

strnum

The number associated with the structure in the CFRM active policy.

strseq

The sequence number for the allocated structure from the CFRM active policy.

mgrsysid

The system slot and sequence number of the event manager system as viewed by this

system only. A value of zero indicates that this system is using policy-based event management.

sysnameormgr

The name of the system for participant data or "MGR SYS" indicating event manager data. Data is only displayed for allocated structures. "MGR SYS" data is only displayed when the command is issued on the event manager system.

#queued

The number of events queued. It is a substantially correct count of current number of events on the queue.

hESN

Event sequence number of first event on the queue.

tESN

Event sequence number of last event on the queue.

dESN

Discard event sequence number.

nESN

Notify event sequence number.

System action: The system continues processing.

Operator response: Not applicable.

System programmer response: Not applicable.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1DCP, IXCO1DC2, IXCO1DC3

Routing Code: #

Descriptor Code: 5,8,9

IXC361I hh.mm.ss DISPLAY XCF**Explanation:**

[LARGER CFRM COUPLE DATA SET REQUIRED. FORMAT A NEW CFRM USING AT LEAST THE FOLLOWING:
ITEM NAME(STR) NUMBER(str#)
ITEM NAME(CONNECT) NUMBER(conn#)]

[THE COUPLE DATA SET FOR CFRM SUPPORTS THE MAXIMUM NUMBER OF STR RECORDS. totalstr STRUCTURE(S) MUST BE DELETED FROM THE POLICY TO ACCOMMODATE STRUCTURES ALLOCATED IN THE COUPLING FACILITY.]

[totalstr STRUCTURE(S) MUST ALSO BE DELETED FROM THE POLICY TO ACCOMMODATE STRUCTURES ALLOCATED IN THE COUPLING FACILITY.]

[THE REALLOCATE PROCESS IS IN PROGRESS.]

[THE REALLOCATE PROCESS IS STOPPING.]

CFNAME COUPLING FACILITY SITE

cfname type.mfg.plant.sequence sitename [- RECOVERY SITE]

PARTITION: *partition* **SIDE:** *side* **CPCID:** *cpcid*

[POLICY CHANGE PENDING - DELETE]
 [COUPLING FACILITY FAILED]
 [COUPLING FACILITY IN CLEANUP]
 [THE CFRM ACTIVE POLICY IS EMPTY]

A DISPLAY XCF,CF command was entered to display summary information about the coupling facilities defined in this sysplex. The system will repeat the message text to report all coupling facilities.

If no coupling facilities are displayed, then the trailer message shown above will be displayed instead to explain the absence of coupling facility names.

If the CFRM Couple Data Set needs to be reformatted, then a message will be displayed before any coupling facility names are listed. This message will specify the numbers to be used in reformatting the data set.

If the REALLOCATE process has been initiated, then a message will be displayed before any structures are listed. This message will indicate the current state of the REALLOCATE process. The REALLOCATE process will be in progress if a SETXCF START,REALLOCATE operator command has been issued. The REALLOCATE process will be stopping if a SETXCF STOP,REALLOCATE operator command has been issued. Once started, the REALLOCATE process will evaluate each allocated structure to determine the need for activation of a pending policy and/or location adjustment of instance(s) allocated in CF(s). REALLOCATE processing will end either when all allocated structures have been evaluated with appropriate action taken or when the REALLOCATE process was stopped and relocation steps for the current target structure have finished.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY XCF command.

str#

The STR number to be used in reformatting the CFRM Couple Data Set. If the current number is adequate, then this line will not be displayed.

conn#

The CONNECT number to be used in reformatting the CFRM Couple Data Set. If the current number is adequate, then this line will not be displayed.

totalstr

Total number of structures that should be deleted from the CFRM active policy.

THE REALLOCATE PROCESS IS IN PROGRESS.

The REALLOCATE process is initiated by the SETXCF START,REALLOCATE operator command. Once started, the REALLOCATE process examines

each allocated structure to determine whether the location of any instance needs to be adjusted and/or a pending policy activated. The evaluation process uses the XCF allocation algorithm which factors in the CFRM active policy information and current set of active connections to make the determination.

THE REALLOCATE PROCESS IS STOPPING.

The REALLOCATE process is stopped by the SETXCF STOP,REALLOCATE operator command. Once stopped, the structure which is the current target of the REALLOCATE process will complete the relocation steps prior to ending the REALLOCATE process.

COUPLING FACILITY

The coupling facility which this system is able to use is identified by the node descriptor. See mapping IXLYNDE. The format xxxxxx.xxx.xxxxxxxxxxxxxx gives the type, manufacturer ID, manufacturer plant ID, and sequence number.

cfname

Name of coupling facility from the CFRM active policy

type

Node type (See ndetype in IXLYNDE).

mfg

Node manufacturer ID (See ndemfg in IXLYNDE).

plant

Node manufacturer plant ID (See ndeplant in IXLYNDE).

sequence

Node sequence number (See ndesequence in IXLYNDE).

sitename

The name of the site from the CFRM active policy. If the Recovery Manager is active and the site is the recovery site, " - RECOVERY SITE" will appear after the site name.

partition

Node LPAR partition number (See ndepartition in IXLYNDE).

side

The node PP/SI mode indicator and configuration code from the IXLYNDE are used to determine the value for *side*. Value and meaning are:

- **SIDE: 0** means the coupling facility is on SIDE 0 of a partitionable CPC.
- **SIDE: 1** means the coupling facility is on SIDE 1 of a partitionable CPC.
- blank means the coupling facility is in a non-partitionable CPC.

cpcid

Node Central Processor Complex (CPC) ID.

System action: The system continues processing.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1DC3

Routing Code: #

Descriptor Code: 5,8,9

IXC362I hh.mm.ss DISPLAY XCF

text

Explanation: In the message, *text* is:

```
[LARGER CFRM COUPLE DATA SET REQUIRED.
FORMAT A NEW COUPLE DATA SET
FOR CFRM USING AT LEAST THE FOLLOWING:
  ITEM NAME(STR) NUMBER(str#)
  ITEM NAME(CONNECT) NUMBER(conn#)]

[THE COUPLE DATA SET FOR CFRM SUPPORTS THE MAXIMUM NUMBER
OF STR RECORDS. totalstr STRUCTURE(S) MUST BE DELETED FROM THE POLICY
TO ACCOMMODATE STRUCTURES ALLOCATED IN THE COUPLING FACILITY.]
[totalstr STRUCTURE(S) MUST ALSO BE DELETED
FROM THE POLICY TO ACCOMMODATE STRUCTURES
STRUCTURES ALLOCATED IN THE COUPLING FACILITY.]
[THE REALLOCATE PROCESS IS IN PROGRESS.]
[THE REALLOCATE PROCESS IS STOPPING.]
CFNAME: cfname
COUPLING FACILITY:      type.mfg.plant.sequence
  PARTITION: partition SIDE: side CPCID: cpcid
  SITE : sitename
  POLICY DUMP SPACE SIZE: size
  ACTUAL DUMP SPACE SIZE: size
  STORAGE INCREMENT SIZE: stgincrement
  [ POLICY CHANGE PENDING - DELETE]
  [ COUPLING FACILITY FAILED]
  [ COUPLING FACILITY IN CLEANUP]
  [ POPULATE REBUILD IN PROGRESS]

  CONNECTED SYSTEMS:
    sysname sysname sysname sysname sysname sysname
  STRUCTURES:
    strnamestat strnamestat strnamestat
[THE CFRM ACTIVE POLICY IS EMPTY]
[NO COUPLING FACILITIES MATCH THE SPECIFIED CRITERIA]
[COUPLING FACILITY NAMES REQUESTED BUT
NOT SHOWN ARE NOT DEFINED]
```

A DISPLAY XCF,CF command was entered to display detail information about the coupling facilities defined in this sysplex. The system will repeat the message text to report all requested coupling facilities.

If no coupling facilities are displayed, then one of the trailer messages shown above will be displayed to explain the absence of coupling facility names.

If the CFRM Couple Data Set needs to be reformatted, then a message will be displayed before any coupling facility names are listed. This message will specify the numbers to be used in reformatting the data set.

If the REALLOCATE process has been initiated, then a message will be displayed before any structures are listed. This message will indicate the current state of the REALLOCATE process. The REALLOCATE process will be in progress if a SETXCF START,REALLOCATE operator command has been issued. The REALLOCATE process will be stopping if a SETXCF

STOP,REALLOCATE operator command has been issued. Once started, the REALLOCATE process will evaluate each allocated structure to determine the need for activation of a pending policy and/or location adjustment of instance(s) allocated in CF(s). REALLOCATE processing will end either when all allocated structures have been evaluated with appropriate action taken or when the REALLOCATE process was stopped and relocation steps for the current target structure have finished.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY XCF command.

str#

The STR number to be used in reformatting the CFRM Couple Data Set. If the current number is adequate, then this line will not be displayed.

conn#

The CONNECT number to be used in reformatting the CFRM Couple Data Set. If the current number is adequate, then this line will not be displayed.

totalstr

Total number of structures that should be deleted from the CFRM active policy.

THE REALLOCATE PROCESS IS IN PROGRESS.

The REALLOCATE process is initiated by the SETXCF START,REALLOCATE operator command. Once started, the REALLOCATE process examines each allocated structure to determine whether the location of any instance needs to be adjusted and/or a pending policy activated. The evaluation process uses the XCF allocation algorithm which factors in the CFRM active policy information and current set of active connections to make the determination.

THE REALLOCATE PROCESS IS STOPPING.

The REALLOCATE process is stopped by the SETXCF STOP,REALLOCATE operator command. Once stopped, the structure which is the current target of the REALLOCATE process will complete the relocation steps prior to ending the REALLOCATE process.

cfname

Name of coupling facility from the CFRM active policy

type

Node type (See ndetype in IXLYNDE).

mfg

Node manufacturer ID (See ndemfg in IXLYNDE).

plant

Node manufacturer plant ID (See ndeplant in IXLYNDE).

IXC363I

sequence

Node sequence number (See ndesequence in IXLYNDE).

partition

Node LPAR partition number (See ndepartition in IXLYNDE).

side

The node PP/SI mode indicator and configuration code from the IXLYNDE are used to determine the value for *side*. Value and meaning are:

- **SIDE: 0** means the coupling facility is on SIDE 0 of a partitionable CPC.
- **SIDE: 1** means the coupling facility is on SIDE 1 of a partitionable CPC.
- blank means the coupling facility is in a non-partitionable CPC.

cpcid

Node Central Processor Complex (CPC) ID.

sitename

The name of the site from the CFRM active policy. If the Recovery Manager is active and the site is the recovery site, " - RECOVERY SITE" will appear after the site name.

size

The size of the dump space as specified in the policy, expressed in K.

stgincrement

Storage increment size for this facility, if available. This size will be expressed in K. If the storage increment size is not available, N/A will be displayed.

sysname

The name of a system connected to a coupling facility. This means both that the system has a physical hardware connection to the coupling facility, and that the policy definition considers the system to be connected.

More lines may be used to list more names. If there are no connected systems, NO SYSTEMS ARE CONNECTED TO THIS COUPLING FACILITY will be displayed. This might be the result of a configuration error.

strnamestat

The name of a structure allocated in this coupling facility, and optionally, structure status information. The structure status information is included only if the structure is other than a normal active allocated structure instance. The structure status information can be one of the following:

- (OLD) — old instance during structure rebuild
- (NEW) — new instance during structure rebuild
- (TRN) — structure in transition since it is being allocated or deallocated

- (PND) — deallocation is pending due to a structure dump in progress or loss of connectivity to the coupling facility

More lines may be used to list more names. If there are no allocated structures, the previous line will display NO STRUCTURES ARE IN USE BY THIS SYSPLEX IN THIS COUPLING FACILITY.

System action: The system continues processing.

User response: If NO SYSTEMS ARE CONNECTED TO THIS COUPLING FACILITY is displayed, see Appendix E in *z/OS MVS Setting Up a Sysplex* for a list of steps for Coupling Facility Reconfiguration Guidelines.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1DC3

Routing Code: #

Descriptor Code: 5,8,9

IXC363I THE SETXCF FORCE FOR ALL CONNECTIONS FOR STRUCTURE strname WAS {COMPLETED|REJECTED|ACCEPTED}: text

Explanation: An operator entered a SETXCF FORCE, CONNECTION,STRNAME=strname, CONNAME=ALL command.

In the message text:

strname

The name of the structure.

COMPLETED

All failed-persistent connections were deleted.

REJECTED

All failed-persistent connections could not be deleted.

ACCEPTED

The request to force all connections was accepted.

USER DOES NOT HAVE SAF AUTHORIZATION

The connections could not be deleted by a user without proper authorization.

STRUCTURE NOT DEFINED IN THE CFRM ACTIVE POLICY

The structure is not defined in the CFRM active policy.

STRUCTURE NOT ALLOCATED OR IS PENDING DEALLOCATION

The structure is either not allocated in any coupling facility or is pending deallocation.

AN UNEXPECTED ERROR OCCURRED

An unexpected error occurred during force processing.

ALL FAILED-PERSISTENT CONNECTIONS WERE DELETED

All failed-persistent connections were successfully deleted.

XES FUNCTION NOT AVAILABLE

XES functions are not available. This can be because the hardware necessary to provide XES functions is not present.

COUPLE DATA SET FOR CFRM NOT AVAILABLE

The couple data set for CFRM is not available to this system.

REQUEST WILL BE PROCESSED

ASYNCHRONOUSLY

One or more of the coupling facility operations resulting from this SETXCF FORCE request cannot be performed immediately. These operations will remain pending until XCF is able to process them from some system in the sysplex.

CONNECTIONS DELETED BUT ALSO RESULTED IN STRUCTURE DEALLOCATION

All failed-persistent connections were deleted, but it also resulted in structure deallocation because the last connection to the structure was deleted.

NO FAILED-PERSISTENT CONNECTIONS DEFINED

No failed-persistent connections exist for the specified structure.

REBUILD IN PROGRESS

The specified structure is being rebuilt. Connections cannot be deleted while rebuild is in progress.

FORCE CONNECTION NOT PERMITTED FOR PERSISTENT LOCK OR SERIALIZED LIST

For a persistent lock or serialized list structure, forcing a failed-persistent connection is not permitted because undetected loss of data can occur.

System action: The SETXCF FORCE command was completed, rejected or accepted.

Operator response: If the SETXCF FORCE command was rejected, use the DISPLAY XCF command with the STRUCTURE or CF options to verify the name and state of connections to the structure.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1SCP

Routing Code: #

Descriptor Code: 5,8,9

IXC364I hh.mm.ss DISPLAY XCF

Explanation:

TYPE: *type*

POLNAME: {*polname* | **POLICY DEFAULTS ARE IN EFFECT** }

STARTED: *mm/dd/yyyy hh:mm:ss*

LAST UPDATED: *mm/dd/yyyy hh:mm:ss*

SYSPLEX FAILURE MANAGEMENT IS *status*

[**INTERNAL XCF COMPONENT ERROR**]

[**COUPLE DATA SET NOT ACCESSIBLE FROM THIS SYSTEM**]

[**POLICY NOT STARTED**]

[**NOT SUPPORTED BY DISPLAY XCF,POLICY**]

[**STOP POLICY IN PROGRESS**]

[**STOP POLICY COMPLETE**]

[**LOAD FAILED: EXIT ROUTINE FOR** *type* **NOT FOUND**]

[**NO TYPE DATA SETS ARE ACCESSIBLE FROM THIS SYSTEM**]

[**POLICY CHANGE(S) PENDING**]

| A DISPLAY XCF command was entered to display information about active policies. See the Displaying Cross System Coupling Facility (XCF) Information ofz/OS MVS System Commands for more information on the syntax of the DISPLAY XCF command.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY XCF,POLICY command.

type

The type name associated with the policy displayed.

polname

The name of the policy displayed.

POLICY DEFAULTS ARE IN EFFECT

Indicates that the ARM policy defaults are active.

mm/dd/yyyy

The date when the policy was started. The date is in months (01-12), days (01-31), and years.

hh:mm:ss

The time when the policy displayed was started.

The time is in hours (00-23), minutes (00-59), and seconds (00-59).

status

One of the following:

ACTIVE

Sysplex Failure Management is active.

NOT ACTIVE

Sysplex Failure Management is not active.

INTERNAL XCF COMPONENT ERROR

XCF has encountered an internal error while processing the display command for the specified type.

COUPLE DATA SET NOT ACCESSIBLE FROM THIS SYSTEM

The couple data for the specified type is not accessible from this system.

POLICY NOT STARTED

A policy has not been started for the specified type.

NOT SUPPORTED BY DISPLAY XCF,POLICY

Either TYPE=ALL was specified on the DISPLAY XCF,POLICY command, or this type was specified explicitly on the command. This type is not supported by the DISPLAY XCF,POLICY command. This text can be displayed because of one of the following conditions:

- This type does not exist in the sysplex
- This type exists in the sysplex but is not known to this system
- This type exists in the sysplex but does not use DISPLAY XCF,POLICY as a mechanism to display policy information.

STOP POLICY IN PROGRESS

A stop policy is in progress.

STOP POLICY COMPLETE

The policy has been stopped.

NOT FOUND

The policy exit routine for the requested type could not be loaded.

NO TYPE DATA SETS ARE ACCESSIBLE FROM THIS SYSTEM

No type data sets are accessible from this system.

POLICY CHANGE(S) PENDING

Indicates that the policy change is in progress. For CFRM, use the DISPLAY XCF,CF and the DISPLAY XCF,STR commands to determine if the changes for coupling facilities and/or structures have completed. For CFRM, message IXC512I provides the number of policy change(s) pending, and message IXC513I indicates the completion of change policy processing.

System action: The system continues processing.

Operator response: Not Applicable.

System programmer response: Not Applicable.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1DC3

Routing Code: #

Descriptor Code: 5,8,9

IXC365I THE SETXCF FORCE STRDUMP REQUEST FOR STRUCTURE *strname* WAS {COMPLETED|REJECTED|ACCEPTED}: *text*

Explanation: An operator entered a SETXCF

FORCE,STRDUMP, STRNAME=*strname* command.

In the message text:

strname

The name of the structure.

COMPLETED

The dump associated with the specified structure was deleted.

REJECTED

The dump associated with the specified structure was not deleted.

ACCEPTED

The request to force the structure dump was accepted.

USER DOES NOT HAVE SAF AUTHORIZATION

The structure dump could not be deleted by a user without proper authorization.

STRUCTURE NOT DEFINED IN THE CFRM ACTIVE POLICY

The structure is not defined in the CFRM active policy.

STRUCTURE NOT ALLOCATED

The structure is not allocated in any coupling facility.

AN UNEXPECTED ERROR OCCURRED

An unexpected error occurred during force processing.

STRUCTURE DUMP WAS DELETED

The dump associated with the specified structure was successfully deleted.

XES FUNCTION NOT AVAILABLE

XES functions are not available. This can be because the hardware necessary to provide XES functions is not present.

COUPLE DATA SET FOR CFRM NOT AVAILABLE

The couple data set for CFRM is not available to this system.

REQUEST WILL BE PROCESSED**ASYNCHRONOUSLY**

One or more of the coupling facility operations resulting from this SETXCF FORCE request cannot be performed immediately. These operations will remain pending until XCF is able to process them from some system in the sysplex.

NO STRUCTURE DUMP ASSOCIATED WITH CURRENT VERSION OF THE REQUESTED STRUCTURE

No structure dump is associated with the current version of the requested structure. If there are version(s) of the structure that are pending deallocation, then there may be structure dumps associated with these versions of the structure. To delete a structure dump which is associated with a version of a structure that is pending deallocation,

you must specify the structure dump identifier. The structure dump identifier can be obtained by issuing the DISPLAY XCF,STR operator command.

NO STRUCTURE DUMP EXISTS WITH REQUESTED STRDUMPID

No structure dump with a matching structure dump identifier is associated with the requested structure.

System action: The SETXCF FORCE command was accepted, rejected or completed.

Operator response: If the SETXCF FORCE command was rejected then use the DISPLAY XCF command with the STRUCTURE option to verify the structure name and, if you specified the STRDUMPID keyword, to verify the structure dump identifier.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2RHT, IXC01SCP

Routing Code: #

Descriptor Code: 5

**IXC366I THE SETXCF FORCE STRDUMPSERIAL REQUEST FOR STRUCTURE *strname* WAS {COMPLETED|REJECTED|ACCEPTED};
text**

Explanation: An operator entered a SETXCF FORCE,STRDUMPSERIAL, STRNAME=*strname* command.

In the message text:

strname

The name of the structure.

COMPLETED

Dumping serialization was released for the requested structure.

REJECTED

The request to force structure dump serialization was rejected.

ACCEPTED

The request to force structure dump serialization was accepted.

USER DOES NOT HAVE SAF AUTHORIZATION

Structure dump serialization could not be deleted by a user without proper authorization.

STRUCTURE NOT DEFINED IN THE CFRM ACTIVE POLICY

The structure is not defined in the CFRM active policy.

STRUCTURE NOT ALLOCATED OR IS PENDING DEALLOCATION

The structure is either not allocated in any coupling facility or is pending deallocation.

AN UNEXPECTED ERROR OCCURRED

An unexpected error occurred during force processing.

STRUCTURE DUMP SERIALIZATION WAS RELEASED OR WAS NOT HELD

Dumping serialization, if held, was released for the requested structure.

XES FUNCTION NOT AVAILABLE

XES functions are not available. This can be because the hardware necessary to provide XES functions is not present.

COPULE DATA SET FOR CFRM NOT AVAILABLE

The couple data set for CFRM is not available to this system.

REQUEST WILL BE PROCESSED

ASYNCHRONOUSLY

One or more of the coupling facility operations resulting from this SETXCF FORCE request cannot be performed immediately. These operations will remain pending until XCF is able to process them from some system in the sysplex.

NO STRUCTURE DUMP ASSOCIATED WITH CURRENT VERSION OF THE REQUESTED STRUCTURE

No structure dump is associated with the current version of the requested structure. If there are version(s) of the structure that are pending deallocation, then there may be structure dumps associated with these versions of the structure. Since there are no active connectors to a version of a structure which is pending deallocation, dump serialization is not impacting any connectors and there is no need to release dump serialization.

NO STRUCTURE DUMP EXISTS WITH REQUESTED STRDUMPID FOR THE CURRENT VERSION OF THE REQUESTED STRUCTURE

No structure dump with a matching structure dump identifier is associated with the current version of the requested structure. If there are version(s) of the structure that are pending deallocation, then there may be a structure dump with the requested structure dump identifier associated with a version of the structure that is pending deallocation. Since there are no active connectors to a version of a structure which is pending deallocation, dump serialization is not impacting anyone. Therefore, there is no need to release dump serialization.

System action: The SETXCF FORCE command was accepted, rejected, or completed.

Operator response: If the SETXCF FORCE command was rejected then use the DISPLAY XCF command with the STRUCTURE option to verify the structure name and, if you specified the STRDUMPID keyword, to verify the structure dump identifier.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2RHT, IXC01SCP

Routing Code: #

Descriptor Code: 5

IXC367I THE SETXCF {START|STOP} REBUILD REQUEST FOR {STRUCTURE|COUPLING FACILITY} name WAS {ACCEPTED|REJECTED:} reason

Explanation: An operator entered a SETXCF START/STOP REBUILD or a SETXCF START/STOP REBUILD, DUPLEX command to start or stop structure rebuild processing, but the command was not successful.

In the message text:

START

The request was to start structure rebuild processing.

STOP

The request was to stop structure rebuild processing.

STRUCTURE

The request was for a structure.

COUPLING FACILITY

The request was for a coupling facility.

name

The name of the structure or coupling facility.

ACCEPTED.

The request was accepted.

REJECTED:

The request was rejected.

reason

One of the following:

STRUCTURE NOT DEFINED IN THE CFRM ACTIVE POLICY

The structure is not defined in the CFRM active policy and therefore is not allocated in any coupling facility.

STRUCTURE NOT ALLOCATED

The structure is not allocated in any coupling facility.

REBUILD HAS ALREADY BEEN INITIATED FOR THE STRUCTURE

The structure rebuild process is already in progress for the structure. Use the DISPLAY XCF,STR command to determine the type (rebuild or duplexing rebuild) and method (user-managed or system-managed) of the structure rebuild process.

REBUILD STOP HAS ALREADY BEEN INITIATED FOR THE STRUCTURE

Stop has already been initiated for the structure rebuild processing.

AT LEAST ONE ACTIVE CONNECTION INDICATED THAT REBUILD IS NOT ALLOWED

Rebuild not permitted because IXLCNN with ALLOWREBLD=NO was specified by at least one active connection.

COUPLE DATA SET FOR CFRM NOT AVAILABLE

The couple data set for CFRM is not available to this system.

NO ACTIVE CONNECTIONS TO THE STRUCTURE

The rebuild request would have resulted in a user-managed rebuild, but the structure has no active connectors to participate in rebuild.

REBUILD STOP IS IN PROGRESS FOR THE STRUCTURE

Rebuild stop is in progress for the structure.

STRUCTURE NOT IN REBUILD PROCESS

The structure is not in the rebuild process.

CLEANUP HAS BEGUN, REBUILD CANNOT BE STOPPED NOW

Rebuild has entered the cleanup phase. Rebuild cannot be stopped now.

XES FUNCTION NOT AVAILABLE

XES functions are not available. This can be because the hardware necessary to provide XES functions is not present.

AN UNEXPECTED ERROR OCCURRED

An unexpected error occurred during rebuild processing.

NO ELIGIBLE STRUCTURES FOUND IN COUPLING FACILITY

On a rebuild start request, no structures eligible for rebuild were found in the coupling facility specified. On a rebuild stop request, no structures eligible for rebuild stop were found in the coupling facility specified.

COUPLING FACILITY NOT DEFINED IN THE CFRM ACTIVE POLICY

The coupling facility is not defined in the CFRM active policy.

NO COUPLING FACILITY PROVIDED BETTER CONNECTIVITY

No other facility has better connectivity than the current one. The rebuild, which was initiated due to a loss of connectivity, would cause a further degradation in connectivity if accepted. The system evaluated the set of active connections which lost connectivity to the current structure as compared to the set of active connections which would not be able to connect to the rebuild new structure, since the result of the rebuild would cause additional active connections to lose connectivity, the system terminates structure rebuild processing.

NO COUPLING FACILITY PROVIDED BETTER OR EQUIVALENT CONNECTIVITY

No other facility has better connectivity than the current one. The rebuild would cause a degradation in connectivity as determined by SFM system weights, if accepted.

Note: When this reason is received for an operator initiated rebuild by STRNAME or CFNAME and the installation needs to rebuild the structure(s), a SETXCF START,REBUILD command specifying LESSCONN=CONTINUE may be used to force the rebuild to continue despite this condition. Because this may cause active connections to the structure to lose connectivity to the structure, do not use LESSCONN=CONTINUE unless you understand the impact to the application or subsystem. Consult the application or subsystem documentation for recommendations.

A POPULATECF REBUILD IS ALREADY IN PROGRESS

An attempt to start a POPULATECF rebuild was rejected since a previous POPULATECF rebuild is still in progress. Only one POPULATECF rebuild request is supported at a time.

POPULATECF REBUILD OR REALLOCATE PROCESS IS ALREADY IN PROGRESS

An attempt to start a POPULATECF rebuild was rejected for one of the following reasons:

- A POPULATECF rebuild is in progress.
- A REALLOCATE process is in progress or stopping.

Only one POPULATECF rebuild or REALLOCATE process is supported at a time. Use DISPLAY XCF,STR,STATUS=ALLOCATED to identify the process.

NO STRUCTURES SELECTED FOR THE POPULATECF REQUEST

On a POPULATECF rebuild start request, no structures eligible for rebuild were found to participate in the POPULATECF request. Refer to message IXC540I which lists the structures with a reason for not being selected for a rebuild.

NO POPULATECF REBUILD IS IN PROGRESS

An attempt to stop a POPULATECF rebuild was rejected for one of the following reasons:

- No POPULATECF rebuild for the specified coupling facility is in progress.
- A REALLOCATE process is in progress or stopping. The in progress REALLOCATE process can be stopped with the SETXCF STOP,REALLOCATE command. Use

DISPLAY XCF,STR,STATUS=ALLOCATED to identify the structure(s) in the REALLOCATE process.

COUPLING FACILITY HAS FAILED

An attempt to start a POPULATECF rebuild was rejected since the specified coupling facility has failed. The specified coupling facility must be repaired before it can be used for allocating structures.

COUPLING FACILITY IS IN CLEANUP

An attempt to start a POPULATECF rebuild was rejected since the specified coupling facility is in cleanup processing. When cleanup processing has completed, the specified coupling facility can be used for allocating structures.

COUPLING FACILITY IS BEING REMOVED

An attempt to start a POPULATECF rebuild was rejected since the specified coupling facility is being removed from the active policy.

DUPLEXING REBUILD NOT ALLOWED FOR THE STRUCTURE

The structure does not support duplexing rebuild for one of the following reasons:

- DUPLEX(DISABLED) was specified or defaulted to in the CFRM active policy for the structure.
- There are failed persistent connections that are unavailable until a larger CFRM couple data set is made available.
- A user-managed duplexing rebuild could not be started because:
 - User-managed duplexing rebuilds are not supported for the structure type.
 - At least one active or failed-persistent connection specified or defaulted to IXLCONN ALLOWDUPREBLD=NO.
- A system-managed duplexing rebuild could not be started because:
 - The structure has at least one active connector, and none of the connectors (active or failed-persistent) specified IXLCONN ALLOWAUTO=YES when connecting.
 - A system-managed duplexing rebuild is not supported when a CFRM policy change is pending for the structure.

TYPE OF STOP REQUEST DOES NOT MATCH TYPE OF REBUILD IN PROGRESS

Either SETXCF STOP,REBUILD was requested to stop a duplexing rebuild or SETXCF STOP,REBUILD,DUPLEX was requested to stop a non-duplexing rebuild. The SETXCF STOP,REBUILD command must be used to stop non-duplexing rebuilds and the SETXCF

STOP,REBUILD,DUPLEX command must be used to stop duplexing rebuilds.

DUPLEXING NOT ESTABLISHED, CANNOT STOP TO KEEP NEW STRUCTURE

SETXCF

STOP,REBUILD,DUPLEX,KEEP=NEW was requested and the rebuild has not yet entered the duplex established phase. Stop requests to switch to the new structure are not accepted until the rebuild enters the duplex established phase.

STRUCTURE HAS FAILED.

The rebuild start request was rejected for one of the following reasons:

- SETXCF START,REBUILD,DUPLEX was requested and the structure has failed. Duplexing rebuild is not allowed when the structure is in the failed state.
- The rebuild start request would result in a system-managed rebuild. System-managed rebuild is not allowed when the structure is in the failed state.

NO OTHER COUPLING FACILITY FOUND IN PREFERENCE LIST.

SETXCF START,REBUILD was requested and LOCATION=OTHER was either specified on the rebuild request or defaulted to for STARTREASON=LOSSCONN or for a request to start a duplexing rebuild. In addition to avoiding the facility in which the structure is currently allocated, when a duplexing rebuild is stopped by the operator and DUPLEX(ENABLED) is specified in the active policy, the subsequent duplexing request initiated due to DUPLEX(ENABLED) will avoid the coupling facility in which the previous instance of the structure was allocated when the duplexing rebuild was stopped.

ALREADY STOPPING IN THE OTHER DIRECTION

The IXLREBLD STOP DUPLEX request was not processed because duplex rebuild stop has already been initiated for this structure name in the other direction. Either KEEP=OLD was requested and KEEP=NEW type of duplex rebuild stop is in progress or KEEP=NEW was requested and KEEP=OLD type of duplex rebuild stop is in progress.

STRUCTURE DOES NOT SUPPORT SYSTEM-MANAGED PROCESSES

The structure does not support system-managed processes (for example, rebuild) for one of the following reasons:

- The structure was not allocated in a coupling facility at or above the minimum CFLEVEL required for the current process by a system supporting system-managed processing.

- The structure has connections that have not been reconciled into the CFRM active policy.
- Structure cleanup is in progress for the structure.

CONNECTORS DO NOT SUPPORT SYSTEM-MANAGED PROCESSES

The requested system-managed process cannot be initiated for one of the following reasons:

- The structure has at least one active connector, and at least one of the connectors (active or failed-persistent) did not specify IXLCCONN ALLOWAUTO=YES when connecting.
- A duplexing rebuild cannot be initiated for a structure that has only failed-persistent connectors, and at least one of the failed-persistent connectors did not specify IXLCCONN ALLOWAUTO=YES when connecting.

NO SUITABLE COUPLING FACILITY IN PREFERENCE LIST

The requested system-managed process cannot be initiated for one or more of the following reasons:

- The preference list is empty.
- The preference list contains no other coupling facility at or above the minimum CFLEVEL required for the current process.
- The structure already exists in the only suitable coupling facility. The same coupling facility can only be selected as the target for the system-managed process if a CFRM policy change is pending for the structure and one of the following is true:
 - The policy change does not affect the SIZE or INITSIZE parameters.
 - The policy change affects the SIZE or the INITSIZE parameter and all of the structure connectors specified IXLCCONN ALLOWALTER=YES.
- A potentially suitable coupling facility is being removed from the CFRM active policy.

AT LEAST ONE CONNECTOR HAS LOST CONNECTIVITY TO THE STRUCTURE

The requested system-managed process (for example, rebuild) cannot be initiated because one or more of the connectors has lost connectivity to the target structure.

CFRM COUPLE DATA SET DOES NOT SUPPORT SYSTEM-MANAGED PROCESS

The CFRM couple data set does not support the requested system-managed process (for example, rebuild), because the CFRM couple data set was not formatted at or above the minimum version for the system-managed

process requested. Use the DISPLAY XCF,COUPLE,TYPE=CFRM command to determine the format of the CFRM couple data set. To support system-managed rebuild, the CFRM couple data set should be formatted specifying "ITEM NAME(SMREBLD) NUMBER(1)". For system-managed duplexing rebuild, "ITEM NAME(SMDUPLEX) NUMBER(1)" should also be specified when formatting a CFRM couple data set. Specifying "ITEM NAME(SMDUPLEX) NUMBER(1)" implicitly formats a CFRM couple data set that supports both system-managed rebuild and system-managed duplexing rebuild.

STRUCTURE WITH NO CONNECTORS HAS NEVER BEEN SYSTEM-MANAGED DUPLEXED

A system-managed duplexing rebuild cannot be initiated because there are no connections to the structure and the structure has not previously been duplexed using system-managed processing.

ALLOCATION OF REBUILD NEW STRUCTURE FOR DUPLEXING REBUILD NOT FEASIBLE

Allocation of the rebuild new structure instance in support of a duplexing rebuild is not feasible. Message IXC574I will contain additional diagnostic information.

System action: The system ignores the command.

Operator response: Use the DISPLAY XCF command with the STRUCTURE or CF options to verify the name and state of the structure to be rebuilt. If the reason for refusing the rebuild is a perceived degradation in connectivity and this is acceptable, issue a SETXCF START,REBUILD command specifying LESSCONN=CONTINUE. LESSCONN=CONTINUE may be used to initiate a rebuild which will force the rebuild to continue despite this condition. Because this action may cause active connections to the structure to lose connectivity to the structure, do not use LESSCONN=CONTINUE unless you understand the impact to the application or subsystem. Some connectors will stop the rebuild if a loss of connectivity is observed but most will disconnect from the structure to allow the rebuild to complete. Depending on the exploiter, disconnecting from the structure is likely to result in losing the exploiter's sysplex-related functionality on that system (for example, loss of data sharing capability) and for critical system exploiters, this may result in a system wait state. Before proceeding with this action, consult the documentation for the exploiting application or subsystem.

System programmer response: Not applicable.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1SCP

Routing Code: #

Descriptor Code: 5

IXC368I UNEXPECTED ERROR ENCOUNTERED PROCESSING SETXCF COMMAND, REASON = *reason-code*

Explanation: XCF encountered an unexpected error while processing the SETXCF command. The message text contains the reason code associated with the error. This reason code should be provided to IBM for diagnostic purposes.

In the message text:

reason-code

The reason code associated with the error.

System action: SETXCF command processing ends.

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: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1ASY, IXCO1SCP

Routing Code: #

Descriptor Code: 5

IXC370I THE VARY XCF COMMAND COULD NOT BE PROCESSED: *text*

Explanation: XCF found incorrect syntax or options specified on the VARY XCF command. The message text shows the syntax error.

In the message text:

reason-code

The reason code.

SYSTEM NAME SPECIFIED IS NOT VALID

The system name specified is incorrect.

THE ONLY ALLOWABLE OPTIONS ARE OFFLINE AND RETAIN

The option specified is incorrect.

THE ONLY ALLOWABLE OPTIONS FOR RETAIN ARE YES OR NO

The option specified for RETAIN is incorrect.

OFFLINE MUST BE SPECIFIED

OFFLINE was not specified on the command.

INSUFFICIENT COMMAND AUTHORITY

Authority is insufficient for the command.

REQUEST WAS CANCELLED BY THE OPERATOR

The VARY XCF command was cancelled by the operator.

VARY REQUEST IS NOT VALID

The VARY XCF command request is incorrect.

THE SYSTEM IS CURRENTLY IN XCF-LOCAL MODE

The system is running in XCF-local mode.

FORCE OPTION IS NOT ACCEPTABLE AT THIS TIME

The operator must remove a system with the VARY XCF command before entering a VARY XCF,FORCE command.

THE CURRENT SYSTEM IS IN PARTITIONING

The operator entered the VARY XCF command on this system to remove another system from the sysplex. However, the system on which the command was entered is already being removed from the sysplex, and so cannot remove another system.

DUPLICATE KEYWORD SPECIFIED

The keyword specified is a duplicate.

**AN UNEXPECTED ERROR OCCURRED,
REASON=reason-code**

An unexpected error occurred during the processing of the VARY XCF command. A reason code is returned.

System action: The VARY command ends.

Operator response: If necessary, reenter the command with the correct syntax.

System programmer response: If AN UNEXPECTED ERROR OCCURRED. REASON=reason-code appears in the message text, or 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: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1VCP

Routing Code: 1,2

Descriptor Code: 5

**IXC371D CONFIRM REQUEST TO VARY SYSTEM
sysname OFFLINE. REPLY
SYSNAME=*sysname* TO REMOVE
sysname OR C TO CANCEL.**

Explanation: The system issues this message to confirm a VARY XCF command to vary a system out of the sysplex.

In the message text:

sysname

The name of the system specified on the VARY command for removal from the sysplex.

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

Operator response: Choose one of the following replies:

SYSNAME=*sysname*

To confirm that system *sysname* should be removed from the sysplex.

C To cancel the request to remove system *sysname* from the sysplex.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1VCP

Routing Code: 1,2

Descriptor Code: 5

**IXC372I VARY REJECTED, SYSTEM *sysname* IS
NOT PART OF THE SYSPLEX OR IS
IPLING**

Explanation: The system specified on the VARY XCF command is not defined to the sysplex, or is IPLing into the sysplex.

In the message text:

sysname

The name of the system specified on the VARY command for removal from the sysplex.

System action: The system rejects the VARY XCF command.

Operator response: Enter DISPLAY

XCF,SYSPLEX,ALL or DISPLAY XCF,SYSPLEX,*sysname* to display the status of the system(s) in the sysplex. If the system specified on the VARY XCF command is not shown in the output from the DISPLAY XCF command, the system is not part of the sysplex and it is not necessary to issue the VARY XCF command.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1VCP

Routing Code: 1,2

Descriptor Code: 5

**IXC375I TRACE SYNTAX IS NOT VALID:
ALLOWABLE OPTIONS ARE SERIAL,
GROUP, SIGNAL, STATUS, STORAGE,
GRPNAME, CFRM, AND SFM**

Explanation: XCF found incorrect option(s) on the TRACE command.

System action: The TRACE command ends.

Operator response: Reenter the command with the correct options. If the command fails a second time, notify the system programmer.

System programmer response: Correct the trace options.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCC1TCP

Routing Code: 1,2

Descriptor Code: 5

IXC376I GROUP NAME *groupname* IS TOO LONG OR CONTAINS INVALID CHARACTERS

Explanation: XCF found an incorrect group name, *groupname*, specified on the CLASSDEF statement in the COUPLExx parmlib member.

In the message text:

groupname
The name of the group.

System action: XCF ignores the incorrect group name.

Operator response: Notify the system programmer.

System programmer response: Correct the syntax of the group name on the CLASSDEF statement in the COUPLExx parmlib member.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCC1TCP

Routing Code: 1,2

Descriptor Code: 5

IXC377I MORE THAN 8 GROUPS SPECIFIED

Explanation: While processing the TRACE CT command, the system found more than eight groups specified on the GROUPNAME XCF component trace option. You can only specify up to eight groups with the GROUPNAME option.

System action: The system rejects the TRACE CT command.

Operator response: Notify the system programmer.

System programmer response: Enter the TRACE CT command again with eight or less groups specified on the GROUPNAME option.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCC1TCP

Routing Code: 1,2

Descriptor Code: 5

IXC378I A NEW SYSXCF CTRACE PARMLIB MEMBER WAS SPECIFIED - TRACE WILL BE REDEFINED WITH NEW OPTIONS AND DATA PREVIOUSLY WRITTEN TO SYSXCF'S TRACE BUFFER WILL NOT BE SAVED

Explanation: The system issues this message during initialization when the following occurs:

1. XCF encounters an error while processing a COUPLExx member and prompts the operator for a new COUPLExx member.

2. The operator replies with a COUPLExx member that names a different CTRACE parmlib member.

System action: The system does not save previously defined trace data in the trace buffer. XCF component trace continues tracing with the options specified in the new parmlib member.

Operator response: Verify that the options pointed to by the current COUPLExx member are the desired options. Options can be changed using the TRACE CT command. Options and buffer size can be changed by reinitializing the system.

System programmer response: Ensure that the COUPLExx member points to the correct CTIXCFxx parmlib member.

Source: Cross System Coupling Facility (SCXCF)

Routing Code: 1,2

Descriptor Code: 12

IXC379I CTRACE DEFINE FOR SYSXCF FAILED - TRACING WILL BE INITIALIZED USING DEFAULT OPTIONS

Explanation: XCF encountered an error during initialization while defining component trace or XCF. This can occur because XCF finds an error while reading the component trace parmlib member, CTyXCFxx, or another error in component trace processing.

System action: XCF continues component tracing with the default options defined in the default component trace parmlib member, CTIXCF00. The system issues component trace messages explaining the error.

Operator response: See the operator response for message ITT010I, if the system issues it, or other component trace messages.

System programmer response: See the system programmer response for message ITT010I, if it is issued, or other component trace messages.

Source: Cross System Coupling Facility (SCXCF)

Routing Code: 1,2

Descriptor Code: 12

IXC380I CTRACE DEFINE FOR SYSXCF FAILED - TRACING COULD NOT BE INITIALIZED

Explanation: XCF tried to initialize component tracing for XCF using default options, either because the COUPLExx parmlib member didn't name a component trace parmlib member or because the previous component trace initialization failed. However, the default component trace initialization for XCF also failed.

IXC381I • IXC383I

The system is now running without component tracing for XCF.

System action: Initialization continues without component tracing for XCF. The system issues component trace messages (prefix ITT) explaining the problem.

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 component trace messages (prefix ITT) accompanying this message.

Source: Cross System Coupling Facility (SCXCF)

Routing Code: 1,2

Descriptor Code: 12

IXC381I SYSXCF COMPONENT TRACE FAILED FOR PARMLIB MEMBER *memname*.
DIAG1: *diag1a diag1b* DIAG2: *diag2*
TRACING WILL BE INITIALIZED USING {CTIXCF00IDEFAULT TRACE OPTIONS}.

Explanation: XCF encountered an error during initialization while defining component trace for XCF. This can occur because XCF finds an error while reading the component trace parmlib member, CTIXCFxx, or in component trace processing.

In the message text:

memname
Name of the failing XCF parmlib member.

diag1a
Used by IBM for problem determination.

diag1b
Used by IBM for problem determination.

diag2
Used by IBM for problem determination.

CTIXCF00
XCF will continue processing with parmlib CTIXCF00.

DEFAULT TRACE OPTIONS

XCF will continue processing with default trace options.

System action: XCF continues component tracing with the default options defined in the default component trace parmlib member, CTIXCF00, or default trace options, depending on the action specified in message IXC381I. The system issues component trace messages explaining the error.

Operator response: See the operator response for message ITT010I, if the system issues it, or other component trace messages.

System programmer response: See the system programmer response for message ITT010I, if it is issued, or other component trace messages.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCC1DEF

Routing Code: 1,2

Descriptor Code: 12

IXC382I SYSXCF COMPONENT TRACE FAILED FOR DEFAULT TRACE OPTIONS.
DIAG1: *diag1a diag1b* DIAG2: *diag2* NO TRACING IN EFFECT.

Explanation: XCF tried to initialize component tracing for XCF using default options. The system is now running without component tracing for XCF.

In the message text:

diag1a
Used by IBM for problem determination.

diag1b
Used by IBM for problem determination.

diag2
Used by IBM for problem determination.

System action: Initialization continues without component tracing for XCF. The system issues component trace messages (prefix ITT) explaining the problem.

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 component trace messages (prefix ITT) accompanying this message.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCC1DEF

Routing Code: 1,2

Descriptor Code: 12

IXC383I SETXCF START OR STOP POLICY REJECTED. UNABLE TO PROCESS POLICY CHANGE FOR *typename*. *text*

Explanation: The operator attempted to activate a new policy. The policy change was unsuccessful.

In the message text:

typename
The name of the type whose policy is to change.

diag093
An internal diagnostic code that IBM might request.

COUPLE DATASET LOST.

The policy change cannot complete on this system because the couple data set for the specified *typename* has been lost.

NOT ENOUGH STORAGE AVAILABLE.

The policy change cannot complete because not enough virtual storage is available.

ADMINISTRATIVE RECORD IS EMPTY.

The policy change cannot complete because the administrative record is empty. No administrative policies have been defined.

COUPLE DATA SET IS NOT AVAILABLE.

The policy change cannot complete because the couple data set for specified *typename* is not available to this system.

THIS TYPE IS NOT SUPPORTED BY SETXCF.

The policy change cannot complete because the type indicated in the message is not supported by the SETXCF START/STOP,POLICY command. This can be due to one of following conditions:

- This type does not exist in the sysplex
- This type exists in the sysplex but is not known to this system
- This type exists in the sysplex but does not use SETXCF as a mechanism to start and stop policies.

SOFTWARE FAILURE EXPERIENCED WHILE PROCESSING THE REQUEST. DIAG093: *diag093*

The policy change cannot complete because of an unexpected software failure.

System action: System processing continues. This system does not complete the policy change. In the case that the couple data set for the *typename* was lost, other systems may attempt to continue processing the policy change.

Operator response: Notify the system programmer.

System programmer response: Depending on the message text, do one of the following:

NOT ENOUGH STORAGE AVAILABLE.

Define a larger amount of virtual storage and retry the request.

ADMINISTRATIVE RECORD IS EMPTY.

Use IXCMIAPU to define policies for the specified *typename*. Enter the SETXCF START command to activate the policy.

COUPLE DATASET LOST.**COUPLE DATA SET IS NOT AVAILABLE.****THIS TYPE IS NOT SUPPORTED BY SETXCF.**

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Contact the IBM Support Center. Provide the diagnostic code.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA2SIN, IXCA3SAP, IXCL2POL, IXCL2TSK, IXCO1SCP

Routing Code: #

Descriptor Code: 5

IXC384I SETXCF START POLICY REJECTED.
ADMINISTRATIVE POLICY *polname*
FOR *typename* NOT FOUND.

Explanation: The administrative policy named on the SETXCF command was not found in the administrative record.

In the message text:

polname

The name of the policy to be activated.

typename

The name of the type whose policy is to change.

System action: System processing continues. No policy change takes place.

Operator response: Reenter the SETXCF command with the name of a policy defined in the administrative record.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA2SIN, IXCA3SAP, IXCL2POL

Routing Code: #

Descriptor Code: 5

IXC385I SETXCF STOP POLICY REJECTED.
THERE IS NO ACTIVE POLICY IN EFFECT FOR *typename*. *text*

Explanation: No policy is currently active.

In the message text:

typename

The name of the type whose policy is to be stopped.

EITHER NO POLICY HAS BEEN ACTIVATED OR A PREVIOUS STOP HAS BEEN COMPLETED.

There is no active policy to stop. Either a policy has never been activated or a SETXCF STOP was already issued immediately preceding this one.

System action: System processing continues.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA2TSK, IXCA3SAP, IXCL2POL

Routing Code: #

Descriptor Code: 5

**IXC386I SETXCF COUPLE,PSWITCH REQUIRES
A SYNCHRONIZED ALTERNATE
COUPLE DATA SET FOR type**

Explanation: The operator entered a SETXCF COUPLE,PSWITCH command to request that the alternate couple data set be made the primary couple data set, but no alternate data set is available.

In the message text:

type

The type name for which the SETXCF COUPLE command was processed.

System action: The system ignores the incorrect SETXCF COUPLE command. The primary couple data will not be affected by this command.

Operator response: Notify the system programmer.

System programmer response: Before a primary couple data set can be removed, an alternate must be formatted and defined to XCF using the SETXCF COUPLE,ACOUPLE command. Then, enter the SETXCF COUPLE,PSWITCH command.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1ASY, IXCO1SCP

Routing Code: #

Descriptor Code: 5

**IXC387I SETXCF COUPLE,{PCOUPLE I
ACOUPLE I PSWITCH} FOR type IS
NOT VALID IN XCF-LOCAL MODE**

Explanation: An operator entered a SETXCF COUPLE command to change an option for the couple data set, but the command failed. The system on which the COUPLE command was entered is running in XCF-local mode. A system in XCF-local mode cannot use or specify XCF couple data sets.

In the message text:

PCOUPLE

The option PCOUPLE was specified on the failing command.

ACOUPLE

The option ACOUPLE was specified on the failing command.

PSWITCH

The option PSWITCH was specified on the failing command.

type

The type name for which the SETXCF COUPLE command was processed.

System action: The system ignores the SETXCF COUPLE command.

Operator response: Notify the system programmer.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1ASY, IXCO1SCP

Routing Code: #

Descriptor Code: 5

**IXC388I SETXCF
COUPLE,{ACOUPLE|PSWITCH}
REQUIRES TYPE type TO BE ACTIVE
ON THIS SYSTEM**

Explanation: An operator entered a SETXCF COUPLE command to change an option for the couple data set, but the command failed. The operator requested that the alternate couple data set be made the primary couple data set but either the type was not defined or was not active on this system.

In the message text:

ACOUPLE

The option ACOUPLE was specified on the failing command.

PSWITCH

The option PSWITCH was specified on the failing command.

type

The type name for which the SETXCF COUPLE command was processed.

System action: The system ignores the incorrect SETXCF COUPLE command. The primary couple data will not be affected by this command.

Operator response: Notify the system programmer.

System programmer response: Before the SETXCF COUPLE command can be processed, the specified type must be active on this system.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1ASY, IXCO1SCP

Routing Code: #

Descriptor Code: 5

**IXC389I SETXCF COUPLE,PCOUPLE NOT
VALID FOR type**

Explanation: The operator entered a SETXCF COUPLE,PCOUPLE command to define a data set to be used as a primary couple data set. The SETXCF COUPLE,PCOUPLE command is not valid for this type. The type is given in the message text.

In the message text:

type

The type name for which the SETXCF COUPLE command was processed.

System action: The system ignores the incorrect SETXCF COUPLE command. The primary couple data

will not be affected by this command.

Operator response: Notify the system programmer.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1ASY, IXCO1SCP

Routing Code: #

Descriptor Code: 5

IXC390I **SETXCF** *text*

Explanation: An operator entered a SETXCF command to start or stop a policy, but the command was rejected. The system on which the SETXCF command was entered is running in XCF-local mode. A system in XCF-local mode cannot start or stop policies.

In the message text:

START,POLICY IS NOT VALID IN XCF-LOCAL MODE

The SETXCF START,POLICY command was rejected.

STOP,POLICY IS NOT VALID IN XCF-LOCAL MODE

The SETXCF STOP,POLICY command was rejected.

PRSMOPOLICY,ACTIVATE IS NOT VALID IN XCF-LOCAL MODE

The PRSMOPOLICY,ACTIVATE command was rejected.

PRSMOPOLICY,DEACTIVATE IS NOT VALID IN XCF-LOCAL MODE

The PRSMOPOLICY,DEACTIVATE command was rejected.

System action: The system ignores the SETXCF command.

Operator response: Notify the system programmer.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1SCP

Routing Code: #

Descriptor Code: 5

IXC391I *hh.mm.ss DISPLAY XCF*

THE DISPLAY COMMAND COULD NOT BE PROCESSED: *text*

Explanation: The DISPLAY XCF command could not be processed due to the reason given in the message text.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59) for the DISPLAY XCF command.

text

is one of the following:

SUFFICIENT STORAGE UNAVAILABLE

The system was unable to supply the storage needed for processing the command.

CFRM COUPLE DATA SET IS NOT AVAILABLE

The CFRM active policy could not be read because the couple data set supporting CFRM is not accessible to this system.

A CFRM POLICY HAS NOT BEEN STARTED

A CFRM policy has not been started.

ARM COUPLE DATA SET IS NOT AVAILABLE

The active automatic restart management policy could not be read because the couple data set supporting automatic restart management is not accessible to this system.

System action: The system ends processing of the DISPLAY command.

Operator response: If type **COPULE DATA SET IS NOT AVAILABLE** appears in the message text, enter the SETXCF COUPLE,TYPE=type, PCOUPLE=(*dsname, volser*) to activate a primary couple data set for the given type. If **A CFRM POLICY HAS NOT BEEN STARTED** appears in the message text, enter the SETXCF START,POLICY,TYPE=CFRM,POLNAME=(*polname*) to start a CFRM policy.

If the problem persists, notify the system programmer.

System programmer response: 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: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1DCP, IXCO1DC2, IXCO1DC3, IXCO1DC4

Routing Code: #

Descriptor Code: 5,8,9

IXC392I *hh.mm.ss DISPLAY XCF*

text

Explanation: In the message, *text* is:

ARM RESTARTS ARE status

```
----- ELEMENT STATE SUMMARY ----- -TOTAL- -MAX-
STARTING AVAILABLE FAILED RESTARTING RECOVERING
numstart numavail numfailed numrestart numrecov totalelem maxelem
RESTART GROUP:restartgroup                    PACING :pacing    FREECSA:csabelow
                                                  csabove
```

ELEMENT NAME	STATE	CURR SYS	INIT SYS	JOBNAME	ASID	LEVEL
elementname	state	currsys	initsys	job	asid	level

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```
ELEMENT NAME :elementname    JOBNAME :job      STATE  :state
CURR SYS :currsys      JOBTYPE :jobtype   ASID   :asid
INIT SYS :initsys       JESGROUP:jesgrp   TERMTYPE:termtype
EVENTEXIT:exitname     ELEMENTTYPE:elementtyp LEVEL   :level

TOTAL RESTARTS :totrestart INITIAL START:regdate regtime
RESTART THRESH : thresh FIRST RESTART:frstdate [frsttime]
RESTART TIMEOUT:restimeint LAST  RESTART:lrstdate lrstime
assocelemtext assocelemname

[NO ARM ELEMENTS MATCH THE SPECIFIED CRITERIA]
[NO ARM ELEMENTS ARE DEFINED]
```

A DISPLAY XCF,ARMSTATUS command was entered to display information about jobs or started tasks registered as batch elements of the automatic restart manager. The system repeats the message text to report on each requested element along with some general information about automatic restart management.

For elements currently in the FAILED or RESTARTING state, the ASID and JOBNAME fields will contain N/A.

For elements currently in the FAILED state, the CURR SYS contains the system where the element recently was running, even though the system may have been removed from the sysplex.

If no elements are displayed, then one of the trailer messages shown above will be displayed instead to explain the absence of elements.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59) when the DISPLAY XCF command was entered.

status

One of the following:

ENABLED

Automatic restart manager restarts are enabled in the sysplex. A SETXCF START command has been issued to enable automatic restart manager restarts.

NOT ENABLED

Automatic restart manager restarts are not enabled in the sysplex. Either a SETXCF STOP command has been issued or a SETXCF START command was never issued.

numstart

The total number of batch jobs and started tasks that are currently registered as elements of automatic restart manager that meet the DISPLAY filtering and are in STARTING state

numavail

The total number of batch jobs and started tasks that are currently registered as elements of automatic restart manager that meet the DISPLAY

filtering, and are in AVAILABLE state. This also includes elements listed in AVAILABLE-TO state.

numfailed

The total number of batch jobs and started tasks that are currently registered as elements of automatic restart manager that meet the DISPLAY filtering, and are in FAILED state.

numrestart

The total number of batch jobs and started tasks that are currently registered as elements of automatic restart manager that meet the DISPLAY filtering and are in RESTARTING state.

numrecov

The total number of batch jobs and started tasks that are currently registered as elements of automatic restart manager that meet the DISPLAY filtering and are in RECOVERING state.

totalelem

The total number of batch jobs and started tasks that are currently registered as elements of automatic restart manager and meet the DISPLAY filtering.

maxelem

The maximum number of elements that can register. This information is determined by the TOTALELEM value when the ARM couple data set was formatted.

restartgroup

The name of the restart group to which the elements listed belong, based on the active policy. If restarts are not enabled or the automatic restart manager's default policy parameters are active, then the restart group's name is DEFAULT.

pacing

The restart pacing interval used between the restart of each element in the restart group. The pacing interval is determined by the RESTART_PACING parameter of the automatic restart management policy.

csabelow

The number of kilobytes (KB) of CSA that must be available on a target system for this restart group to be restarted. The number of kilobytes is determined by the FREE_CSA parameter of the automatic restart management policy.

cсаabove

The number of kilobytes (KB) of ECSA that must be available on a target system for this restart group to be restarted. The number of kilobytes is determined by the FREE_CSA parameter of the automatic restart management policy.

elementname

The name that the element specified when the element issued the IXCARM macro to register.

state

One of the following:

STARTING

The element issued the IXCARM macro to register but is not ready to accept work.

AVAILABLE

The element is ready to accept work. The element issued the IXCARM macro to indicate it is ready to accept work.

AVAILABLE-TO

The element is ready to accept work. The automatic restart manager placed the element in AVAILABLE state when the element did not issue the IXCARM macro to make itself ready within the ready timeout interval. The ready timeout interval is determined by the READY_TIMEOUT parameter of the automatic restart manager policy.

FAILED

The element has ended abnormally, or the system on which the element was running is leaving the sysplex, and MVS has not yet restarted the element.

RESTARTING

The element has been restarted but has not yet issued the IXCARM macro to reregister.

RECOVERING

The element has been restarted and has reregistered but is not yet ready to accept work.

currsys

The system on which the element is running or, for a failed element, the system where the element most recently was running.

initsys

The system on which the element initially registered by issuing the IXCARM macro. Initial registration is either the first registration, or the first registration after the element deregistered itself or was deregistered by MVS.

job

The name of the job or started task associated with this element. N/A appears if the element is in FAILED or RESTARTING state.

asid

The address space identifier for the address space in which the element is currently running. N/A appears if the element is in FAILED or RESTARTING state.

level

The level of the element used to determine the order in which elements are restarted. The level is determined by the element type and LEVEL parameter of the automatic restart management policy.

jobtype

Either JOB or STC, which indicate whether the element is a batch job or a started task.

jesgrp

The name of the JES XCF group to which the element is associated.

termtype

One of the following:

ELEMTERM

Specifies that the element should be restarted only if the element itself unexpectedly fails. It should not be restarted if the system on which it is running unexpectedly fails.

ALLTERM

Specifies that the element should be restarted if the element unexpectedly fails or if the system on which it is running unexpectedly fails.

exitname

The name of the element's event exit, which was specified when the element issued the IXCARM macro to register. If no event exit was specified on the register request, *NONE* appears.

elementtype

The element type specified when the element issued the IXCARM macro to register. If no element type was specified on the register request, *NONE* appears.

totrestart

The total number of restarts for the specified element.

regdate

The date of the initial registration request. The date appears as mm/dd/yyyy, where mm is the month (01-12), dd is the day (01-31), and yyyy is the year.

regtime

The time of the initial registration request. The time appears as hh.mm.ss, where hh is hours (00-23), mm is minutes (00-59), and ss is seconds (00-59).

thresh

The restart threshold value. The restart threshold value appears as n OF m, where n is the number of restarts that have occurred within a given time interval and m is the maximum number of restarts allowed within that time interval. The maximum number of restarts and the time interval are determined by the RESTART_ATTEMPTS parameter of the automatic restart manager policy. When automatic restart manager restarts are not enabled, N/A appears

frstdate

The date when the first restart of this element occurred. The date appears as mm/dd/yyyy, where mm is the month (01-12), dd is the day (01-31),

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and yyyy is the year. If there have been no restarts of this element, *NONE* appears.

frsttime

The time when the first restart of this element occurred. The time appears as hh.mm.ss, where hh is hours (00-23), mm is minutes (00-59), and ss is seconds (00-59). If there have been no restarts of this element, blanks appear.

restimeint

The restart timeout interval. The maximum amount of time, in seconds, that the element is expected to take to reregister with the automatic restart manager after being restarted. The interval is determined by the RESTART_TIMEOUT parameter in the automatic restart manager policy or by the RESTARTTIMEOUT parameter on the IXCARM macro. When automatic restart manager restarts are not enabled, N/A appears.

lrstdate

The date when the most recent restart of this element occurred. The date appears as mm/dd/yyyy, where mm is the month (01-12), dd is the day (01-31), and yyyy is the year. If there have been no restarts of this element, *NONE* appears.

lrsttime

The time when the most recent restart of this element occurred. The time appears as hh.mm.ss, where hh is hours (00-23), mm is minutes (00-59), and ss is seconds (00-59). If there have been no restarts of this element, blanks appear.

assocelemtext

One of the following:

ELEM BACKED BY :

The element *assocelemname* identified *elementname* as its backup by issuing the IXCARM macro with the ASSOCIATE,TELEMENT=*elementname*.

ELEM BACKING :

The element *elementname* identified *assocelemname* as its backup by issuing the IXCARM macro with the ASSOCIATE,TELEMENT=*assocelemname*.

assocelemname

The name that the element *elementname* specified as its backup, or associated, element when it issued the IXCARM macro.

System action: The system continues processing.

Operator response: None.

System programmer response: None.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1DC4

Routing Code: #

Descriptor Code: 5,8,9

IXC393I THE SETXCF FORCE TO DREGISTER ARM ELEMENT *elementname* WAS [COMPLETED | REJECTED]: *text*

Explanation: An operator entered a SETXCF FORCE,ARMDEREGISTER command.

In the message text:

elementname

The name of the ARM element.

text

One of the following:

- ARM FUNCTION NOT AVAILABLE
ARM functions are not available.
- COUPLE DATA SET FOR ARM NOT AVAILABLE
The couple data set for ARM is not available to this system.
- ELEMENT Deregistered
The ARM element was successfully deregistered.
- ELEMENT NOT REGISTERED
The element is not registered with ARM.
- ELEMENT IN USE BY THIS SYSTEM
The ARM element is currently in use by this system. Deregistration was not confirmed.
- ELEMENT IN USE BY DIFFERENT SYSTEM
The ARM element is currently in use by an active system. Deregistration must be requested on the system on which the element is registered.
- AN UNEXPECTED ERROR OCCURRED
An unexpected error occurred during FORCE processing.

System action: The request to deregister has been completed or rejected.

Operator response: If the command was rejected, use the DISPLAY SCF,ARMSTATUS command with the ELEMENT option to verify the name and state of the element. Reply Y to the prompt to continue with the deregistration of the ARM element or N if the element is not to be deregistered.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1SCP

Routing Code: 2

Descriptor Code: 5

IXC394A ARM ELEMENT IN USE. REPLY Y TO CONFIRM THAT *elementname* SHOULD BE Deregistered OR N TO CANCEL

Explanation: A SETXCF FORCE,ARMDEREGISTER command requested an element to be deregistered that may be in use. Confirmation is needed to deregister the element.

In the message text:

elementname

The name of the ARM element.

System action: The system waits for the operator to reply. If the operator confirms that the element should be deregistered, the element will be deregistered without checking to see if it is still in use.

Operator response: Use the DISPLAY

XCF,ARMSTATUS with the ELEMENT option to verify the name and state of the element. Reply Y to the prompt to deregister the element regardless of its in-use status, or reply N to cancel deregistration.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCO1SCP

Routing Code: -

Descriptor Code: 5

**IXC401I ANOTHER SYSTEM HAS REPLACED
THIS SYSTEM AS IPLING IN THE
SYSPLEX**

Explanation: Two systems tried to IPL into the sysplex at the same time. This system was preempted by another one, which is now IPLing.

System action: The XCF initialization for this system ends. XCF issues message IXC207A to prompt the operator to specify a new COUPLExx parmlib member.

Operator response: After the other system completes initialization, specify a new COUPLExx parmlib member for this system in reply to message IXC207A.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS2PAC

Routing Code: 1,2

Descriptor Code: 12

**IXC402D *sysname* LAST OPERATIVE AT
hh:mm:ss. REPLY DOWN AFTER
SYSTEM RESET OR INTERVAL=SSSSS
TO SET A REPROMPT TIME.**

Explanation: XCF determined that a system in the sysplex appears to be inoperative. The operator may choose to remove the system from the sysplex, or may specify a time interval to defer removal of the system.

If the system is to be removed from the sysplex, then the system must be system reset before the operator replies DOWN to this message.

Notes:

1. The system reset is needed to ensure that the system image being removed from the sysplex no longer has the capability to perform I/O to devices which may be shared with other systems that remain active in the sysplex. If this reset is not performed before replying to this message, then

severe data integrity problems may result. When the subject system is removed from the sysplex, XCF will clean up resources (such as locks, ENQs, and reserves) which are held by that system, and make them available to other systems in the sysplex. If the subject system is in fact still active, and operating in the belief that it still holds these resources, unpredictable results may occur.

2. When this message appears, it is important that the appropriate system reset action be taken, and that this message be replied to in a timely fashion. While this message is outstanding, XCF must still consider the subject system to be (at least potentially) active in the sysplex, and therefore XCF cannot clean up resources (such as locks, ENQs, and reserves) which are held by that system. These resources will remain unavailable to all other systems in the sysplex until this message is replied to, and the system completes the process of being removed from the sysplex. Extended unavailability of these resources is likely to cause delays, timeouts, or other problems for the other systems in the sysplex.

In the message text:

sysname

The name of the inoperative system in the sysplex.

hh:mm:ss

The last time XCF could detect that the system was functioning. The time is in hours (00-23), minutes (00-59), and seconds (00-59).

System action: Processing continues. If the operator performs a system reset for system *sysname* and then replies DOWN, XCF starts removing system *sysname* from the sysplex. The system is not removed from the sysplex until the operator performs a system reset and replies DOWN. If the system once again appears to be operative, the message will be deleted before it is answered.

Operator response: Choose one of the following replies:

DOWN

To specify that XCF remove system *sysname* from the sysplex. Before replying DOWN, a system reset must be performed on system *sysname*. Perform the hardware SYSTEM RESET or LOAD (IPL) function to ensure that system *sysname* is reset. If system *sysname* is to be dumped (for example, via Standalone Dump), take care to perform a SYSTEM-RESET-NORMAL or LOAD-NORMAL function that does not clear the system storage. Once system *sysname* is system reset, reply DOWN.

Note that several acceptable alternatives to SYSTEM RESET or LOAD exist. You may reply DOWN after any action or condition listed below occurs for system *sysname*:

- SYSTEM RESET-NORMAL

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- LOAD-NORMAL
- INITIATION OF STANDALONE DUMP (via LOAD-NORMAL)
- SYSTEM RESET-CLEAR
- LOAD-CLEAR
- SYSTEM-IML
- POWER-ON-RESET
- NO POWER to the CPC where system *sysname* resides
- Deactivation of the Logical Partition where system *sysname* resides
- Reset of the Logical Partition where system *sysname* resides
- | Processor on which *sysname* is running is in a checkstopped state.

Depending on your hardware and your hardware operational procedures, the above functions may be invoked explicitly or implicitly. For example, on an HMC you may implicitly perform one of the above hardware functions by dragging a CPC object or an image object and dropping the object on the ACTIVATE task. The hardware function performed depends on the activation profile associated with the object.

It is important to note that, if system *sysname* is in a disabled wait state, that is not, by itself, sufficient to guarantee that system *sysname* can no longer access I/O devices which may be shared with other active systems in the sysplex. However, if the system is configured so that a system reset is automatically performed when a disabled wait state is entered, then that is sufficient, and there is no need to manually reset the system again.

INTERVAL=sssss

To request that system monitoring continue and the operator be repromted, if system *sysname* does not become active within the specified interval. The interval, *sssss*, must be in seconds and in the range of 0 to 86400 seconds (24 hours).

If the reply is incorrect, the system issues message IXC208I to notify the operator of the error. Then the system issues message IXC402D again.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS2WTO

Routing Code: 1,2

Descriptor Code: 2

IXC403D *sysname* STARTED INITIALIZATION AT
 hh:mm:ss. REPLY W TO WAIT FOR
 sysname OR I TO COMPLETE
 INITIALIZATION.

Explanation: XCF determined that the system

initializing the sysplex has not completed initialization. No other systems can IPL into the sysplex until the initialization system completes cleanup of the couple data set.

The system initializing the sysplex started clearing the couple data set, but has not completed for one of the following reasons:

- The system failed and the IPL ended.
- The system is running slowly because of a system or hardware problem.
- The system is running as a guest on a Virtual Machine (VM) and is not receiving sufficient service units to complete the cleanup.
- The couple data sets are large and take a while to clear.

In the message text:

sysname

The system that started sysplex initialization.

hh:mm:ss

The time that system *sysname* started sysplex initialization. The time is in hours (00-23), minutes (00-59), and seconds (00-59).

System action: This system temporarily stops until the operator enters a reply. If the operator replies incorrectly, the system issues message IXC208I and reissues message IXC403D.

Operator response: Choose one of the following replies:

- W To request that this system wait for system *sysname* to complete sysplex initialization by clearing the couple data set.
- I To request that this system should take over sysplex initialization. If system *sysname* is still running, it will eventually detect that another system has taken over sysplex initialization and will wait until the couple data set cleanup is complete before it IPLs into the sysplex.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS2IN

Routing Code: 1,2

Descriptor Code: 2

IXC404I **SYSTEM(S) ACTIVE OR IPLING:**
system-names

Explanation: This system attempted to initialize the sysplex, but XCF found that there are one or more systems that appear to be active (in that they are defined to the sysplex, as represented in the sysplex couple data set), but one or more of these systems do not appear to actually be active because the time of their last system status update is not recent.

XCF requires operator assistance to understand

whether these systems are only residual information in the sysplex couple data set, or are in fact active systems in the sysplex despite their out-of-date system status update times. Note that this message displays all of the active and IPLed systems in the sysplex, not just the systems that are in this in-doubt state.

This message is issued only when one or more systems, other than this system, appear to be active in the sysplex. Thus, this message is not issued when the only system that appears to be active in the sysplex is the one that is being IPLed. A determination of whether another system is the same as the system being IPLed can be made only in native MVS and PR/SM systems. For two systems to be the same, they must have identical central processor information. In PR/SM systems, all of the information, including the LPAR ID, must be the same.

In the message text:

system-names

A table of system names.

System action: The system issues message IXC405D, prompting the operator to indicate whether this system should join the already initialized sysplex (if the operator decides that these systems are truly active in the sysplex), or start initializing a new sysplex instance (if the operator decides that these systems are residual and not active).

Operator response: See the operator response for message IXC405D.

System programmer response: Check all the displayed systems to determine if they are active and if this system belongs in a sysplex with them.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS2IN

Routing Code: 1,2

Descriptor Code: 12

**IXC405D REPLY I TO INITIALIZE THE SYSPLEX,
J TO JOIN SYSPLEX *sysplex-name*, OR
R TO REINITIALIZE XCF**

Explanation: This system is trying to initialize or join a sysplex, but XCF found one or more systems already active in sysplex *sysplex-name*. This message prompts the operator to indicate whether the systems displayed in message IXC404I are actually active in the sysplex and whether initialization should continue. See the explanation of message IXC404I for additional information.

This message is issued only when one or more systems, other than this system, appear to be active in the sysplex. Thus, this message is not issued when the only system that appears to be active in the sysplex is the one that is being IPLed. A determination of whether another system is the same as the system being IPLed

can be made only in native MVS and PR/SM systems. For two systems to be the same, they must have identical central processor information. In PR/SM systems, all of the information, including the LPAR ID, must be the same.

In the message text:

sysplex-name

The name of an existing sysplex.

System action: Initialization processing stops until the operator replies to message IXC405D.

Operator response: Choose one of the following replies:

- I To request that sysplex initialization continue because none of the systems identified in message IXC404I are in fact participating in an operating sysplex, that is, they are all residual systems. This system will perform cleanup of old sysplex data, initialize the couple data set, and start a "new" sysplex. If any of the systems identified in message IXC404I are currently active in the sysplex, they will be placed into a disabled wait state.
- J To request that this system join the already active sysplex. Choose this reply if this system belongs in the sysplex with the systems identified in message IXC404I, despite the fact that some of those systems appear to have out-of-date system status update times. The initialization of this system will continue.

Note that, once this system joins the sysplex and completes its initialization, if the system status update times of the other systems in the sysplex still appear to be out-of-date, this system may consider them to be in a status-update missing condition, and may initiate sysplex partitioning actions against those other systems. Should this occur, those systems will be placed into a disabled wait state.

- R To request that XCF be reinitialized on this system. XCF will stop using the current couple data sets and issue message IXC207A to prompt the operator for a new COUPLExx parmlib member.

Choose R also to change the sysplex name and reinitialize XCF to remove any residual data for this system from the couple data set. The system prompts the operator for a new COUPLExx parmlib member.

If an incorrect reply is entered, the system issues message IXC208I to notify the operator of the error. The system then reissues message IXC405D.

System programmer response: Check all the systems displayed in message IXC404I to determine if they are operative and if this system belongs in a sysplex with them.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS2IN**Routing Code:** 1,2M**Descriptor Code:** 2

IXC406I	THIS SYSTEM IS CONNECTED TO ETR NET ID=xx. THE OTHER ACTIVE SYSTEMS IN THE SYSPLEX ARE USING ETR NET ID=yy. EFFECTIVE CLOCK VALUES ARE NOT CONSISTENT.
----------------	---

Explanation: During sysplex initialization, cross-system coupling facility (XCF) determined that the system joining the sysplex is using a different XCF external time reference (ETR) clock than the other systems in the sysplex or that they are using the same ETR clock but have different effective clock values. All systems in a sysplex must use the same ETR clock and have the same effective clock value.

If the **EFFECTIVE CLOCK VALUES ARE NOT CONSISTENT** message appears in the message text, XCF has determined that the systems in the sysplex are using the same ETR clock but have effective clock values.

In the message text:

xx The identifier of the ETR clock used by the IPLing system.

If the IPLing system is not using an ETR, the message text contains **NET ID=LOCAL**.

yy The identifier of the ETR clock used by the other systems in the sysplex.

System action: The system restarts XCF and issues message IXC207A to request a new COUPLExx specification.

Operator response: Check the status of the ETR, or any defined offsets to the ETR time, and notify the system programmer.

System programmer response: Have the operator do one of the following:

- Specify the COUPLE00 parmlib member on this system to IPL it in XCF-local mode. None of the multisystem XCF services will be available.
- Request a different COUPLExx parmlib member to specify a different couple data set.
- Correct any ETR problem and retry with the same COUPLExx parmlib member.
- Enter a VARY XCF command to remove any systems in the sysplex that are not connected to the correct ETR clock.
- Correct any improperly defined ETR time offsets.

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: Cross System Coupling Facility (SCXCF)**Detecting Module:** IXCS2IN**Routing Code:** 1,2,10**Descriptor Code:** 12

IXC407W	XCF IS UNABLE TO CONTINUE: WAIT STATE CODE: 0A2 REASON CODE: 00C XCF HAS LOST ACCESS TO THE EXTERNAL CLOCK. IF YOU RESTART THIS SYSTEM, ALL OTHER SYSTEMS IN THE SYSPLEX WILL BE PLACED IN A WAIT STATE. RESTART THIS SYSTEM TO CONTINUE.
----------------	--

Explanation: This system lost access to the cross-system coupling facility (XCF) external time reference (ETR) clock. Either the ETR clock failed, or this system's connection to the ETR clock failed. All systems in the sysplex must use the same ETR clock.

If this message appears on every system in the sysplex, the problem is with the ETR clock itself.

System action: The system enters a restartable wait state X'0A2'. If this system is not removed from the sysplex, the other systems will fail. The system writes a machine check record for the ETR failure.

Operator response: Contact hardware support.

System programmer response: Do the following:

- If this message appears on every system in the sysplex, there is a problem with the ETR clock itself. Decide which system in the sysplex you want to keep up and respond to message IXC407W on that system by restarting it. The restarted system removes all other systems from the sysplex. All the other systems enter a nonrestartable wait state.
- If this message is not issued on every system in the sysplex, the problem probably involves this system's connection to the ETR clock. You can keep either this system running or all the other systems running. If you want to keep just this system going, ask the operator to restart it.

In either case, ask the operator to do one of the following:

- Restart this system.
If the ETR clock is not synchronized when this system is restarted, this system will remove all other systems from the sysplex. All the systems will enter a nonrestartable wait state.
If the ETR clock is synchronized, this system will rejoin the other systems in the sysplex.
- Do not restart this system.
If this system is not restarted, another system in the sysplex issues message IXC402D. RESET this system, and reply **DOWN** to message IXC402D on the other system.

After the ETR clock is fixed, reIPL this system into the sysplex.

Source: Cross System Coupling Facility (SCXCF)

Routing Code: 1,2,10

Descriptor Code: 1

**IXC408I PRIMARY AND ALTERNATE COUPLE DATA SETS ARE INCONSISTENT.
REASON CODE *reason-code*.**

Explanation: This system tried to join a sysplex, but its primary and alternate couple data sets are different than the ones used by the sysplex.

In the message text:

reason-code

The hexadecimal reason codes are:

Reason Code	Explanation
08	This system specified a different primary couple data set than the rest of the sysplex.
0C	This system specified a different alternate couple data set than the rest of the sysplex.
10	This system specified different primary and/or alternate couple data sets than the rest of the sysplex.

System action: XCF tries again to initialize this system into the sysplex. The system issues message IXC207A to prompt for a new COUPLExx parmlib member.

Operator response: Notify the system programmer.

System programmer response: Enter the DISPLAY XCF,COUPLE command to display the couple data sets used by the sysplex. Do one of the following:

- Change the couple data sets specified in the COUPLExx parmlib member for this system to match the sysplex.
- Change the COUPLExx parmlib member to specify unique data sets to start a new sysplex for this system.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS2IN, IXCS2PAC

Routing Code: 1,2,10

Descriptor Code: 12

**IXC409D SIGNAL PATHS BETWEEN *sysname1* AND *sysname2* ARE LOST. REPLY
RETRY OR SYSNAME=SYSNAME OF THE SYSTEM TO BE REMOVED.**

Explanation: The last available signalling path

between this system and another system failed, or the path appears to have become non-operational.

In the message text:

sysname1

The name of a system that was connected to the current system before the signalling paths failed or became non-operational.

sysname2

The name of this system.

System action: The system continues and will process the response when entered. Cross-system coupling facility (XCF) tries to restart the signalling path. If XCF restores connectivity, the message will be deleted before it is answered. If XCF cannot fully restore connectivity between the two systems, the system issues message IXC409D again.

If the operator enters an incorrect reply, the system issues message IXC208I to notify the operator of the error.

The system might issue (or reissue) the message if:

- XCF continues to be unable to fully restore connectivity between the two systems. If XCF restores signalling connectivity between the two systems, the system deletes the message before it is answered.
- The operator performs a system reset without first issuing the command VARY,*sysname1*,OFFLINE. Performing a system reset causes signalling paths from all other systems in the sysplex to the system that was reset to appear to have suffered I/O failures.

If the system that has been reset, or has a non-operational signalling path is detected, and is removed from the sysplex because of operator response to message IXC402D or IXC102A, XCF signalling connectivity to the removed system is no longer relevant and the system deletes the message.

If the other system is removed from the sysplex through actions taken by the Sysplex Failure Management, or as the result of a PRSMPOLICY value, the system also deletes the message.

Operator response: Choose one of the following replies:

RETRY

To request that connectivity between the two systems be rechecked. Enter the RETRY response to gain more time for the signalling path restart to complete or to enter SETXCF commands to start additional signalling paths.

SYSNAME=SYSNAME

To request that XCF remove one of the two systems specified in the message text from the sysplex. The system issues message IXC417D to confirm the request to remove the specified system.

Source: Cross System Coupling Facility (SCXCF)

IXC411I • IXC413I

Detecting Module: IXCS2WTO

Routing Code: 1,2

Descriptor Code: 2

IXC411I SYSTEMS CAN NOW ENTER THE SYSPLEX USING SYNCHRONOUS CLOCK ID=*id*

Explanation: The sysplex switched from timer-local mode to the XCF external time reference (ETR) clock.

In the message text:

id The identifier of the ETR clock.

System action: Systems can now form a sysplex using the ETR clock.

Operator response: Any other systems brought into this sysplex should use the ETR clock.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS2TSK

Routing Code: 1,2

Descriptor Code: 4

IXC412I SYSPLEX CONFIGURATION IS NOT COMPATIBLE WITH REQUIRED CONFIGURATION

Explanation: This system tried to IPL with one of the following sysplex configurations specified:

- XCF-local
- MONOPLEX
- Multisystem

This configuration is not compatible with the configuration of the sysplex because of one of the following:

- The configuration specified on the PLEXCFG system parameter is not compatible with the IPLing system's configuration.

For example, if this system specifies PLEXCFG=MULTISYSTEM in its system parameters, it cannot IPL into a sysplex with a MONOPLEX configuration.

- Another system component has imposed restrictions on the sysplex configuration allowed because of other system parameters.

For example, If GRS=NONE is specified in the system parameters, the system cannot IPL in multisystem mode.

System action: The system prompts the operator for a new COUPLExx parmlib member. This message is accompanied by other messages explaining the incompatibility.

Operator response: Notify the system programmer. At the request of the system programmer, do one of the following:

- Specify a COUPLExx parmlib member to allow this system to IPL with the required configuration
- Have the system programmer change this system's system parameters to allow the desired configuration. Then reIPL the system

System programmer response: See the system programmer response for any accompanying messages. Do one of the following:

- Have the operator respecify the COUPLExx parmlib member. For example: When a system is trying to IPL in multisystem mode, but the COUPLExx parmlib member in use does not provide a couple data set, specify another parmlib member that does define a couple data set.
- Change this system's system parameters to match the sysplex the system is trying to join. Then have the operator reIPL the system.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCI2PH2, IXCS2IN

Routing Code: 1,2,10

Descriptor Code: 12

IXC413I *config1* SYSPLEX CONFIGURATION PREVENTED BY *config2*

Explanation: This system tried to IPL with one of the following sysplex configurations:

- XCF-local
- MONOPLEX
- Multisystem

This configuration is not compatible with the configuration of the sysplex because of one of the following:

- The configuration specified on the PLEXCFG system parameter is not compatible with the IPLing system's configuration.
- Another system component has imposed restrictions on the sysplex configuration allowed because of other system parameters.

This message accompanies messages IXC412I and IXC415I to explain the incompatibility.

In the message text:

config1

The type of sysplex configuration.

XCFLOCAL

The system is trying to join a sysplex with an XCF-LOCAL configuration.

MONOPLEX

The system is trying to join a sysplex with a MONOPLEX configuration.

MULTISYSTEM

The system is trying to join a sysplex with a MULTISYSTEM configuration.

config2

config2 is one of the following:

PLEXCFG=(MONOPLEX,MULTISYSTEM)

A PLEXCFG value of (MONOPLEX,MULTISYSTEM) is not compatible with the present sysplex.

PLEXCFG=(XCFLOCAL,MULTISYSTEM)

A PLEXCFG value of (XCFLOCAL,MULTISYSTEM) is not compatible with the present sysplex.

PLEXCFG=MULTISYSTEM

A PLEXCFG value of MULTISYSTEM is not compatible with the present sysplex.

PLEXCFG=(XCFLOCAL,MONOPLEX)

A PLEXCFG value of (XCFLOCAL,MONOPLEX) is not compatible with the present sysplex.

PLEXCFG=MONOPLEX

A PLEXCFG value of MONOPLEX is not compatible with the present sysplex.

PLEXCFG=XCFLOCAL

A PLEXCFG value of XCFLOCAL is not compatible with the present sysplex.

SYSTEM COMPONENT

A system component prevented this system from joining a sysplex with configuration *configuration*. The system component issues another message to explain the problem.

System action: This message was preceded by messages IXC412I, IXC413I, and IXC415I. Processing continues.

Operator response: See the operator response for accompanying messages IXC412I and IXC415I.

System programmer response: See the system programmer response for accompanying messages IXC412I and IXC415I.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCM2CFG

Routing Code: 1,2,10

Descriptor Code: 2,4,12

IXC414I CANNOT JOIN SYSPLEX *sysplex-name* *text*

Explanation: This system tried to join a sysplex, but the sysplex is not accepting new systems.

In the message text:

sysplex-name

The name of the sysplex that this system tried to join.

FOR REASONS WHICH CAN NOT BE DETERMINED

XCF cannot determine why this system cannot join the sysplex.

**WHICH IS RUNNING IN MONOPLEX MODE:
EXTERNAL TIME REFERENCE IS IN LOCAL MODE**

The external time reference (ETR) for the one system in the sysplex is in ETR-local mode. No other system can join the sysplex because they must all have access to the ETR clock, which is not possible when it is in ETR-local mode.

**WHICH IS RUNNING IN MONOPLEX MODE:
CONFIGURATION REQUIREMENT**

The system parameters specified for the one system in sysplex *sysplex-name* requires that the system be in MONOPLEX mode. The system issued messages IXC413I and IXC415I on the one system in the sysplex when it IPLed to indicate why it forced the sysplex to run in MONOPLEX mode.

BECAUSE SYSPLEX RECONFIGURATION IS IN PROGRESS. NO SYSTEM CAN JOIN THE SYSPLEX UNTIL SFM COMPLETES SYSPLEX RECONFIGURATION PROCESSING

The sysplex is being reconfigured because of a loss of signalling connectivity. No other system can join the sysplex while this is in progress.

Operator response: Specify a new COUPLExx parmlib member for this system, to allow the system to join a different sysplex or wait for the sysplex reconfiguration to be completed.

System programmer response: 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: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS2IN

Routing Code: 1,2,10

Descriptor Code: 2,4

IXC415I FORCING SYSPLEX CONFIGURATION TO BE MONOPLEX MODE

Explanation: This system is required to operate in MONOPLEX mode because of one of the following:

- The configuration specified on the PLEXCFG system parameter requires MONOPLEX mode.
- Another system component has imposed restrictions on the sysplex configuration allowed because of other system parameters.

This system is the first system in the sysplex and will prevent any other system from joining the sysplex.

System action: This message is accompanied by message IXC412 that explains why the system forced the sysplex to be in MONOPLEX mode.

The system issues message IXC414I on any other

IXC416I • IXC418I

system that tries to join this sysplex.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCI2PH2

Routing Code: 1,2,10

Descriptor Code: 2,4

IXC416I SIMETRID IS SUPPORTED ONLY WHEN ALL SYSTEMS IN THE SYSPLEX ARE RUNNING ON THE SAME CPC AND ARE USING SIMETRID CONSISTENTLY

Explanation: This system tried to use a simulated external time reference identifier (SIMETRID) in an unsupported or inconsistent manner. This could mean one of the following:

- Systems running as a guest on a Virtual Machine (VM) system do not all have CPUIDs that represent the same CPC, when VMCPUIDTOLERATION is not requested.
- Systems running in a Processor Resource/Systems Manager™ (PR/SM™) environment are not all on the same side of a physical CPC.
- Some systems are using SIMETRID and others are not.
- Systems have different TOD clock values.

System action: The system restarts initialization of XCF. The system issues message IXC207A to prompt the operator for a COUPLExx parmlib member.

Operator response: Notify the system programmer.

System programmer response: To use SIMETRID in a sysplex, do one of the following:

- Make sure that this system should be part of this sysplex. If not, specify the COUPLExx parmlib member for the correct sysplex.
- If the systems are running on VM, make sure that the processor identifiers (CPUIDs) of all the systems on the sysplex represent the same machine if VMCPUIDTOLERATION is not requested. When VMCPUIDTOLERATION is not requested, the VM systems must have their virtual CPUID information defined so that they appear to be on the same physical side of the same CPC. Alternately, if desired, request VMCPUIDTOLERATION by specifying VPCPUIDTOLERATION(YES) in the COUPLExx parmlib member. When VMCPUIDTOLERATION is requested, the VM systems may have disparate virtual CPUID information defined, and still be allowed to participate in the same sysplex.
- If the systems are running in a PR/SM environment, make sure all the systems in the sysplex are on the same side of a physical CPC.

For any system to use SIMETRID, all the systems in the sysplex must use SIMETRID and all the systems in the sysplex must have the same TOD clock value.

If this system should not be using SIMETRID, change the SIMETRID parmlib specification in the CLOCKxx parmlib member.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS2IN

Routing Code: 1,2,10

Descriptor Code: 12

IXC417D CONFIRM REQUEST TO REMOVE sysname FROM THE SYSPLEX. REPLY SYSNAME=sysname TO REMOVE sysname OR C TO CANCEL.

Explanation: The system issues this message to confirm the operator's reply to message IXC409D.

In the message text:

sysname

The name of the system selected for removal from the sysplex.

System action: The system waits for a valid response from the operator.

Operator response: See the operator response to message IXC409D. Make sure that the system in the message text is the one you want to remove.

Choose one of the following replies:

SYSNAME=sysname

To confirm that system *sysname* should be removed from the sysplex.

C To cancel the request to remove system *sysname* from the sysplex. If you select this reply, the system reissues message IXC409D.

If you enter an incorrect reply, the system issues message IXC208I. Then the system reissues message IXC417D.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS2WTO

Routing Code: 1,2

Descriptor Code: 2

IXC418I SYSTEM sysname IS NOW ACTIVE IN SYSPLEX sysplex-name

Explanation: The indicated system has joined the sysplex.

In the message text:

sysname

The name of the system that is now active in the sysplex.

sysplex-name

The name of the sysplex that this system has joined.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCI2PH3

Routing Code: 1,2

Descriptor Code: 4,12

IXC419I NOT SYNCHRONIZED: *sysnames*

Explanation: The system(s) listed in the message are a subset of the active/IPLing systems in the sysplex which did not appear to be correctly synchronized with the IPLing system. Message IXC404I will also be issued to list all of the active/IPLing systems in the sysplex. Message IXC416I or message IXC406I will also be issued to provide additional information regarding the synchronization problems that were detected.

System action: The system cannot join the current sysplex because of the lack of synchronization with one or more of the systems which appear to be active of IPLing in the sysplex. The system issues a message prompting the operator to indicate whether this system should initialize the sysplex, or re-initialize XCF.

Operator response: Respond to the message prompt.

System programmer response: Check the displayed systems to understand the cause of the synchronization problem with respect to the IPLing system, and take corrective actions if necessary.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS2IN

Routing Code: 1,2

Descriptor Code: 12

**IXC420D REPLY I TO INITIALIZE SYSPLEX
sysplex-name, OR R TO REINITIALIZE
XCF. REPLYING I WILL IMPACT OTHER
ACTIVE SYSTEMS.**

Explanation: This system is trying to initialize or join a sysplex, but cross-system coupling facility (XCF) found one or more systems that appear to be part of an existing sysplex *sysplex-name*. XCF determined that this system cannot join the existing sysplex because of reasons specified in preceding messages. This message prompts the operator to decide whether the systems identified in message IXC404I are actually active in the sysplex and whether initialization should continue.

In the message text:

sysplex-name

The name of an existing sysplex.

System action: Sysplex initialization processing stops

until the operator replies to message IXC420D.

Operator response: Choose one of the following replies:

- I** To request that sysplex initialization continue because none of the systems identified in message IXC404I are participating in an operating sysplex. This system will perform cleanup of old sysplex data, initialize the couple data set, and start a "new" sysplex. If any of the systems identified in message IXC404I are currently active in the sysplex, they will be placed into a disabled wait state.
- R** To request that XCF be reinitialized. XCF will stop using the current couple data sets and issue message IXC207A to prompt the operator for a new COUPLExx parmlib member.

Choose **R** also to change the sysplex name and reinitialize XCF to remove any residual data for this system from the couple data set. The system prompts the operator for a new COUPLExx parmlib member.

If an incorrect reply is entered, the system issues message IXC208I to notify the operator of the error. The system then reissues message IXC420D.

System programmer response: Check all the systems displayed in message IXC404I to determine if they are operative and if this system belongs in a sysplex with them.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS2IN

Routing Code: 1,2

Descriptor Code: 2

**IXC421E XCF WAS UNABLE TO STORE PR/SM
SYSTEM AUTHORITY**

Explanation: During XCF initialization, XCF was unable to pass the system authority to PR/SM. The problem is due to one of the following:

- A system problem.
- An error in the processor controller code that processes the request.
- The processor controller was busy and the request timed out.

System action: The system authority is not stored. XCF initialization continues.

Because the system authority could not be stored, XCF PR/SM POLICY cannot process system RESET or DEACTIVATION requests for this system.

Some automated actions will no longer function for the sysplex.

IXC422I

The system may issue message IXC402D for systems that stop normal functions.

Operator response: Reenter the SETXCF

PRSMPOLICY,ACTIVATE=*memname* command. If the problem was due to the processor controller being busy, the command should be successful.

If the problem persists, or if the problem is due to an error in the processor controller code, contact hardware support and notify the system programmer.

If the system issues message IXC402D, follow the operator response for this message as soon as possible.

Notify the system programmer.

System programmer response: 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: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCI2PH2

Routing Code: 1,2,10

Descriptor Code: 3

**IXC422I XCF {PR/SMISFM} POLICY *memname*
WAS UNABLE TO
{SYSRESETDEACTIVATE} *sysname*,
*text***

Explanation: XCF cannot carry out a POLICY action specified in the processor resource/systems manager (PR/SM) POLICY parmlib member or the Sysplex Failure Management policy.

In the message text:

PR/SM

XCF was executing PR/SM POLICY support.

SFM

XCF was executing SFM POLICY support.

memname

The name of the XCF PR/SM POLICY parmlib member or Sysplex Failure Management policy name.

SYSRESET

The XCFPOLxx parmlib member or Sysplex Failure Management policy specified RESETTIME to indicate that a failing system should be reset after the specified amount of time.

DEACTIVATE

The XCFPOLxx parmlib member or Sysplex Failure Management policy specified DEACTTIME to indicate that the logical remove (LPAR) where the failing system resides should be deactivated after the specified amount of time.

sysname

XCF was asked to reset or deactivate one of the systems in the sysplex, or ALL.

response-code

The PR/SM response code.

UNABLE TO RESET ALL CHANNEL INTERFACES

XCF was unable to complete system reset processing.

PR/SM AUTHORIZATION FAILURE

This system was not authorized on the PR/SM security frame (LPSEC) to perform the system reset or deactivate function for another system. In this case, the system programmer or operator has specified conflicting policies between XCF and PR/SM.

PR/SM TIME OUT FAILURE

The requested action timed out. The action may or may not have been initiated for the target logically removed mode (LPAR).

ALL STORAGE ALREADY ONLINE

No storage elements were available to handle a DEACTIVATE request.

FUNCTION NOT ENABLED

XCF could not perform the requested action because the target system did not enable its PR/SM system authority. XCF normally does not enable the PR/SM system authority until the master scheduler initialization phase of the system initialization process. The system issues message IXC421E on the target system.

SYSTEM NOT IN AN LPAR ON THIS CPC

XCF could not carry out the POLICY action because the system being activated or reset does not have LPAR support.

UNEXPECTED PR/SM RESPONSE

CODE=*response-code*

An unexpected response code was received from the processor controller after attempting the specified function. XCF did not complete the requested function.

System action: The deactivate or reset function specified in the XCFPOLxx parmlib member is ignored. The system may issue message IXC402D. The PR/SM console may display additional messages when the processor controller returns a *response-code*.

If **FUNCTION NOT ENABLED** appears in the message text, and XCF is unable to set the PR/SM system authority, the system issues message IXC421E on the target system.

Operator response: Because the system ignores the reset or deactivate request, any reconfiguration actions necessary must be done manually.

Follow the operator response for message IXC402D if the system issues it. Notify the system programmer.

System programmer response: Correct errors in the PRSMPOICY or PR/SM security frame (LPSEC) which may have caused this situation.

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: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS2PAT, IXCS2WTO

Routing Code: 1,2,10

Descriptor Code: 4

**IXC423I XCF {PR/SMISFM} POLICY *memname*
WAS UNABLE TO CONFIG
{STORIESTOR}, *text***

Explanation: XCF is unable to carry out the specified processor resource/systems manager (PR/SM) POLICY action.

In the message text:

PR/SM

XCF was executing PR/SM POLICY support.

SFM

XCF was using the SFM active policy.

memname

The name of the SYS1.PARMLIB member that contains the XCF PR/SM policy, usually XCFPOLxx.

STOR

Real storage that XCF could not configure online.

ESTOR

Expanded storage that XCF could not configure online.

NO STORAGE AVAILABLE

There was no storage of the specified type to configure online. This can occur when the installed storage is already online and there is no additional storage to configure online. This would be likely to occur if the storage being used by the failing system was not defined as reserved to this system.

RSM SERVICE NOT AVAILABLE

XCF was unable to determine if storage was available because of a system error.

System action: The system could not take the action specified in the XCF PR/SM parmlib member.

Operator response: Because the system cannot configure the storage online, any reconfiguration actions necessary must be done manually. Determine what storage is defined to this logical remove by using the processor controller element (PCE) CONFIG frame.

System programmer response: Verify that the storage is defined to the LPARs so that the PR/SM

policy is able to reconfigure storage when a system stops processing.

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: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS2PAT

Routing Code: 1,2,10

Descriptor Code: 4

**IXC424I XCF {PR/SMISFM} POLICY *memname*
EXPERIENCED AN UNEXPECTED
ERROR**

Explanation: XCF PR/SM encountered an unexpected problem. XCF could not perform an action specified in the PR/SM policy parmlib member.

In the message text:

PR/SM

XCF was executing PR/SM POLICY support.

SFM

XCF was executing SFM POLICY support.

memname

The name of the XCF PR/SM policy parmlib member.

System action: The system cannot complete the XCF policy action. Processing continues. The system issues message IXC102A or IXC402D.

Operator response: Follow the operator response for message IXC102A or IXC402D.

If a system was removed from the sysplex, PR/SM storage may need to be reconfigured manually.

System programmer response: 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: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS2PAT

Routing Code: 1,2,10

Descriptor Code: 4

**IXC425I XCF {PR/SMISFM} POLICY *memname*
{SYSGONEIRECONFIG} PROCESSING
HAS COMPLETED FOR SYSTEM
*sysname***

Explanation: XCF completed the SYSGONE policy action specified in the processor PR/SM parmlib member for system *sysname*. This message is issued on the system which processed the SYSGONE event.

In the message text:

IXC426D • IXC427A

PR/SM

XCF was executing PRSMPOLICY support.

SFM

XCF was executing SFM POLICY support.

memname

The name of the XCF PR/SM policy parmlib member or the Sysplex Failure Management policy name.

SYSGONE

PR/SM policy SYSGONE processing.

RECONFIG

SFM policy RECONFIG processing.

sysname

The name of the system for which the SYSGONE action was processed.

System action: XCF processes the SYSGONE action for system *sysname*.

Operator response: Either the operator or a message automation processor can respond to this message by initiating recovery or reconfiguration actions.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS2PAT

Routing Code: 1,2,10

Descriptor Code: 4

IXC426D SYSTEM *sysname* IS SENDING XCF SIGNALS BUT NOT UPDATING STATUS. REPLY SYSNAME=*sysname* TO REMOVE THE SYSTEM OR R TO RETRY

Explanation: The Sysplex Failure Management policy specifies that *sysname* should be ISOLATED when XCF determines that it is inoperative. The *sysname* has not updated its system status for as long as its failure detection interval. However *sysname* has produced signal traffic within its failure detection interval. The system is functional but cannot write its system status. This may be a temporary event or *sysname* is not functioning properly. XCF message IXC426D provides more information.

In the message text:

sysname

The name of the system whose status is missing.

System action: Processing continues. XCF will automatically ISOLATE and remove *sysname* if it does not produce any XCF message traffic within the system failure detection interval. If the operator replies SYSNAME=*sysname*, then XCF starts the removal of system *sysname* from the sysplex.

Operator response: If *sysname* is functional, then do nothing. If *sysname* is not performing properly and its removal is deemed necessary, then REPLY

SYSNAME=*sysname* to have XCF isolate and remove *sysname* from the sysplex. If the reply is incorrect, the system issues message IXC208I to notify the operator of the error, Then, the system issued IXC426D again.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS2WTO

Routing Code: 1,2

Descriptor Code: 2

IXC427A SYSTEM *sysname* HAS NOT UPDATED STATUS SINCE hh:mm:ss BUT IS SENDING XCF SIGNALS. XCF SYSPLEX FAILURE MANAGEMENT WILL REMOVE *sysname* IF NO SIGNALS ARE RECEIVED WITHIN A *interval* SECOND INTERVAL

Explanation: The Sysplex Failure Management policy specifies that *sysname* should be ISOLATED when XCF determines that it is inoperative. The *sysname* has not updated its system status for as long as its failure detection interval. However *sysname* has produced signal traffic within its failure detection interval. The system is functional but cannot write its system status. This may be a temporary event or *sysname* is not functioning properly. XCF message IXC426D prompts the operator to optionally force the removal of the system.

In the message text:

sysname

The name of the system whose status is missing.

hh:mm:ss

The last time system wrote its system status. The time is in hours (00-23), minutes (00-59), and seconds (00-59).

interval

The system failure detection interval in seconds. This interval is the time XCF lets elapse without a status update before assuming that the system is status update missing.

System action: Processing continues. XCF will automatically ISOLATE and remove *sysname* if it continues to be status update missing and does not produce any XCF message traffic within the system failure detection interval. At a minimum, XCF will attempt to send a signalling status message at least once a second. The operator can use message IXC426D to force the removal of the system; see IXC426D for more information.

Operator response: See message IXC426D.

System programmer response: Frequent occurrences of message IXC426D may indicate contention of poor performance of the XCF sysplex couple data sets. The performance problem should be investigated.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS2WTO

Routing Code: 1,2

Descriptor Code: 1

**IXC428I THE SYSTEM STATUS UPDATE TIME IN SYSPLEX COUPLE DATA SET
dsname ON VOLSER volser IS
GREATER THAN THE CLOCK VALUE
IN USE BY THIS SYSTEM.**

**THE COUPLE DATA SET CANNOT
BE USED. COUPLE DATA SET LAST
UPDATED AT:
*mm/dd/yyyy hh:mm:ss***
**CURRENT SYSTEM DATE AND
TIME IS:
*mm/dd/yyyy hh:mm:ss***
**WAIT UNTIL THE TIME DIFFERENCE
HAS ELAPSED AND RESPECIFY
COUPLE=xx OR
SPECIFY A NEW SYSPLEX COUPLE
DATA SET THROUGH THE USE OF
COUPLE=XX OR REFORMAT THE
CURRENT SYSPLEX COUPLE
DATA SET AND RESPECIFY
COUPLE=XX.**

Explanation: During sysplex initialization, cross-system coupling facility (XCF) determined that the system is trying to use a sysplex couple data set that was last used after the current time on this system. It may be the case that the TOD clock on this system is either incorrect, or a system with an unsynchronized clock value has updated the sysplex data set.

In the message text:

dsname

The name of the sysplex couple data set that is being initialized.

volser

The direct access storage device (DASD) volume on which the sysplex couple data set resides.

mm/dd/yyyy hh:mm:ss

The date and time the sysplex couple data set was last updated or the date and time of the current system. The date is in months (1-12), days (1-31), and years. The time is in hours (00-23), minutes (00-59), and seconds (00-59).

xx The suffix identifying the COUPLE parmlib member.

System action: The system restarts XCF and issues message IXC207A to request a new COUPLExx specification.

Operator response: Notify the system programmer.

System programmer response: Make sure that all systems are using the identical time. The problem could

be the result of at least one of the systems in the sysplex having a different time base than the others. See the consequences of different times being encountered within the sysplex in *z/OS MVS Setting Up a Sysplex*. Some recovery actions have more serious implications than others. The list which follows attempts to order the actions in increasing levels of impact.

Have the operator do one of the following:

- Verify the correct sysplex couple data set is in use. If the wrong sysplex couple data set was specified for this system, use a different COUPLExx parmlib member which specifies the correct sysplex couple data set.
- When the time difference is small, and the system clock (or external time reference, ETR) was changed to reflect a change in local time, wait until the time difference has elapsed and respecify the same COUPLExx parmlib member.
- When the current sysplex couple data set was used in an environment with a system time (or external time reference, ETR) in the future, the sysplex couple data set(s) is no longer usable and must be reformatted before it can be used. This allows its time base, and that of all the systems in the sysplex to be synchronized.
- To continue without a sysplex couple data set, specify COUPLE=** to IPL in XCF-local mode.

Detecting Module: IXCS2IN

Routing Code: 1,2,10

Descriptor Code: 12

**IXC429W XCF IS UNABLE TO CONTINUE: THE
text NAME WAS ALREADY DECLARED
AND DOES NOT MATCH *name*.**

Explanation: The system IPL is unable to continue because one of the names being declared by the operating system was already declared via logical partition definition at the hardware console, and the previously-declared name does not match the name being declared by the operating system.

In the message text:

text

One of the following:

OPERATING SYSTEM

XCF was declaring the operating system name.

CHANNEL PATH MANAGEMENT

XCF was declaring the channel path management name.

CPU MANAGEMENT

XCF was declaring the CPU management name.

IXC430E

name

The system or sysplex name which was being declared.

System action: The system enters a non-restartable wait state.

Operator response: Notify the system programmer.

System programmer response: Determine the reason for the mismatch of the indicated name between the name that was declared for the partition via logical partition definition and the name that is to be declared by the operating system (which is either the system name or the sysplex name).

Correct the mismatch by one of the following:

1. IPLing the system into the logical partition which has a system name or sysplex name that matches the name being declared, or
2. Modifying the logical partition definition to make the declared name match the system name or the sysplex name that will be declared by the operating system, or
3. Modifying the system name or sysplex name for the system being IPLed so that it matches the existing names declared via logical partition definition.

Once the mismatch has been corrected, re-IPL the system. If the system name in the logical partition definition has changed, in order for that name change to take effect, you must re-activate the logical partition before you can re-IPL the system.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCI2PH3

Routing Code: 1,2,10

Descriptor Code: 1

IXC430E SYSTEM *sysname* HAS STALLED XCF GROUP MEMBERS

Explanation: The indicated system has one or more members of an XCF group that are not processing their XCF work in a timely manner. The XCF work to be performed by a group member includes such things as processing of messages by a message user exit routine, or processing of group events by a group user exit routine.

A member is declared stalled if there is any one work item that is not being processed in a timely manner. A stalled member could be processing all its other XCF work in a timely manner. See the explanation of message IXC431I for a description of situations that could make a member appear stalled.

Note: It is very unlikely that the delays are caused by a problem in XCF.

It may not be possible to determine the impact to the sysplex, system, or relevant application without understanding the type and nature of the work item(s) experiencing the delay. The impact may not be limited to the stalled member if it provides services to other applications or subsystems the sysplex. Failure to process this work in a timely manner could account for delays or performance problems elsewhere in the sysplex.

This message is not necessarily issued if the stalled member happens to be an internal XCF member.

In the message text:

sysname

The name of the system on which the stalled members reside.

System action: XCF continues to monitor the situation. The message is deleted when no member stalled conditions exist on the indicated system.

Messages IXC431I and IXC432I may be issued periodically to the log to provide information about the current state of the stall for a particular group member. XCF may issue abend x00C reason x020F0006 to initiate internal XCF self verification and other actions to address the stall. The abend does not directly impact the stalled application. If an internal XCF problem is discovered, a dump will be taken. An entry in logrec is made to document the situation even if no dump is taken.

Operator response: Monitor the situation. If there does not seem to be any detrimental impact, no further action may be needed. On many occasions the system will successfully resolve the situation during the course of normal processing. Issue DISPLAY XCF commands on the indicated system to get more information about the stalled group members.

- Use DISPLAY XCF,GROUP to determine which groups have a stalled member on the system.
Message IXC331I lists the names of the groups and indicates which ones have stalled members.
- Use DISPLAY XCF,GROUP,*grpname* to determine which members of group *grpname* are stalled.
Message IXC332I lists the names of the members and indicates which ones are considered stalled by XCF.
- Use DISPLAY XCF,GROUP,*grpname*,*membername* to get detailed information about the member *membername* of group *grpname*. Message IXC333I provides status information about the member and indicates what work appears to be stalled.

There may be other commands provided by the stalled application/subsystem that will allow you to determine its status and/or alleviate the problem. At the direction of the system programmer, you may need to obtain dumps for problem diagnosis and/or terminate the indicated application. If multiple members appear to be stalled, or

if other indicators suggest work is not being processed, check the status of the system because there may be an underlying problem affecting them all.

The DISPLAY XCF,PATHOUT and DISPLAY XCF,PATHIN commands may be issued to obtain detailed path status information to see if a member with a signaling stall appears to be impacting message delivery.

System programmer response: Check the status of the stalled application/subsystem. On many occasions the system will successfully resolve the situation during the course of normal processing, in which case no further action is warranted. Take appropriate action to correct the situation or cancel/terminate the application. Before terminating the application, issue the DISPLAY XCF,GROUP *grpname*,ALL command as well as any application specific display commands that may be helpful in ascertaining status. Then collect the following diagnostic information: system log, application log, and an appropriate dump. In addition to application specific diagnostic data, the dump should include XCF data (SDATA=COUPLE). Then using its normal shut down procedure, terminate the application.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS1DCM

Routing Code: 2,10

Descriptor Code: 11

IXC431I *text*

Explanation: In the message, *text* is:

```
GROUP gnme MEMBER mnme JOB jnme ASID asid STALLED AT sdate stime ID: s#.r#
LAST MSGX: adate sitime sixxit STALLED swork PENDINGQ
LAST GRPX: gdate gtme gnexit STALLED gwork PENDINGQ
```

The indicated XCF Group Member is not processing its XCF work in a timely manner. The processing of at least one work item appears to be stalled.

Note: It is very unlikely that the delays are caused by a problem in XCF.

Possible explanations include:

- Contention problems in the user exit routine(s). Perhaps the exit routine is suspended waiting to obtain the local lock or a latch. DISPLAY GRS,C will identify latch contention.
- SRBs not dispatched in a timely manner. Perhaps the member address space is swapped out or a dump is in progress. Perhaps the dispatch priority of the member address space is too low. Perhaps a loop in some other work unit is consuming most of the CPU resource. The looping work unit need not be in the member address space. It could be in an address space other than those identified by the IXC431I message(s).

- An influx of work has exceeded the processing capacity of the member or system. The influx may be a temporary spike that the system can work through with time. It could be the residual effect of some other problem that caused processing of an otherwise normal workload to be delayed.
- Some other member or system in the sysplex is not processing its work in a timely manner. Although XCF may have identified the indicated member as stalled, the situation could be the result of sympathy sickness arising from processing delays elsewhere in the sysplex (which may or may not have been identified).
- A member or system might be engaged in reconfiguration or recovery processes that must complete before normal processing can proceed. For example, a system may have just become active in the sysplex, a system may have just been removed from the sysplex, a member may be joining the group, a member may be leaving the group, or some other application specific processes may be running.
- The user exit routine may have a coding error in which it returns to the dispatcher instead of returning to XCF. One would expect this situation to occur only when testing a new application that exploits XCF services.

It may not be possible to determine the impact to the application without understanding the nature and content of the item(s) experiencing the delay. The impact may not be limited to the stalled member if it provides services to other applications or subsystems in the sysplex. Failure to process this work in a timely manner could account for delays or performance problems elsewhere in the sysplex.

If multiple members appear to be stalled, or if other indicators suggest work is not being processed, check the status of the system because there may be an underlying problem affecting them all.

In the message text:

gnme

The name of the XCF group whose member stalled.

mnme

The name of the stalled member.

jnme

The name of the job.

asid

The hexadecimal ASID of the address space.

sdate

The date when XCF believes the member stalled.

stime

The time when XCF believes the member stalled.

s# A number to help correlate other instances of message IXC431I that are issued for the indicated

IXC432I

member with regard to this stall. Also appears in message IXC432I. In general this number is incremented each time a new stall is detected for the member. However it can be reset to zero if no stalls are detected for the member for a sufficiently long time.

r# A number to help indicate whether message IXC431I is being issued or reissued for the same stall condition. Equals one when message IXC431I is first issued for a stall, and incremented each time IXC431I is reissued with new data.

adate
The date when a signal exit most recently completed. Blank if no signal exit ever completed.

sitime
The time when a signal exit most recently completed. Blank if no signal exit ever completed.

sexit
The number of stalled signal exit routines.

swork
The number of signal work items queued for processing by or on behalf of the indicated member. These items include messages to be delivered to the member, notifications to be presented to the member, and internal XCF signaling related requests that need to be processed in the member address space.

gdate
The date when a group exit most recently completed. Blank if no group exit ever completed.

gtime
The time when a group exit most recently completed. Blank if no group exit routine ever completed.

gnexit
The number of stalled group exit routines.

gwork
The number of group work items queued for processing by or on behalf of the indicated member. These items include events that are to be presented to the member.

System action: XCF continues to monitor the situation. If the stalled condition persists, but other items are being successfully processed, XCF periodically reissues message IXC431I with updated information. XCF may issue abend X'00C' reason X'020F0006' to initiate internal XCF self verification and other actions to address the situation. The abend does not directly impact the stalled application in any way. If an internal XCF problem is discovered, a dump will be taken. An entry in logrec is made to document the situation even if no dump is taken. Message IXC432I is issued if the stalled member resumes normal processing or terminates.

Operator response: This message is issued to the

system log so no operator response is expected. If through customer action, the message is rerouted to an operator console, the operator should monitor the situation. If there does not seem to be any detrimental impact, no further action may be needed. Use DISPLAY XCF, GROUP, *grpname*, *membername* to get detailed information about the stalled member of group *grpname* named *membername*. Message IXC333I provides status information about the member and indicates what work appears to be stalled.

There may be other commands provided by the indicated application/subsystem that will allow you to determine its status and/or alleviate the problem. If more than one member is impacted, there may be an underlying system problem affecting them all. If so, investigate the status of the system at large. At the direction of the system programmer, you may need to obtain dumps for problem diagnosis and/or terminate the indicated application.

XCF monitors its own internal use of the XCF signalling service and may issue message IXC431I if XCF itself appears to be stalled. However, the DISPLAY XCF, GROUP command cannot be used to investigate such stalls since the command does not support the internal XCF group.

System programmer response: Check the status of the stalled application/subsystem. If multiple members appear to be stalled, or if other indicators suggest work is not being processed, there may be an underlying problem affecting them all. If so, a broader system diagnosis may be warranted because the impacted members may not be at fault. On many occasions the system will successfully resolve the situation during the course of normal processing, in which case no further action is warranted. If necessary, take appropriate action to correct the situation or cancel/terminate the application. Before terminating the application, issue DISPLAY XCF, GROUP, *grpname*, ALL and any relevant application display, then collect the following diagnostic information: system log, application log, and an appropriate dump. In addition to application specific diagnostic data, the dump should include XCF data (SDATA=COUPLE). Then using its normal shut down procedure, terminate the application.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS1DCM

Routing Code: 2,10

Descriptor Code: 12

IXC432I **GROUP** *grpname* **MEMBER**
 membername **JOB** *jobname* **ASID** *asid*
 text AT *ResumeDate* *ResumeTme* **ID:**
 stall#

Explanation: The indicated XCF Group Member is no longer considered stalled. This message is issued after

the stalled condition indicated by message IXC431I is alleviated.

In the message text:

grpname

The name of the XCF group whose member resumed its XCF processing.

membername

The name of the resumed member.

jobname

The name of the job.

asid

The hexadecimal ASID of the address space.

text

One of the following:

RESUMED

The member is now processing the indicated work in a timely manner.

TERMINATING

The member is being deactivated. Pending work will be discarded.

ResumeDate

The date when XCF determined that the member should no longer be considered stalled.

ResumeTime

The time when XCF determined that the member should no longer be considered stalled.

stall#

A number to help correlate other instances of message IXC431I that are issued for the indicated member with regard to this stall. Also appears in message IXC432I. In general this number is incremented each time a new stall is detected for the member. However it can be reset to zero if no stalls are detected for the member for a sufficiently long time.

System action: If processing resumed, XCF continues to monitor the situation as needed. If the member is terminating, XCF continues with member cleanup processing. If message IXC430E was issued, and no other members on the local system appear to be stalled, message IXC430E is deleted.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXS1DCM

Routing Code: 2,10

Descriptor Code: 12

IXC433I **THIS SYSTEM IS IN A PARTITION WITH LOGICAL PARTITION ID *LNum*. THE FOLLOWING ACTIVE OR IPLING SYSTEM(S) DO NOT SUPPORT THE CURRENT LOGICAL PARTITION ID: *system-names***

Explanation: During sysplex initialization, the cross-system coupling facility (XCF) determined that the system joining the sysplex is a Logical Partition with an identifier that is not compatible with the systems that are in the current sysplex.

In the message text:

LNum

The identifier of the Logical Partition of the IPLing system.

system-names

A table of system names.

System action: The system restarts XCF and issues message IXC207A to request a new COUPLExx specification.

Operator response: Check the service levels of the specified system(s) and notify the system programmer.

System programmer response: Have the operator do one of the following:

- Apply the necessary service to the specified systems that will allow them to be compatible with the current Logical Partition ID.
- Enter a VARY XCF command to remove the specified systems that are not compatible with the current Logical Partition ID.
- Specify the COUPLE00 parmlib member on this system to IPL it in XCF-local mode. None of the multisystem XCF services will be available.
- Request a different COUPLExx parmlib member to specify a different couple data set.

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: Cross System Coupling Facility (SCXCF)

Detecting Module: IXS1DCM

Routing Code: 1,2,10

Descriptor Code: 12

IXC434I **sysname HAS TIMING DEFINITIONS THAT ARE NOT CONSISTENT WITH THE OTHER ACTIVE SYSTEMS IN SYSPLEX *sysplex* - EFFECTIVE CLOCK VALUES ARE NOT CONSISTENT.**

text

Explanation: During sysplex initialization, cross-system coupling facility (XCF) determined that the system joining the sysplex is using a different time source than the other systems in the sysplex. All systems in a sysplex in the same timing network must be configured with the same coordinated timing network identifier and be synchronized to the same coordinated server time and have the same effective clock value.

In the message text:	
<i>sysname</i>	IXC435I ALL SYSTEMS IN SYSPLEX <i>sysplex</i> ARE NOW SYNCHRONIZED TO THE SAME TIME REFERENCE.
The name of the system.	
<i>sysplex</i>	
The name of the sysplex	
<i>text</i>	
<i>text</i> is one of the following:	
SYSTEM: <i>sysname</i> IS USING ETR NETID: <i>etrid</i>	Explanation: Systems in the sysplex must be using the same primary reference time. This message indicated the timing in use by each of the systems in the sysplex. All these systems are using the same primary time reference for synchronization.
Shows the ETR NetId defined for the indicated system.	
SYSTEM: <i>sysname</i> IS USING CTNID: <i>stpid-etrid</i>	
Shows the STP and ETR portions of the CTN identifier defined for the indicated system.	
SYSTEM: <i>sysname</i> IS USING CTNID: <i>stpid</i>	
Shows the STP portion of the CTN identifier defined for the indicated system.	
System action: The system restarts XCF and issues message IXC207A to request a new COUPLExx specification.	
Operator response: Check the status of the ETR, or any defined offsets to the ETR time, if the ETR portion of the CTNID is provided. Check the CTNID and any defined offsets for the server that this system is running on. Make sure the STP portion of the CTNID is consistent with the STP portion of the CTNID defined for the other servers in the timing network. Notify the system programmer.	
System programmer response: Have the operator do one of the following:	
• Specify the COUPLE00 parmlib member on this system to IPL it in XCF-local mode. None of the multisystem XCF services will be available.	
• Request a different COUPLExx parmlib member to specify a different couple data set.	
• Correct any ETR problems if the system is stepping to or being steered by an ETR.	
• Correct any CTNID specifications (either the STPid portion or the ETRid portion).	
• Retry with the same COUPLExx parmlib member.	
• Enter a VARY XCF command to remove any systems in the sysplex that are not connected to the same time source.	
• Correct any improperly defined time offsets.	
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: Cross System Coupling Facility (SCXCF)	
Detecting Module: IXCS2TSK	
Routing Code: 2,10	
Descriptor Code: 12	
	IXC435I ALL SYSTEMS IN SYSPLEX <i>sysplex</i> ARE NOW SYNCHRONIZED TO THE SAME TIME REFERENCE.
	<i>text</i>
	Explanation: Systems in the sysplex must be using the same primary reference time. This message indicated the timing in use by each of the systems in the sysplex. All these systems are using the same primary time reference for synchronization.
	In the message text:
	<i>sysplex</i>
	The name of the sysplex
	<i>text</i>
	<i>text</i> is one of the following:
	SYSTEM: <i>sysname</i> IS USING ETR NETID: <i>etrid</i>
	Shows the ETR NetId defined for the indicated system.
	SYSTEM: <i>sysname</i> IS USING CTNID: <i>stpid-etrid</i>
	Shows the STP and ETR portions of the CTN identifier defined for the indicated system.
	SYSTEM: <i>sysname</i> IS USING CTNID: <i>stpid</i>
	Shows the STP portion of the CTN identifier defined for the indicated system.
	System action: The system continues processing.
	Operator response: None.
	System programmer response: None.
	Source: Cross System Coupling Facility (SCXCF)
	Detecting Module: IXCS2TSK
	Routing Code: 2,10
	Descriptor Code: 12
	IXC436W THIS SYSTEM HAS LOST TIME SYNCHRONIZATION WITH THE OTHER SYSTEMS IN THE SYSPLEX AND HAS BEEN PLACED INTO A NON-RESTARTABLE WAIT STATE CODE: X'0A2' REASON CODE: X'15A'
	Explanation: This system lost access to its primary time reference. This may have been the result of a configuration change to the coordinated time network (CTN) ID for the CEC where this system was running.
	System action: The system enters a non-restartable wait state X'0A2' reason code X'15A'. If this system is not removed from the sysplex, the other systems may fail. If there are other active systems in the sysplex that did not lose their primary reference time, then XCF on those systems will detect a status update missing condition for this system. XCF on those active systems will partition this system from the sysplex according to

| the sysplex failure management policy if such a policy
| exists and is active.

| **Operator response:** Determine whether this change
| was intentional or not. Seek assistance from the system
| programmer.

| **System programmer response:** If this message is
| not issued on every system in the sysplex, but it is
| issued on every system on the same CEC and the
| affected systems are all using STP for their time source
| in a coordinated time network, determine if the
| configuration change was intentional. If not, reset the
| CTNID for this CEC and re-IPL the z/OS systems.

| **Source:** Cross System Coupling Facility (SCXCF)

| **Detecting Module:** IXCS2TSK

| **Routing Code:** 1,10

| **Descriptor Code:** 1

| **IXC437I SYSTEMS CAN NOW ENTER THE
| SYSPLEX USING COORDINATED
| SERVER TIME CTNID=*stpid*[*-etrid*]**

| **Explanation:** The sysplex switched from local timing
| mode to timing synchronized by the coordinated timing
| network.

| **System action:** Systems can now form a sysplex
| using the CTN primary reference time.

| **Operator response:** Any other systems brought into
| this sysplex should use the same primary reference
| time in the same CTN.

| **System programmer response:** None.

| **Source:** Cross System Coupling Facility (SCXCF)

| **Detecting Module:** IXCS2TSK

| **Routing Code:** 1,2

| **Descriptor Code:** 4

| **IXC438I COORDINATED TIMING INFORMATION
| HAS BEEN UPDATED FOR SYSTEM
| *sysname*
| *text***

| **Explanation:** This system has been notified of a
| change to the CTNID.

| In the message:

| *sysname*
| The name of the system

| *text*

| *text* is one of the following:

- PREVIOUS CTNID: *etrid*
- CURRENT CTNID: *etrid*
- PREVIOUS CTNID: *stpid-etrid*
- CURRENT CTNID: *stpid-etrid*

- PREVIOUS CTNID: *stpid*
- CURRENT CTNID: *stpid*
- CURRENT TIMING: LOCAL

| *etrid*

| The ETR portion of the CTN identifier defined
| for the indicated system.

| *stpid*

| The STP portion of the CTN identifier defined
| for the indicated system.

| **System action:** Systems in the sysplex must be using
| the same CTN reference time. If this system has an
| updated CTNID that is not consistent with the other
| systems in the sysplex, then this system will be taken
| out of the sysplex.

| **Operator response:** Make sure that all systems in the
| sysplex are running on CECs that have been updated
| with the new CTNID.

| **System programmer response:** None.

| **Source:** Cross System Coupling Facility (SCXCF)

| **Detecting Module:** IXCS2TSK

| **Routing Code:** 1,2,10

| **Descriptor Code:** 4

| **IXC439E ALL SYSTEMS IN THE SYSPLEX
| *sysplex* ARE NOT SYNCHRONIZED TO
| THE SAME TIME REFERENCE. THE
| FOLLOWING SYSTEM IS NOT PART OF
| THE TIMING NETWORK AND WILL BE
| REMOVED.
| *text***

| **Explanation:** Systems in the sysplex must be using
| the same CTN reference time. If this system has an
| updated CTNID that is not consistent with the other
| systems in the sysplex, then this system will be taken
| out of the sysplex.

| In the message:

| *sysplex*
| The name of the system

| *text*

| *text* is one of the following:

| **SYSTEM: *sysname* IS USING ETR NETID: *etrid***
| Shows the ETR NetId defined for the indicated
| system.

| **SYSTEM: *sysname* IS USING CTNID: *stpid-etrid***
| Shows the STP and ETR portions of the CTN
| identifier defined for the indicated system.

| **SYSTEM: *sysname* IS USING CTNID: *stpid***
| Shows the STP portion of the CTN identifier
| defined for the indicated system.

- | **SYSTEM: sysname IS IN LOCAL TIMING MODE**
| The system is currently running in local mode
| rather than the CTN synchronized mode.
- | **System action:** The system continues processing.
- | **Operator response:** Make sure all systems in the sysplex are running on the CECs that have been updated with the new CTNID.
- | **System programmer response:** None.
- | **Source:** Cross System Coupling Facility (SCXCF)
- | **Detecting Module:** IXCS2TSK
- | **Routing Code:** 1,2
- | **Descriptor Code:** 11

**IXC451I INVALID SIGNAL PATH FROM SYSTEM
osysname DEVICE outdev TO SYSTEM
isysname DEVICE indev: text**

Explanation: XCF detected an error in the configuration of sysplex signalling paths. The problem can be errors in either the COUPLExx parmlib members or the hardware configuration. This message appears on the system that defined the inbound side of the signalling path.

In the message text:

osysname
The system transmitting a message.

outdev
The device number for the outbound signalling path, coming from *osysname*.

isysname
The system receiving a message.

indev
The device number for the inbound signalling path, leading to *isysname*.

NOT SAME SYSPLEX

A signalling path was established between two systems that are not in the same sysplex. Signalling paths are only permitted between systems participating in the same sysplex.

COUPLE DATA SETS DIFFER

A signalling path was established between two systems that have the same sysplex name, but not the same couple data sets. The couple data sets must have matching names, volumes, and formatting time stamps.

CIRCULAR PATH

A signalling path leads back only to the same system. Circular signalling paths are not allowed.

System action: The system leaves the indicated signalling paths online and allocated to XCF. XCF does not use the signalling path until the problem is corrected. The system on the outbound side of the

signalling path receives no information about this problem.

Operator response: Depending on the message text, do the following:

COUPLE DATA SETS DIFFER NOT SAME SYSPLEX

Do one of the following:

- If one of the systems is IPLing, try respecifying the COUPLExx parmlib member by responding to message IXC207A. If message IXC207A does not appear, then the system must be reIPLed in order to allow it to join the same sysplex.
- If one of the systems is already active in the sysplex, enter either:
 - The DISPLAY XCF,SYSPLEX command to determine what sysplex name is being used by the active system.
 - The DISPLAY XCF,COUPLE command to determine what couple data sets are being used by the active system.
- If the two systems involved are not supposed to be in the sysplex, no signalling path should connect them. Record the device numbers and system names identifier in the message and notify the system programmer. Enter a SETXCF STOP command on the active system where each device is defined to release resources associated with the signalling path.

CIRCULAR PATH

Enter a SETXCF STOP command on the system where the device is defined. Record the device numbers and system name identified in the message. Notify the system programmer.

System programmer response: Make sure that the COUPLExx parmlib member defines the correct signalling path or couple data set for the systems involved. Verify that the hardware configuration is correct and devices are correctly cabled.

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: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCT1ME1

Routing Code: 1,2

Descriptor Code: 12

**IXC452I THE NON-XCF CONNECTOR NAMED
connname RESIDING ON SYSTEM
sysname MAY INTERFERE WITH XCF'S
USE OF STRUCTURE strname**

Explanation: A non-XCF connector is connected to a XES list structure that is defined to XCF for signalling. The name of the connector and the system from which it did the connect is identified. A structure used by XCF

for signalling should be dedicated exclusively to XCF in order to ensure correct operation of the signalling service.

Some of the consequences if the non-XCF connector remains connected to a structure used for signalling:

- Signals may be lost.
- XCF may not be able to connect to the structure.
- Rebuild processing may never complete.

In the message text:

connname

The connection name by which the connector is known. This name was specified via the CONNAME parameter on the IXLCNN macro invocation.

sysname

The name of the system on which the connector resides.

strname

The name of the XES list structure defined to XCF as a signalling path.

System action: If the structure appears to be in use for signalling already, processing continues. If the structure does not appear to be in use for signalling, XCF disconnects from the structure.

Operator response: If XCF is not supposed to use the structure for signalling, enter a SETXCF STOP path command (for each direction that applies) to prevent XCF from attempting to use the structure and thereby interfere with the use of the structure by the other connector(s).

If XCF is supposed to use the structure for signalling, consult the system programmer to determine whether this connector is a legitimate user of the structure. Usually steps should be taken immediately to force the indicated connector(s) to disconnect from the structure. If not, the XCF signalling service may fail in a variety of ways due to interference from the non-XCF connector.

System programmer response: Do not allow non-XCF connectors to connect to a structure that is to be used for signalling. Simply being connected to the structure can prevent the XCF signalling service from operating as intended.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCT1SEX

Routing Code: 1,2

Descriptor Code: 5,12

**IXC453I INSUFFICIENT SIGNALLING PATHS
AVAILABLE TO ESTABLISH
CONNECTIVITY**

Explanation: A system is trying to join a sysplex, but there are not enough paths available to establish

signalling connectivity between this system and the sysplex.

The COUPLExx parmlib member must provide path definitions so that there will be at least one inbound and one outbound signalling path for every other active system in the sysplex. Either the definition for these signalling paths is missing from the COUPLExx parmlib member, or a failure kept the system from establishing the paths that were defined, or more time is needed to establish the signalling paths.

System action: If the system is not yet active in the sysplex, XCF stops using the COUPLExx parmlib member and message IXC207A is issued. System initialization stops until the operator respecifies the COUPLExx parmlib member.

If the system is active in the sysplex, message IXC455D is issued. System initialization stops until the operator specifies how much longer the system should wait for signalling connectivity to be established. Alternatively, the operator must re-IPL the system.

If a failure prevented the signalling paths from functioning, the IPL-ing system and/or the system to which the signalling path is connected issue messages to explain the failure. Look especially for messages IXC305I and IXC307I which explain why start path processing failed or why the path was stopped.

Operator response: Respond to message IXC455D or IXC207A as appropriate. Notify the system programmer if the problem persists.

If a failure kept the system from establishing valid signalling paths, see the operator response for the message issued to explain the signalling path failure.

System programmer response: Correct the COUPLExx specifications if signalling path definitions are missing.

If a failure kept the system from establishing valid signalling paths, see the system programmer response for the message issued to explain the signalling path failure.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCT1CON

Routing Code: 1,2

Descriptor Code: 12

**IXC454I SIGNALLING CONNECTIVITY CANNOT
BE ESTABLISHED FOR SYSTEMS:
*system-names***

Explanation: A system is trying to join a sysplex, but has not established signalling connectivity for the systems listed in the message text.

The problem is one of the following:

- The definitions for signalling paths to the systems listed are missing from the COUPLExx member.

IXC455D

- The other side of a signalling path has not been defined to XCF on a listed system.
- A failure prevented XCF from establishing valid signalling paths using the signalling path definitions in the COUPLExx parmlib member.
- Not enough time has elapsed for XCF to establish the signalling path.

In the message text:

system-names

A list of systems to which the initializing system has not established signalling connectivity.

System action: If the initializing system does not appear to have enough paths defined to establish signalling connectivity message IXC453I is issued. Message IXC455D is then issued. System initialization stops until the operator responds to message IXC455D.

Operator response: See the operator response for message IXC455D.

System programmer response: Ensure that signalling paths between every pair of systems are defined and operational.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCT1CON

Routing Code: 1,2

Descriptor Code: 12

**IXC455D REPLY INTERVAL=NNN SECONDS TO
RECHECK CONNECTIVITY OR *text***

Explanation: A system is trying to join a sysplex, but has not yet established signalling connectivity with all the systems in the sysplex. Message IXC454I identifies the systems without signalling connectivity to the IPLing system.

In the message text:

R TO REINITIALIZE XCF

Since the system is not yet active in the sysplex, XCF can be re-initialized.

RE-IPL SYSTEM

Since the system is active in the sysplex, XCF cannot be re-initialized. The system must be removed from the sysplex and re-initialized via an IPL.

System action: Initialization processing stops until the operator replies to the message or re-IPLs the system.

Operator response: There are six diagnostic activities to guide you in replying to this message. Before doing any of these activities, do a visual check on all hardware systems and compare with the configuration chart to ensure that all systems are correctly configured. If the configuration is correct, do the following to diagnose the problem:

1. Check the COUPLExx parmlib member and the couple data set
2. Check for non-operational systems
3. Check the signalling path definitions
4. Check the signalling path status in each active system
5. Check the signalling path status in the IPLing system
6. Collect diagnostic data for IBM.

These diagnostic procedures are described in greater detail below. After diagnosing the problem, choose one of the possible responses indicated in the message:

INTERVAL=nnn

To request that the IPLing system continue to check for full connectivity in the sysplex for the next *nnn* seconds. Choose this response after resolving any diagnosed problems, or simply to allow more time for the signalling paths to become established.

Each time this response is chosen, stopped signalling paths on the IPLing system are started again since the circumstances which caused the path failure may have been resolved, thereby allowing the path to establish signalling connectivity. In some cases, the system will unconditionally stop paths that are in the midst of stop processing so that a new start request can be initiated for the path.

System initialization proceeds as soon as signalling connectivity is established. If connectivity is not established within *nnn* seconds, the system reissues message IXC455D to reprompt the operator. The maximum allowable value of *nnn* is 999 seconds.

- R** To request reinitialization of XCF. Choose this response if the signalling path definitions in the current COUPLExx do not provide the required signalling paths for the systems identified in message IXC454I.

Choose this response to stop and then start the signalling paths all over again (specify the same COUPLExx parmlib member when prompted). This action sometimes allows signalling connectivity to be established when the system does not seem to be making progress despite repeated use of the INTERVAL=nnn response.

The system issues message IXC207A to prompt the operator to specify a new COUPLExx member. All signalling paths are stopped, and the system starts the signalling paths identified in the new COUPLExx parmlib member.

During XCF initialization, message IXC305I may or may not be displayed on an operator console when a CTC device cannot be started as a signalling path.

- The message is not displayed on an operator console the first time XCF initialization runs during an IPL.
- If XCF initialization is to be restarted for an issue not related to signalling connectivity problems, the message is not displayed on an operator console.
- If XCF initialization is to be restarted for an issue related to signalling connectivity, message IXC207A prompts the operator to respecify the COUPLExx parmlib member. The response to message IXC207A determines whether message IXC305I is displayed on an operator console. If the same COUPLExx parmlib member is specified, message IXC305I will be displayed. If a different COUPLExx parmlib member is specified, message IXC305I will not be displayed on the operator console, but IXC305I will always be displayed on the hardcopy log.

Re-IPL the system

It may not be possible for XCF to process a new COUPLExx member. In this case, the only recourse is to re-IPL the system. From an active console in the sysplex, enter a VARY XCF command to remove this system from the sysplex. Once sysplex partitioning completes, re-IPL this system. Specify a COUPLExx parmlib member that defines the signalling paths by which signalling connectivity can be established.

If an incorrect reply is entered, the system issues message IXC208I to notify the operator of the error. The system then reissues message IXC455D.

Repeatedly specifying INTERVAL=nnn and/or repeatedly respecifying the COUPLExx parmlib member may cause a signalling path on another system to be stopped because the path exceeds its retry limit. In such cases the operator may need to enter a SETXCF START path command on that system to manually start the signalling path again. This situation is more likely to occur when the other system is running a release of MVS/ESA™ prior to SP510.

Specifically, the diagnostic procedures are:

1. Are the COUPLExx parmlib member and couple data set identified properly?

If the COUPLExx parmlib member is not correctly identified, request reinitialization of XCF (reply R) with the correct parmlib member. If the sysplex couple data set is not correctly identified, request reinitialization of XCF (reply R) with the correct couple data set. The COUPLExx parmlib member identifies the sysplex couple data set(s) to be used by this system.

2. Are any systems non-operational?

Check the systems named in message IXC454I. If any of these systems is non-operational, use the VARY XCF command from an active system to

remove the non-operational systems from the sysplex. When all non-operational systems have been removed from the sysplex, reply INTERVAL=nnn to request that the IPLing system continue to check for full signalling connectivity.

If there is no active system in the sysplex from which to issue the VARY XCF command, ensure that the systems named in message IXC454I actually are non-operational. Then, reply R to reinitialize XCF. If message IXC405D appears, reply I to complete the removal of all the systems from the sysplex and continue the initialization process.

3. Are all signalling paths properly defined in the COUPLExx parmlib member?

Use the configuration chart to verify that the required signalling paths are correctly defined in the current COUPLExx parmlib member. If the signalling path definitions do not agree, you must either specify a different COUPLExx member or modify the current one. See the system programmer.

4. What is the status of the signalling paths in each active system?

From an active system console, issue DISPLAY XCF,PATHOUT and DISPLAY XCF,PATHIN commands to obtain detailed information about the status of the signalling paths on each of the systems listed in message IXC454I. The DISPLAY command issues message IXC356I which identifies the status of the requested signalling paths. If the status of a path needed for signalling connectivity is STARTING, RESTARTING, LINKING, REBUILDING, QUIESCING, or QUIESCED, allow additional time for XCF to establish signalling connectivity (reply INTERVAL=nnn). If the signalling path is not established after several attempts, enter a SETXCF STOP path command to stop the path and then enter a SETXCF START command to start the path again.

Note particularly that additional time may be needed when a list structure is used for signalling. Signalling paths cannot be established through a list structure until an active system allocates the structure and initializes it for use by the XCF signalling service. If a list structure is the only means of establishing connectivity between a set of systems in the sysplex (not recommended since it represents a single point of failure), the first system in the set to become active in the sysplex will be the only system capable of allocating the structure. The remaining systems in the set cannot allocate the structure because they are not active in the sysplex, and they cannot become active in the sysplex until they establish signalling connectivity. Initialization of the remaining systems will be delayed until the first system in the set successfully starts the structure for signalling. Message IXC306I is issued when the structure is started successfully.

If the status is STOPPING, STOPFAILED, or INOPERATIVE, do the following:

IXC457I

- If the status is STOPPING, let the stop complete or issue the SETXCF STOP command with UNCOND=YES. Once the path is stopped, issue the SETXCF command to start the path again.
- If the status is STOPFAILED, enter SETXCF STOP path command(s) to try stopping the path again. If the failure persists, specify the UNCOND=YES option on the stop path commands to unconditionally stop the path.
- Examine the system logs to gather more information about signalling paths that are stopped or have failed to start. Resolve any hardware problems.
- Enter a SETXCF START command to start the path again.

If a needed signalling path is not displayed, enter SETXCF START path command to start the path needed to establish signalling connectivity.

After resolving these path problems, reply INTERVAL=nnn on the IPLing system to allow XCF additional time to establish connectivity.

5. What is the status of the signalling paths in the IPLing system?

Examine the system logs from all systems for any additional data, especially messages about stopped paths or paths that failed to be started. If these messages originate from the IPLing system, and the paths needed for connectivity are either stopped or have not been successfully started, reinitialize XCF with the COUPLExx parmlib member that corresponds to the configuration. As a last resort, take a stand-alone dump from the IPLing system. View the dump with the Interactive Problem Control System (IPCS). Use the VERBX MTRACE command to view messages issued to the system log during the IPL.

6. If connectivity is not established at this point, what diagnostic aids does the IBM Support Center need?

Contact the IBM Support Center. The system programmer should provide the following information:

- a. A copy of the configuration chart
- b. The console output from the DISPLAY command showing the signalling path status
- c. The COUPLExx parmlib definition for each system
- d. System logs from all systems
- e. An SVC dump from the active system including the XCF address space, the XCF data spaces, and LSQA.
- f. A stand-alone dump from the IPLing system, also containing the XCF data spaces.

System programmer response: Provide a configuration chart for the operator which describes the signalling paths used to establish signalling connectivity between every pair of systems in the sysplex. Ensure

that the COUPLExx parmlib member correctly defines the signalling paths needed to establish signalling connectivity. Ensure that the necessary signalling paths are defined to systems already active in the sysplex. Ensure that the underlying hardware (devices, coupling facilities, coupling data sets) are operational and available to the appropriate systems. For list structures, ensure that the appropriate CFRM policy is active. Examine the system logs to determine why signalling connectivity could not be established. Messages IXC305I, IXC307I, and IXC467I identify path problems. Message IXC466I indicates when a signalling path is established.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCT1CON

Routing Code: 1,2

Descriptor Code: 2

**IXC457I {REBUILT} STRUCTURE *strname*
ALLOCATED WITH *numlist* LISTS
WHICH SUPPORTS FULL SIGNALLING
CONNECTIVITY AMONG *numsys*
SYSTEMS AND UP TO *numsig* SIGNALS**

Explanation: XCF successfully connected to the indicated list structure.

In the message text:

REBUILT

If REBUILT appears in the message, the structure was allocated as the result of structure rebuild processing. If REBUILT does not appear, the structure was allocated as the result of start path processing.

strname

The name of the XES list structure defined to XCF for signalling.

numlist

The total number of lists in the structure. Some of the lists are used by XCF to manage the list structure. The remaining lists are used for signalling paths.

numsys

The number of systems for which full signalling connectivity, both outbound and inbound, could be established with this structure.

numsig

The maximum possible number of signals that could be contained in the structure at any one time. The maximum number of signals will be less if any of the signals are long enough to require more than one list element. The largest signal written to the list structure requires sixteen list elements.

Therefore the maximum number of possible signals could be as low as *numsig* divided by sixteen.

System action: Processing continues.

System programmer response: This message indicates the capacity of the list structure with respect to signalling. Use this information as part of capacity planning activities, when evaluating structure size in the CFRM policy, or when determining potential causes of signalling performance degradation, or signalling connectivity problems.

The system initially tries to allocate the list structure with enough lists to provide for full signalling connectivity among all the potential systems in the sysplex. The number of potential systems is determined by the maximum number of systems supported by the sysplex couple data set. If *numsys* is smaller than the maximum number of supported systems, systems may not be able to establish signalling paths due to an insufficient number of lists within the structure. This condition may also indicate that the structure is too small, which can degrade signalling performance. Signalling performance is degraded if the number of signals (list entries) is too small.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCT1ISS

Routing Code: 1,2

Descriptor Code: 5,12

IXC458I SIGNAL *direction* **DEVICE** *devn*
STOPPED: *text*

Explanation: In the message, *text* is one of the following:

- **REASON UNKNOWN**
- **OPERATOR COMMAND**
- **RETRY LIMIT EXCEEDED**
- **SYSPLEX PARTITIONING OF LOCAL SYSTEM**
- **SYSPLEX PARTITIONING OF REMOTE SYSTEM**
- **OTHER SIDE IS SAME DIRECTION**
- **SUBCHANNEL NOT OPERATIONAL FOR RESUME**
- **START REQUEST FAILED**
- **CONNECTED TO NON-XCF SIGNALLER**
- **NON-XCF SIGNALLER USING PATH**
- **HALT I/O FAILED**
- **PURGE I/O FAILED**

Cross-system coupling facility (XCF) stopped a signalling path. Unless the operator initiated the stop, the signalling path remains defined to XCF.

In the message text:

direction

The direction of the signalling path that stopped.

direction is one of the following:

- **PATHIN** for an inbound signalling path.
- **PATHOUT** for an outbound signalling path.

devn

The device number for the signalling path that stopped.

REASON UNKNOWN

XCF cannot determine why the signalling path was stopped.

OPERATOR COMMAND

The operator entered a SETXCF STOP command. The device is no longer defined to XCF.

RETRY LIMIT EXCEEDED

The retry count for the signalling path has exceeded the retry limit. The device might still be usable. The problem can be:

- An I/O error occurred on the device.
- An incorrect COUPLExx parmlib member was specified.
- The specified COUPLExx parmlib member had signalling path definition errors. For instance, the retry limit can be exceeded if both sides of a signalling path were started in the same direction. See the explanation for the message text **OTHER SIDE IS SAME DIRECTION**.
- The IPL of a system into a sysplex caused an ESCON CTC device to appear non-operational.

SYSPLEX PARTITIONING OF LOCAL SYSTEM

The local system is no longer in the sysplex, so XCF stopped the signalling path connected to it. If the operator used either the VARY XCF command with RETAIN=NO or the SETXCF STOP command, the definition of the signalling path is deleted from XCF.

SYSPLEX PARTITIONING OF REMOTE SYSTEM

The remote system is no longer in the sysplex, so XCF stopped the signalling path connected to it. If the operator used either the VARY XCF command with RETAIN=NO or the SETXCF STOP command, the definition of the signalling path is deleted from XCF.

OTHER SIDE IS SAME DIRECTION

XCF tried to establish signalling connectivity between two systems, but the signalling path was defined in the same direction on both systems. A signalling path must have an outbound side and an inbound side. If both sides are defined in the same directions, messages cannot travel between the two systems involved.

Either of the two systems involved can detect the problem; the message appears only on one system. No response or acknowledgment is provided about this condition to the other system involved.

SUBCHANNEL NOT OPERATIONAL FOR RESUME

The subchannel is not operational for one of the following reasons:

- No subchannel is provided.

IXC459I

- The subchannel did not have a valid device number assigned.
- The subchannel is not enabled.

START REQUEST FAILED

A request to start a device for use as a signalling path failed because the device is either not suitable or not available. See message IXC456I for an explanation of the problem.

CONNECTED TO NON-XCF SIGNALLER

The device on the other end of this signalling path is not defined to XCF. Either this signalling path is not connected to a system in the sysplex, or another application is trying to use the signalling path. This signalling path can only be used for communication between two systems in the sysplex.

This message can also be issued in a circumstance where XCF is using the link. If an ESCON CTC is defined to the hardware as a BCTC in the IOCDS, but defined to software as an SCTC, XCF will attempt to use the CTC. The protocol understood by the hardware for the CTC is for BCTC; therefore, the first system that tries to connect shows status "LINKING". However, when the second system attempts to connect, the system issues message IXC458I with the additional text CONNECTED TO NON-XCF SIGNALLER.

NON-XCF SIGNALLER USING PATH

An non-XCF application tried to use this system's signalling path. Devices used by XCF must be dedicated exclusively to XCF.

HALT I/O FAILED

The system tried to stop all I/O through this device, but the request failed. The device is probably in a permanent error state. If the device is an ESCON CTC, IPLing another system into the sysplex might have caused the device to stop.

PURGE I/O FAILED

An attempt to remove all I/O queued to this device failed.

System action: XCF stops using this device as a signalling path. The device is left unallocated and online. XCF writes a component trace record for the problem.

If the stop was not initiated by the operator, the device remains defined to XCF, and is in an inoperative state.

Note: Depending on the kind of failure, XCF may be able to automatically restart the device.

Operator response: Depending on the message text, do one of the following:

SUBCHANNEL NOT OPERATIONAL FOR RESUME

HALT I/O FAILED

Contact hardware support.

PURGE I/O FAILED

Contact software support.

OTHER SIDE SAME DIRECTION

The direction of the signalling path *direction* is wrong. Correct the error as follows:

- Enter a SETXCF STOP *direction* to delete the definition of the incorrect path.
- Enter SETXCF START *direction* with the correct direction.
- For other message text, notify the system programmer.
- Manually restart the path.

System programmer response: For both systems involved, do the following:

- Make sure that the correct device number was specified.
- Make sure that the signalling path definitions in the COUPLExx parmlib member are correct.
- Make sure that the correct COUPLExx parmlib member was specified.
- Make sure that the device is being used only by XCF.
- Look in the SYS1.LOGREC error records for I/O errors on the device.
- Ask the operator to enter DISPLAY XCF,PATHOUT,DEVICE=ALL or the DISPLAY XCF,PATHIN,DEVICE=ALL commands on the active systems for information on devices.

If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the XCF component trace data, the SYS1.LOGREC error record, and the GTF trace data for the device that has failed.

Source: Cross-system coupling facility (XCF)

Detecting Module: IXCT1STR

Routing Code: 1,2,10

Descriptor Code: 12

IXC459I SIGNAL *direction* DEVICE *devn*
STOPPED UNCONDITIONALLY: *text*

Explanation: *text* is one of the following:

REASON UNKNOWN

OPERATOR COMMAND

SYSPLEX PARTITIONING OF LOCAL SYSTEM

Cross-system coupling facility (XCF) stopped a signalling path unconditionally.

In the message text:

direction

The direction of the signalling path that stopped. *direction* is one of the following:

- **PATHIN** for an inbound signalling path.
- **PATHOUT** for an outbound signalling path.

devn

The device number for the signalling path that stopped.

REASON UNKNOWN

XCF cannot determine why the signalling path was stopped.

OPERATOR COMMAND

The system stopped the signalling path in response to a SETXCF STOP signalling path command.

SYSPLEX PARTITIONING OF LOCAL SYSTEM

XCF removed the local system from the sysplex. The signalling path was already in the midst of stop processing at the time the message was issued.

System action: XCF stops using the device as a signalling path. It is left unallocated and online.

If **SYSPLEX PARTITIONING OF LOCAL SYSTEM** appears in the message text, XCF forces the in-progress stop request to complete.

Source: Cross-system coupling facility (XCF)

Detecting Module: IXCT1STR

Routing Code: 1,2,10

Descriptor Code: 12

IXC460I *statement MAXMSG VALUE MUST BE AT LEAST **minimum** TO SUPPORT CLASSLEN OF **classlen** FOR TRANSPORT CLASS **classname***

Explanation: The MAXMSG value, in kilobytes, of message buffer space, defined on a COUPLExx parmlib member statement is too small. The MAXMSG value must provide enough buffer space for a message as long as the class length defined for the indicated transport class.

In the message text:

statement

The *statement* can be one of the following:

CLASSDEF

The MAXMSG value for a CLASSDEF statement is incorrect.

LOCALMSG

The MAXMSG value for a LOCALMSG statement is incorrect.

PATHOUT *dev*

The MAXMSG value for a PATHOUT statement is incorrect. *dev* is the device number of the outbound signalling path.

COPPLE

The MAXMSG value for the COPPLE statement is incorrect.

minimum

The least possible value for MAXMSG, in kilobytes, to support the class length of this transport class. Note that setting the MAXMSG value to minimum may not provide sufficient buffer space to ensure good signalling performance.

classlen

The length, in bytes, of messages allowed for this transport class.

classname

The name of this transport class.

System action: The system prompts the operator for a new COUPLExx parmlib member and waits for the operator to reply.

Operator response: Record the indicated *statement*, *classname*, and *classlen*. Notify the system programmer of the problem.

Specify a new COUPLExx parmlib member when prompted.

System programmer response: In the COUPLExx parmlib member, increase the MAXMSG value or decrease the CLASSLEN value of transport class *classname*.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCT1IN

Routing Code: 1,2

Descriptor Code: 12

IXC462W **XCF IS UNABLE TO ACCESS THE ETR AND HAS PLACED THIS SYSTEM INTO NON-RESTARTABLE WAIT STATE**
CODE: 0A2 REASON CODE: 114

Explanation: This system lost access to the ETR. Either the ETR failed, or ETR connectivity to this system has failed. All systems in the sysplex must use the same ETR.

If this message appears on every system in the sysplex, the problem is probably with the ETR itself.

System action: The system enters a non-restartable wait state X'0A2', reason code X'114'. The system writes a machine check record for the ETR failure. If this system is not removed from the sysplex, the other systems may fail. If there are other active systems in the sysplex that did not lose ETR synchronization, then XCF on those systems will detect a status update missing condition for this system. XCF on those active systems will partition this system from the sysplex according to the sysplex failure management policy if such policy exists and is active. Otherwise, XCF will issue message IXC402D to ask the operator whether XCF should partition this system from the sysplex.

Operator response: Contact hardware support and determine whether to reconfigure the sysplex with

assistance from the system programmer.

System programmer response: Do the following:

- If this message appears on every system in the sysplex, there is probably a problem with the ETR itself. For this case, XCF can allow only one system to be IPLed back into the sysplex, unless a simulated ETR can be used in which case all systems must be IPLed to run in the same processor in the same physical partition under VM or PR/SM. Determine whether to reconfigure the sysplex and then IPL any systems that will be a part of that sysplex.
- If this message is not issued on every system in the sysplex, the problem is probably an ETR connectivity failure that involves one or more systems. You can choose to continue with the unaffected systems, or you can choose to reconfigure the sysplex as described above, except that you must also carefully consider whether any of the unaffected systems need to be reset first in order to protect data integrity of shared sysplex wide resources. If you choose to continue with the unaffected systems, the affected systems must be partitioned out of the sysplex, either manually by replying to IXC402D, or automatically as a result of an installation sysplex failure management policy.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS2ETR

Routing Code: 1,10

Descriptor Code: 1

IXC463I {REBUILD} IXLCONN FOR STRUCTURE *strname* WITH *numlist* LISTS IN COUPLING FACILITY *cfname* WAS NOT SUCCESSFUL: *reason*

Explanation: The system attempted to allocate the structure named *strname*, but no coupling facility was suitable. This message is issued for each coupling facility considered.

In the message text:

REBUILD

If REBUILD appears in the message, the connect was requested as the result of structure rebuild processing. If REBUILD does not appear, the connect was requested as the result of start path processing.

strname

The name of the XES structure defined to XCF for signalling.

numlist

The number of lists requested by XCF when connecting to the structure.

cfname

Name of the coupling facility that the structure could not be allocated in.

reason

One of the following:

POLICY INDICATES SYSTEM NOT CONNECTED TO FACILITY

According to the CFRM active policy, the system on which the connect was processed is not connected to the coupling facility in which the structure is allocated. Physical connectivity to the coupling facility must be re-established.

COUPLING FACILITY NOT DEFINED IN POLICY

The structure is not defined in the CFRM active policy. Verify that the set of facilities actually in use in the sysplex is correct and matches the CFRM policy most recently activated.

LOST CONNECTIVITY TO FACILITY

The system lost connectivity to the coupling facility in which the structure is allocated. Physical connectivity to the coupling facility must be re-established.

COUPLING FACILITY FAILURE

The coupling facility failed.

STRUCTURE FAILURE DURING ALLOCATION PROCESS

The structure failed while being allocated.

STRUCTURE ATTRIBUTES NOT VALID FOR THIS FACILITY

The structure attributes were inconsistent with the model dependent attributes of the coupling facility.

STRUCTURE SIZE DEFINED IN POLICY IS TOO SMALL. MINIMUM SIZE REQUIRED TO ALLOCATE THE STRUCTURE IS *minsizeK*.

The structure size specified in the CFRM active policy is too small to allocate the structure with the attributes specified. Increase the structure size defined in the policy. The minimum amount of space required to allocate the structure is *minsize* kilobytes. Note that the minimum allocatable size is not sufficient for good signalling performance, so more space is usually needed.

POLICY NOT ALLOWING ALLOCATIONS IN THIS FACILITY

New structures cannot be allocated in this coupling facility according to the CFRM active policy. The facility is being removed from the active policy, the facility has failed, or the facility is in the policy reconciliation process.

XCF COMPONENT ERROR

An internal XCF error occurred within the connect service.

UNKNOWN HARDWARE ERROR

An unknown hardware error occurred.

NOT ENOUGH SPACE TO ALLOCATE STRUCTURE IN FACILITY. MINIMUM SIZE

REQUIRED TO ALLOCATE THE STRUCTURE IS *minsizeK*.

There was not sufficient space available in the coupling facility to allocate the structure. The minimum amount of space required to allocate the structure is *minsize* kilobytes. Note that the minimum allocatable size is not sufficient for good signalling performance, so more space is usually needed.

LOCATION=OTHER SPECIFIED ON STRUCTURE REBUILD

The rebuild request specified that the structure must be allocated in some other coupling facility. Since the structure is already allocated in coupling facility *cfname*, it is not an eligible facility for the rebuilt structure.

DOES NOT SUPPORT NUMBER OF USERS NEEDED FOR REBUILD

The coupling facility was not selected for a rebuild connect request because it does not support the number of users connected to the original structure. The number of connectors to the original structure exceeds the coupling facility model dependent limit on the maximum number of connectors.

UNKNOWN REASON: *reason-code*

The reason the structure could not be allocated was not expected. The indicated *reason-code* comes from the field ConaFacilityRsnCode in the Connect Answer Area (mapped by IXLYCONA) returned by the connect service (IXLCONN).

FACILITY MAX ELEMENT CHARACTERISTIC TOO SMALL

The coupling facility model dependent limit for the maximum element characteristic is too small for XCF's needs.

FACILITY MAX NUMBER OF LISTS TOO SMALL

The number of lists requested exceeds the coupling facility model dependent limit for the maximum number of lists in a list structure.

IXLCONN SERVICE COULD NOT CONNECT

An unexpected return and reason code was returned by the IXLCONN service when XCF attempted to connect to the structure.

RC=*n*, RSN=*n*

Diagnostic data that is provided to assist IBM service personnel with problem determination.

System action: If there is at least one coupling facility for which the allocation failed due to space constraints, the system decreases the requested number of lists and attempts to allocate the structure again. If the structure still cannot be allocated, this process is repeated until there are so few lists that the structure would not be suitable for signalling even if it could be allocated. The system issues message(s) IXC463I for the maximum number of lists requested, and for the number of lists

requested at the point the system deemed that the structure would not be suitable for signalling. The system issues message IXC457I if the structure can be allocated during this process.

If the structure is not successfully allocated for the REBUILD case, the system will revert to the original structure if it is still usable and will initiate a stop path request if it is not usable. The system also initiates a stop path request if the structure cannot be allocated when it is not a REBUILD case.

System programmer response: Use this information to determine why a structure was not allocated in a particular coupling facility.

Ensure that the coupling facility supports the structure attributes required for it to be used by XCF. As needed, make a suitable coupling facility available to the sysplex.

Ensure that the correct CFRM policy is active. As needed, modify the definition of the structure in the CFRM active policy. For example, change the maximum structure size, the preference list, or the exclusion list. Also consider modifying the CFRM active policy for other structures since reducing the size or number of structures allocated in a coupling facility could free up space for this structure.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCT1ISS

Routing Code: 1,2

Descriptor Code: 5,12

IXC464I REBUILD REQUEST FOR STRUCTURE *strname* WAS NOT SUCCESSFUL: *text*

Explanation: A request to rebuild a structure used for signalling was not successful.

In the message text:

strname

The name of the XES list structure that was to be rebuilt.

STOP IS REQUESTED

A stop path command was initiated for the signalling path by either the operator or XCF. All processing for the rebuild request is ended.

PATH UNCONDITIONALLY STOPPED

A stop command with UNCOND=YES was entered for the signalling path. The unconditional stop path request was initiated by either the operator or the system. All processing for the rebuild request is ended.

UNEXPECTED ERROR

An unexpected failure occurred while processing the command.

NO CONNECTIVITY TO COUPLING FACILITY

The system processing the rebuild command does not have connectivity to the coupling facility containing the rebuilt structure. This situation could be due to operator commands such as VARY PATH OFFLINE or CONFIG CHP OFFLINE or hardware errors such as facility or path failures.

NO CONNECTION AVAILABLE FOR XCF

XCF was unable to connect to the structure. There was no connection available for XCF to use. Possible explanations include:

- The maximum number of connectors to a structure has been reached for the CFRM active policy.
- The model dependent limit on the maximum number of connectors to a list structure has been reached for the coupling facility that contains the list structure.
- Some non-XCF connector is connected to the structure. A non-XCF connector can prevent XCF from connecting to a structure even though all the connections are not in use.

UNEXPECTED HARDWARE ERROR

The signalling path could not be rebuilt due to an unexpected hardware error.

STRUCTURE NOT DEFINED IN ACTIVE POLICY

The indicated structure name is not defined in the CFRM active policy. The structure must be defined in the active policy in order to connect to the structure.

UNABLE TO ALLOCATE STRUCTURE

Structure could not be allocated. Message IXC463I is written to the system log to explain why the allocation failed in each of the coupling facilities that was tried. The preference list in the CFRM active policy determines which coupling facilities are allowed to contain the structure.

NEW CONNECTIONS TO STRUCTURE BEING PREVENTED

New connections to the requested structure are being prevented at this time for one of the following reasons:

- All active connectors have confirmed the rebuild quiesce event. New connections will not be permitted until the rebuild or rebuild stop is completed.
- The structure is allocated in a coupling facility that is failed. New connections will not be permitted until the structure is rebuilt, or all connections disconnect causing the structure to be deallocated.
- The coupling facility containing the structure is not available for use because policy reconciliation is in progress. New connections will not be permitted until policy reconciliation is complete.

- New structure allocations for this structure name are not permitted because there is a pending policy change for this structure. New connections will not be permitted until the change is complete.

UNABLE TO DEFINE LOCAL LIST NOTIFICATION VECTOR

The list notification vector used to monitor list transitions could not be defined. The situation is most likely caused by a lack of storage in the Hardware System Area (HSA).

OTHER SYSTEMS USING STRUCTURE INCOMPATIBLY

Some other system is using the structure in ways that are not compatible with the protocols used by the system that processed the rebuild request.

DELAYED UNTIL STOP COMPLETES

A system initiated rebuild request is delayed until stop path processing completes. The system will automatically start the path upon successful completion of the stop, provided the path remains defined to XCF for signalling.

STRUCTURE FAILURE

The structure failed.

COUPLE DATA SET FOR CFRM NOT AVAILABLE

The couple data set for CFRM is not available to this system. In order to connect to structures, the couple data set for CFRM must be available.

For a system that is IPLing into an existing sysplex, this failure also arises when the indicated structure is not defined in the CFRM active policy.

DELAYED UNTIL STRUCTURE DUMP COMPLETES

The connect to the structure could not complete because SVC Dump holds serialization on the structure.

STRUCTURE'S DISPOSITION IS KEEP

The rebuilt structure was created with a disposition that allows it to persist (remain allocated) when there are no defined connections. Since the system that processed the rebuild request does not use persistent structures, the structure is being used in ways that are not compatible with its protocols.

STRUCTURE'S LIST ENTRY SIZE TOO SMALL

The rebuilt structure was created with a maximum size list entry that is not large enough to contain 65536 bytes of data. Since the system that processed the rebuild command creates list entries containing up to 65536 bytes of data, the structure is being used in ways that are not compatible with its protocols.

STRUCTURE DOES NOT USE ADJUNCT DATA

The rebuilt structure does not use adjunct data. Since the system that processed the rebuild request uses adjunct data for its list entries, the structure is being used in ways that are not compatible with its protocols.

XES FUNCTION NOT AVAILABLE

XES functions are not available. This situation can arise when the hardware necessary to provide XES functions is not present.

STRUCTURE IN USE BY A NON-XCF CONNECTOR

One or more of the connectors to the rebuilt structure is not XCF. Since it appears that the structure is in use by some other application, XCF disconnects from the structure to avoid interfering with that application. Structures to be used by XCF for signalling should be dedicated exclusively to XCF in order to ensure correct operation. Message IXC452I is issued to identify the non-XCF connectors.

STRUCTURE IN USE BY ANOTHER SYSPLEX

The rebuilt structure appears to be in use by systems in a different sysplex. Signalling paths are only permitted between systems participating in the same sysplex.

TOO FEW LISTS IN STRUCTURE

The structure does not have enough lists available.

The rebuilt structure was not allocated with the minimum number of lists required for XCF to make use of the structure for signalling. It could be that the structure was allocated by a non-XCF connector, or that there was not enough space available to allocate the structure with the desired number of lists.

NOT ENOUGH FREE SPACE IN STRUCTURE FOR SIGNALLING

There is not enough space available in the rebuilt structure for XCF to use it for signalling. After connecting to the structure, XCF verifies that there is enough space available to manage the structure and to be able to send at least one signal of the maximum supported message length. If the size of the structure is greater than or equal to the maximum structure size defined in the CFRM active policy, the size specified in the policy must be increased so that a larger structure can be allocated. If the allocated structure size is less than the size defined in the policy for the structure, the coupling facility containing the structure did not have enough space available to allocate the structure as large as the policy allowed. Either more space needs to be made available in the coupling facility, or the structure needs to be allocated in a coupling facility that can accommodate it.

UNEXPECTED ERROR

An unexpected failure occurred while processing the command.

IXLREBLD REQUEST(START) FAILED

XCF attempted to initiate a structure rebuild by invoking the IXLREBLD macro but the START rebuild request failed.

REBUILD WAS STOPPED AND ORIGINAL UNUSABLE

Rebuild processing was stopped, so the rebuilt structure will not be used. The original structure is not usable by this system, so the system will stop using the original structure.

REBUILT NOT USABLE, NEED ORIGINAL FOR SIGNAL CONNECTIVITY

This system is not able to use the rebuilt structure, so it considered disconnecting from the structure so that other systems could proceed with using the rebuilt structure. Since disconnecting from the original structure would lead to a loss of signalling connectivity, the rebuild is stopped.

STOP REBUILD, WOULD LOSE SIGNAL CONNECTIVITY

The rebuild is stopped since this system would lose signalling connectivity with one or more systems if it were to use the rebuilt structure.

REBUILT NOT USABLE, ORIGINAL NOT USABLE

Neither the original structure nor the rebuilt structure can be used by this system.

STOP REBUILD, WOULD LOSE SPACE

A rebuild was requested in order to increase the amount of usable space in the structure. The rebuild is stopped since the rebuilt structure did not resolve the space problem.

STOP REBUILD, WOULD LOSE LISTS

A rebuild was requested in order to increase the number of lists in the structure. The rebuild is stopped since the rebuilt structure did not resolve the problem with the number of lists.

REBUILT NOT USABLE

This system cannot use the rebuilt structure.

DIA073=n n n n n

Diagnostic data that is provided to assist IBM service personnel with problem determination.

System action: If possible, the system reverts to using the original structure. If the original structure is not usable, the system initiates stop path processing.

Operator response: If stop path processing was performed for the structure, enter a SETXCF START path command to try to start the structure again.

If the system reverts to using the original structure, resolve any hardware, definitional, or capacity problems. Then enter a SETXCF START,REBUILD command to try rebuilding the structure again.

If the problem persists, do the following:

1. Record the name of the signalling path, the text explaining why the rebuild was not successful, and any diagnostic data presented with this message. The system programmer will need this information if it becomes necessary to contact IBM service for problem resolution.

2. Enter the display commands that are relevant to the problem. Record the results of the display commands to assist with problem determination.
3. Contact hardware support as needed.
4. Contact the system programmer as needed.

The following commands are useful for investigating unsuccessful rebuild requests for structures. In some cases, it may be helpful to enter these commands on systems in the sysplex other than the one that was processing the rebuild request.

- DISPLAY XCF,PATHOUT,STRNAME=*strname* to display detailed information about the use of the structure for signalling, including the state of the outbound list paths that have been started.
- DISPLAY XCF,PATHIN,STRNAME=*strname* to display detailed information about the use of the structure for signalling, including the state of the inbound list paths that have been started.
- DISPLAY XCF,STRUCTURE to display summary information about the structures defined in this sysplex.
- DISPLAY XCF,STRUCTURE,STRNAME=*strname* to display detailed information about the indicated structure.
- DISPLAY XCF,CF to display summary information about the coupling facilities defined in this sysplex.
- DISPLAY XCF,CF,CFNAME=*cfname* to display detailed information about the indicated coupling facility as defined to the sysplex.
- DISPLAY CF to display summary hardware information about the coupling facilities connected to a system.
- DISPLAY CF,CFNAME=*cfname* to display detailed hardware information about the indicated coupling facility connected to a system.
- DISPLAY M=CHP(*chp*) to display the state of the channel paths connecting a system to a coupling facility.

Depending on the message text, do the following manual intervention:

NO CONNECTIVITY TO COUPLING FACILITY

Enter a DISPLAY XCF,STRUCTURE,STRNAME=*strname* for information about which coupling facility contains the indicated structure. Enter a DISPLAY CF,CFNAME=*cfname* command to display the status of that coupling facility and the channel paths that connect the system to it. (*cfname* is the name of the coupling facility that contains the structure).

Enter a CONFIG CHP command to configure channel paths to the coupling facility, if needed. Enter a VARY PATH command to vary the channel paths online to the system, if needed.

NO CONNECTION AVAILABLE FOR XCF

Enter a DISPLAY XCF,STRUCTURE,STRNAME=*strname* command for information about the connectors to the structure. Enter a DISPLAY XCF,POLICY,TYPE=CFRM command for information about the CFRM active policy. Consult the system programmer as needed to determine whether to:

- Perform the steps needed to activate a CFRM policy that has been formatted to support more connectors.
- Enter a SETXCF START,REBUILD command to rebuild the structure in a coupling facility that supports more connectors.
- Perform the steps needed to cause the non-XCF connector to disconnect from the structure.

UNABLE TO DEFINE LOCAL LIST NOTIFICATION VECTOR

Enter a DISPLAY XCF,STR command to determine which structures are in use. For each structure that is in use, enter a DISPLAY,XCF,STR,STRNAME=*inusestr*, where *inusestr* is the name of an in use structure, to determine which applications are connected to the structure from this system. Consult the system programmer as needed to determine whether to reduce the number of connectors connected to structures from the system that processed the rebuild command, or to modify the way in which the connectors are using the structure, or to perform the steps needed to increase the amount of storage in the Hardware System Area (HSA).

DELAYED UNTIL STRUCTURE DUMP COMPLETES

If the dump does not complete within a reasonable time, enter a DISPLAY,XCF,STRNAME=*strname* command for information about the structure dump. To force the dump serialization to be released, enter a SETXCF FORCE,STRDUMPSERIAL command. Note however, that the requested structure dump may then fail to contain the data needed for problem determination.

System programmer response: Do the following:

1. Examine the information provided by the operator.
2. Ensure that the hardware is correctly configured, defined to the system, and operational.
3. Perform the actions suggested below for the indicated message text.
4. Examine logrec error records for I/O errors or other hardware problems related to the signalling path.
5. Examine the system log for other messages related to the signalling path. Messages IXC452I, IXC457I, and IXC463I are especially relevant.
6. Obtain the following additional diagnostic information as appropriate for problem determination:
 - The XCF component trace table. The trace table must be obtained within 30 seconds of the

problem if XCF detail tracing is enabled, and within a few minutes if just XCF default tracing is in effect. Default tracing is sufficient to resolve this problem.

- XES component trace tables. Obtain both the global trace buffer and the connection related trace buffer.

If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Supply any diagnostic data presented as part of the rebuild failed message, any output from the DISPLAY commands issued while investigating the problem, the system log(s), and any of the traces that were obtained.

Depending on the message text, the following actions are appropriate:

NO CONNECTION AVAILABLE FOR XCF

If the maximum number of connectors to a structure has been reached for the CFRM active policy, use the XCF couple data set format utility to create a new couple data set that supports more connectors. Run the XCF Administrative Data Utility to recreate the CFRM policy in the new couple data set. Have the operator make this couple data set available to the sysplex.

If the model dependent limit on the maximum number of connectors to a list structure has been reached for the coupling facility that contains the list structure, have the operator rebuild the structure into some other coupling facility that can support the required number of connectors. If so, consider modifying the preference list in the CFRM policy so that the structure is allocated in coupling facilities that can support the required number of connectors. If no suitable coupling facility is available, consider defining more list structures for signalling so that each list structures provides signalling connectivity for a subset of systems in the sysplex. The structures together can provide for full signalling connectivity but the number of connectors need not exceed the model dependent limits on the number of connectors.

If some non-XCF connector is connected to the structure, take whatever steps are needed to force that connector to disconnect.

UNABLE TO DEFINE LOCAL LIST NOTIFICATION VECTOR

There was not enough storage available in the Hardware System Area (HSA) of the system that processed the start command to allow a list notification vector to be defined. Either reduce the amount of storage being used in the HSA, or increase the amount of storage available in the HSA for creating list notification vectors. Reduce the amount of HSA storage being used by decreasing the number of connectors or changing

the way connectors make use of their structure. For example, the size of the list notification vector required by the XCF signalling service is determined by the number of inbound list paths to be started. As another example, changing the number of buffers associated with a XES cache structure changes the amount of HSA storage required by the connector.

COUPLE DATA SET FOR CFRM NOT AVAILABLE

Use the XCF format utility program to format a couple data set for CFRM. Ensure that the couple data set formatted for CFRM is available to the system.

NOT ENOUGH FREE SPACE IN STRUCTURE FOR SIGNALLING

If the size of the structure is greater than or equal to the maximum structure size defined in the CFRM active policy, use the XCF Administrative Data Utility to increase the structure size specified in a policy. Have the operator activate the updated policy.

If the allocated structure size is less than the size defined in the policy for the structure, the coupling facility containing the structure did not have enough space available to allocate the structure as large as the policy allowed. Either more space needs to be made available in the coupling facility, or the structure needs to be allocated in a coupling facility that can accommodate it. More space can be made available in a coupling facility by causing structures to be deallocated from that facility, or by decreasing the amount of space reserved for structure dumps. It may be necessary to modify the preference list or the exclusion list defined in the CFRM policy to allow the structure to be allocated in a more suitable coupling facility. Alternatively, it may be necessary to make a new coupling facility available for the sysplex to use.

UNABLE TO ALLOCATE STRUCTURE

Examine the system log for instances of message IXC463I for explanations of why the structure could not be allocated. Message IXC463I is issued for each coupling facility that was considered. Resolve the problems indicated by message IXC463I or make a suitable coupling facility available for use.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCT1NSS, IXCT1PCC

Routing Code: 1,2

Descriptor Code: 5,12

IXC465I	REBUILD REQUEST FOR STRUCTURE <i>strname WAS result WHY REBUILT:</i> <i>rebuildrsn {WHY STOPPED:}stoppedrsn</i>
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Explanation: Rebuild processing for a XES List Structure used by the XCF signalling service has completed. As indicated by *result*, the structure may

have been rebuilt or rebuild processing may have been stopped.

In the message text:

strname

The name of the XES structure defined to XCF for signalling.

result

Indicates how rebuild processing completed. The *result* can be:

SUCCESSFUL

The structure was rebuilt.

STOPPED

Rebuild processing was stopped. The structure was not rebuilt.

rebuildrsn

Indicates why processing of a structure rebuild request was initiated on this system:

OPERATOR REQUEST

The operator entered a SETXCF START,REBUILD command for this structure.

LOST CONNECTIVITY TO FACILITY

This system lost connectivity to the coupling facility containing the structure.

STRUCTURE FAILURE

This system detected a structure failure.

MORE LISTS NEEDED

This system determined that the structure was not allocated with enough lists for all the signalling list paths that are needed.

MORE SPACE NEEDED

This system determined that more space was needed in the structure.

UNABLE TO START LIST MONITORING

This system was unable to establish list monitoring for lists used by XCF to manage the structure. The system initiated rebuild processing in an attempt to connect to a new instance of the structure in hopes that the necessary list monitoring could be established.

IXLVECTR TOKEN NOT VALID

The vector token used by this system when invoking the Local Vector Service (macro IXLVECTR) is no longer valid. A structure failure may cause a vector token to become invalidated. The system initiated rebuild processing in an attempt to connect to a new instance of the structure. A new vector token is assigned for the new structure.

MORE SYSTEMS EXPECTED

The system initiated rebuild processing to allocate the list structure with more lists for signalling paths that new systems entering the sysplex are expected to need in order to

establish full signalling connectivity. New systems are expected to enter the sysplex when the primary sysplex couple data set is replaced by a couple data set formatted with a larger MAXSYSTEM specification.

PARTICIPANT, RSN=STRUCTURE FAILURE

This system is participating in a rebuild of the structure initiated by some other connector due to a structure failure.

PARTICIPANT, RSN=OPERATOR REQUEST

This system is participating in a rebuild of the structure initiated by the operator.

PARTICIPANT, RSN=MORE LISTS NEEDED

This system is participating in a rebuild of the structure initiated by some other connector due to a need for more lists.

PARTICIPANT, RSN=MORE SPACE NEEDED

This system is participating in a rebuild of the structure initiated by some other connector due to a need for more space in the structure.

PARTICIPANT, RSN=UNABLE TO START LIST MONITORING

This system is participating in a rebuild of the structure initiated by some other connector that was unable to start list monitoring.

PARTICIPANT, RSN=IXLVECTR TOKEN NOT VALID

This system is participating in a rebuild of the structure initiated by some other connector since the vector token that the connector used when invoking the Local Vector Service (macro IXLVECTR) is no longer valid.

PARTICIPANT, RSN=MORE SYSTEMS EXPECTED

This system is participating in a rebuild of the structure initiated by some other connector to allocate the list structure with more lists for signalling paths that new systems entering the sysplex are expected to need in order to establish full signalling connectivity. New systems are expected to enter the sysplex when the primary sysplex couple data set is replaced by a couple data set formatted with a larger MAXSYSTEM specification.

PARTICIPANT, RSN=DIAG080: n n

This system is participating in a rebuild of the structure initiated by some other connector for a reason that this system could not interpret.

WHY STOPPED:

Indicates that the structure rebuild was stopped.
Applicable only when *result* is STOPPED.

stoppedrsn

Indicates why processing of a structure rebuild request was stopped on this system. Applicable only when *result* is STOPPED.

OPERATOR REQUEST

The operator entered a SETXCF STOP,REBUILD command.

LOST CONNECTIVITY TO NEW STRUCTURE

This system lost connectivity to the coupling facility that contains the rebuilt structure.

LOST CONNECTIVITY TO OLD STRUCTURE

This system lost connectivity to the coupling facility that contains the original structure. The rebuild could not continue without access to the original structure.

FAILURE OF NEW STRUCTURE

The rebuilt structure failed.

FAILURE OF OLD STRUCTURE

The original structure failed. The rebuild could not continue without access to the original structure.

NO COUPLING FACILITY PROVIDED BETTER CONNECTIVITY

No other coupling facility has better connectivity than the current one. The rebuild, which was initiated due to a loss of connectivity, would cause a further degradation in connectivity if accepted.

NO COUPLING FACILITY PROVIDED EQUIVALENT OR BETTER CONNECTIVITY

No other coupling facility has equivalent or better connectivity than the current one. The rebuild would cause a degradation in connectivity as determined by SFM system weights, if accepted.

WOULD LOSE SIGNAL CONNECTIVITY

This system would lose signalling connectivity if it were to use the rebuilt structure. The rebuild is stopped so the system can revert to using the original structure for signalling.

WOULD LOSE LISTS

The rebuilt structure would not provide more lists than the original structure, but the purpose of the rebuild was to increase the number of lists in the structure.

WOULD LOSE SPACE

The rebuilt structure would not provide more space than the original structure, but the purpose of the rebuild was to increase the amount of space available within the structure.

NO SUCCESSFUL CONNECTIONS TO NEW STRUCTURE

None of the connectors were able to successfully connect to a new instance of the structure.

UNUSABLE, NEED ORIGINAL FOR CONNECTIVITY

Other systems can use the rebuilt structure, but this system cannot. The rebuild is stopped

since this system would lose signalling connectivity to some other system in the sysplex without the original structure.

PARTICIPANT, RSN=LOST CONNECTIVITY TO NEW STRUCTURE

This system is participating in a stop rebuild request that it did not initiate. Some connector lost connectivity to the coupling facility containing the rebuilt structure.

PARTICIPANT, RSN=LOST CONNECTIVITY TO OLD STRUCTURE

This system is participating in a stop rebuild request that it did not initiate. Some connector lost connectivity to the coupling facility containing the original structure and was unable to continue rebuild processing.

PARTICIPANT, RSN=FAILURE OF NEW STRUCTURE

This system is participating in a stop rebuild request that it did not initiate. Some connector detected that the new structure failed.

PARTICIPANT, RSN=FAILURE OF OLD STRUCTURE

This system is participating in a stop rebuild request that it did not initiate. Some connector detected that the original structure failed and was unable to continue rebuild processing.

PARTICIPANT, RSN=WOULD LOSE SIGNAL CONNECTIVITY

This system is participating in a stop rebuild request that it did not initiate. Some connector determined that it would lose signalling connectivity by using the rebuilt structure. The rebuild was stopped to revert to signalling through the original structure.

PARTICIPANT, RSN=WOULD LOSE LISTS

This system is participating in a stop rebuild request that it did not initiate. Some connector determined that the rebuilt structure would not provide more lists than the original structure. The rebuild was stopped since this was not acceptable.

PARTICIPANT, RSN=WOULD LOSE SPACE

This system is participating in a stop rebuild request that it did not initiate. Some connector determined that the rebuilt structure would not provide more space than the original structure. The rebuild was stopped since this was not acceptable.

PARTICIPANT, RSN=NO SUCCESSFUL CONNECTIONS TO NEW STRUCTURE

This system is participating in a stop rebuild request that it did not initiate. Some connector determined that no connector was able to successfully connect to the rebuilt structure. The rebuild is stopped since the structure could not be used for signalling.

PARTICIPANT, RSN=UNUSABLE, NEED ORIGINAL FOR CONNECTIVITY

This system is participating in a stop rebuild request that it did not initiate. Some connector determined that it cannot use the rebuilt structure, and that it would lose signalling connectivity without the original structure.

PARTICIPANT, RSN=DIAG081: nn

This system is participating in a stop rebuild request that it did not initiate. Some connector determined that it cannot use the rebuilt structure. This system could not interpret the reason for stopping the rebuild.

PARTICIPANT, RSN=THE SPECIFIED POPULATECF IS LESS SUITABLE

This system is participating in a stop rebuild request that it did not initiate. POPULATECF rebuild processing determined that the current coupling facility is a more suitable location for the structure than the specified POPULATECF.

System action: If the structure is not usable by this system, stop path processing is initiated. Otherwise the system continues to use the structure for signalling.

Operator response: No response needed if the structure was rebuilt as desired. If the structure was not rebuilt, resolve the problems that caused rebuild processing to be stopped.

If the rebuild was stopped because signalling connectivity would be lost, enter SETXCF START path command(s) to start the additional signalling paths needed to maintain signalling connectivity.

If the rebuild was stopped because of a lack of connectivity to the coupling facility containing an instance of the structure, restore physical connectivity to the facility. Enter a CONFIG CHP command to configure channel paths to the coupling facility, if needed. Enter a VARY PATH command to vary the channel paths online to the system, if needed.

System programmer response: Ensure that coupling facilities are correctly defined, configured, and operational. Ensure that the structure is correctly defined in the CFRM active policy. Ensure that there is sufficient space available in at least one coupling facility so that a new instance of the structure can be allocated during rebuild processing. Provide redundant signalling paths so that signalling connectivity will be maintained even without this structure.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCT1NSS, IXCT1PCC

Routing Code: 1,2

Descriptor Code: 5

IXC466I	<i>direction SIGNAL CONNECTIVITY ESTABLISHED WITH SYSTEM sysname VIA sigpath</i>
----------------	--

Explanation: This message appears in the system log when a signalling path is established. The signalling path is eligible for signal transfer. When both the sending and receiving systems establish their respective sides of the path, signal transfer can begin.

In the message text:

direction

Signalling connectivity was established in the indicated *direction*:

INBOUND

This system is capable of receiving signals from system *sysname*.

OUTBOUND

This system is capable of sending signals to system *sysname*.

sysname

The name of the other system for which signalling connectivity has been established.

sigpath

Signalling connectivity was established. *sigpath* is one of the following:

DEVICE dev1 WHICH IS CONNECTED TO DEVICE dev2

Signalling connectivity was established for a CTC device. *dev1* is the device number for the local signalling path and *dev2* is the device number used by the other system.

STRUCTURE strname LIST listnum

Signalling connectivity was established for a list structure. *strname* is the list structure and *listnum* is the list number of the specified list within the list structure being used for this signalling path.

System action: Processing continues.

System programmer response: Use this information when attempting to resolve signalling connectivity problems. This message indicates which paths were successfully established.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCT1ME1, IXCT1ME2

Routing Code: 1,2

Descriptor Code: 5

IXC467I	<i>command dir pathname RSN: text</i>
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Explanation: Processing is being initiated that will result in a loss of signalling capacity. The message explains what action is being performed and why.

In the message text:

command

The command being initiated for the signalling path.
Command is one of the following:

RESTARTING

An established signalling path is being restarted. Signal transfer over the path is interrupted. Restart processing is initiated to re-establish the path and thereby restore it to service. This system may have detected an error, or it simply may be reacting to an action taken by the system to which the path is connected.

REBUILDING

A XES list structure used by the XCF signalling service is to be rebuilt. Rebuild processing is initiated to recover from errors or to reconfigure resources related to coupling facilities. This system may be initiating path rebuild processing, or may be doing so in order to participate in a rebuild initiated on some other system. Note that invoking of the XES rebuild service (macro IXLREBLD) is only one part of the processing needed to accomplish the rebuild of a structure used for signalling. Message IXC467I is issued by each system as it initiates the processing needed to accomplish the rebuild from the perspective of the XCF signalling service.

STOPPING

The signalling path is being removed from service. Stop path processing is initiated for errors or in response to actions taken by the system to which the path is connected. Stopping a list structure causes all list paths through that structure to be stopped as well (in the indicated direction).

- dir* The direction specified for the indicated request. An inbound signalling path is used to receive signals from another system in the sysplex. An outbound signalling path is used to send signals to another system in the sysplex.

PATHIN

Indicates the path was defined for inbound signal traffic

PATHOUT

Indicates the path was defined for outbound signal traffic

PATH

Indicates the path direction was not specified or could not be determined. For system initiated requests, the existing XCF path definition was to be used to determine the direction(s) in which to apply the request.

pathname

The name of the signalling path.

DEVICE *dev* USED TO COMMUNICATE WITH SYSTEM *sysname*

Indicates the CTC device whose device number is *dev*. The path is used to communicate with the system named *sysname*.

STRUCTURE *strname*

Indicates the XES list structure whose name is *strname*. A list structure can contain one or more individual list signalling paths.

STRUCTURE *strname* LIST *num* USED TO COMMUNICATE WITH SYSTEM *sysname*

Indicates the list signalling path using list number *num* within the XES list structure named *strname* to communicate with the system named *sysname*.

I/O ERROR WHILE LINKING

An error occurred when the system started an I/O operation used to establish the signalling path.

I/O ERROR AFTER LINKED

An error occurred after an I/O operation used to establish the signalling path had completed, but before the path could be established.

I/O ERROR WHILE WORKING

An I/O error occurred while the signalling path was engaged in signal transfer.

I/O ERROR WHILE RESTARTING. DIAG038: 5

An I/O error occurred while the signalling path was being restarted.

ATTENTION INTERRUPT

An I/O interrupt was presented for a path that was not engaged in any I/O operations. Usually this means the system on the other end of the signalling path is restarting or stopping its side of the path while this system is in the midst of restarting its side of the path.

I/O APPARENTLY STALLED

Signal transfer over the signalling path appears to have stalled. The path is restarted in an attempt to restore the path to working order.

INCOMPLETE SIGNAL

An I/O transfer completed, but not all the data in the signal was received. The path is restarted so that the signal can be resent.

SIGNAL OUT OF SEQUENCE

A signal did not arrive in the expected order. The path is restarted to re-synchronize the two sides of the signalling path.

WRONG BUFFER SIZE

The signal was longer than expected. The path is restarted to re-synchronize the two sides of the signalling path.

I/O QUEUE INCONSISTENT

An I/O queue does not appear to be intact. The path is restarted to ensure successful transfer of the signals.

RESUME I/O FAILED

A suspended I/O operation could not be resumed successfully.

I/O ERROR. DIAG038: 14

An I/O operation ended abnormally or unexpectedly. The path is restarted in an attempt to restore it to working order.

INTERVENTION REQUIRED

An I/O operation failed due to an intervention required condition. This could mean that the system on the other end of the signalling path is restarting or stopping its side of the path. It could also mean that underlying hardware is no longer operational. Manual intervention may be required.

NEED SIGNAL CONNECTIVITY

There is no signalling connectivity with at least one other system in the sysplex. This path is restarted in hopes that it may be able to establish connectivity.

CIRCULAR PATH

The inbound and outbound side of a signalling path must be under the control of two distinct systems. This signalling path may have been misconfigured or defined to XCF incorrectly because it appears to have both sides of the path defined to the same system. However, some of the data used to detect this situation is inconsistent. The path is restarted in order to resolve this question.

INCORRECT SIGNAL LENGTH

While negotiating the parameters to be used for signal transfer, one of the systems determined that the requested signal length was inappropriate. The path is restarted to resolve the problem.

XCF RECOVERY

XCF recovery processing could not determine whether signal transfer over the signalling path was operational. The path is restarted in order to ensure that both sides of the path are synchronized.

UNQUIESCE I/O

The signalling path was quiesced for signal transfer. In this case, the path was restarted as part of the processing used to unquiesce the I/O.

I/O TERMINATION

An I/O operation was terminated due to an error (such as a machine check or program check) that occurred while a system routine was in control. The signalling path is restarted to restore it service.

RESET PARAMETERS

Due to changes in resources associated with the signalling path, it is being restarted to reset its parameters of operation. For example, the maximum list set entry count of each list path is adjusted according to the number lists currently in use as signalling paths through a list structure. Or a change to the MAXMSG value (amount of buffer

space) for the signalling path may require modification of parameters related to I/O transfer.

INTERVENTION REQUIRED WHILE LINKING

An I/O operation initiated as part of an attempt to establish the signalling path failed due to an intervention required condition. This situation could be due to an IPL of the system on the other side of the signalling path. Also, the other system may have restarted or stopped its side of the signalling path.

NORMAL COMPLETION OF START

Start path processing completed without error. The path appears to be usable for signalling. A path restart is requested to initiate the processing required to establish signalling connectivity via this path.

START CONVERTED TO RESTART

A system initiated path start request was converted to a path restart request.

INCORRECT SIGNAL FORMAT

While negotiating the parameters to be used for signal transfer, one of the systems determined that the requested signal format was inappropriate. The path is restarted to resolve the problem.

START I/O FAILED

An attempt to start an I/O operation failed. The path is restarted in an attempt to restore it to working order.

I/O ERROR. DIAG038: 37

An I/O operation ended abnormally or unexpectedly. The path is restarted in an attempt to restore it to working order.

INCORRECT VECTOR INDEX

The vector index specified when invoking the Local Vector Service (macro IXLVECTR) is not valid. The path is restarted in order to re-establish a valid vector index.

INCORRECT LIST ENTRY VERSION NUMBER

The signal was not transferred with the expected validation data. The path is restarted to re-synchronize the two sides of the signalling path.

If this error is repetitive, use SETXCF to either rebuild the signalling structure or to stop all pathins and pathouts to the signalling structure and then restart the paths.

Note: This condition may be caused by replying DOWN to message IXC402D prior to a system being completely reset.

SYSPLEX PARTITIONING OF LOCAL SYSTEM

The request was initiated because the local system is no longer in the sysplex. If the local system was active in the sysplex, it enters a wait-state upon completion of sysplex partitioning. If the system was attempting to IPL into a sysplex but never became active, all paths are stopped before the

operator is prompted by message IXC207A to respecify a new COUPLExx parmlib member.

SYSPLEX PARTITIONING OF REMOTE SYSTEM

The system to which the path had last established signalling connectivity is being removed from the sysplex. The initiator of the partitioning request specifies whether the systems remaining in the sysplex are to retain the signalling paths used to communicate with the removed system. If the paths are not to be retained, this path becomes undefined to XCF for signalling upon completion of the stop. To redefine the path to XCF for signalling, the operator must enter a SETXCF START path command. If the paths are to be retained after the system is removed from the sysplex, this path remains defined to XCF for signalling and is restarted.

OTHER SYSTEM STOPPING ITS SIDE OF PATH

The other system to which the signalling path is connected is stopping its side of the path. If the path is no longer needed, this system also stops its side of the path. For example, if a system stops using a list structure for outbound signal traffic, all the systems using the structure for inbound signal traffic can stop their inbound list paths. If the path is still needed, this system restarts the path so that it is ready to re-establish the signalling path if the other side should ever start the path again.

OTHER SIDE IS SAME DIRECTION

XCF tried to establish signalling connectivity between two systems, but the signalling path was defined in the same direction on both systems. A signalling path must have an outbound side and an inbound side. If both sides are defined in the same directions, signals cannot be transferred via this signalling path.

Either of the two systems involved can detect the problem. The error is not necessarily detected by the system that has the incorrect definition. If it appears that the other system is at fault, the path is restarted to ensure that this side of the path remains ready to establish connectivity when the other side of the path is correctly defined. The restart may also allow the other system to recognize that its path is not defined correctly. If it appears that this system is at fault the path is stopped.

OPERATOR REQUEST

The operator entered a SETXCF command which caused the indicated request to be initiated.

STRUCTURE FAILURE

This system detected structure failure.

UNABLE TO START LIST MONITORING

This system was unable to establish list monitoring. The signalling service cannot ensure correct operation without the ability to monitor list transitions. Depending on the list involved, failure to

establish monitoring may impact a particular list path or use of the whole structure.

RETRY LIMIT EXCEEDED

The retry count for the signalling path exceeded the retry limit. The path is stopped because it is considered to be non-operational. The problem can be:

- I/O errors occurred on the path.
- An incorrect COUPLExx parmlib member was specified.
- The specified COUPLExx parmlib member had signalling path definition errors. For instance, the retry limit can be exceeded if both sides of a signalling path were started in the same direction. See the explanation for the message text **OTHER SIDE IS SAME DIRECTION**.

SUBCHANNEL NOT OPERATIONAL FOR RESUME

The subchannel is not operational for one of the following reasons:

- No subchannel is provided.
- The subchannel did not have a valid device number assigned.
- The subchannel is not enabled.

REBUILD FAILED, UNABLE TO USE ORIGINAL

A structure rebuild was initiated. The rebuild attempt failed and this system is unable to use the original list structure.

START REQUEST FAILED

A request to start a signalling path failed. Message IXC305I explains why the start request failed.

CONNECTED TO NON-XCF SIGNALLER

The other end of this signalling path is not under XCF control. Either the signalling path is not connected to a system in the sysplex, or another application is trying to use the signalling path. A signalling path can only be used for communication between two systems active in the same sysplex and both ends of the path must be under XCF's exclusive control in order to ensure correct operation of the signalling service.

NON-XCF SIGNALLER USING PATH

A non-XCF application tried to use this system's signalling path. Paths used by XCF must be dedicated exclusively to XCF in order to ensure correct operation of the signalling service.

HALT I/O FAILED

The system tried to stop all I/O through this path, but the request failed. For a CTC signalling path, the CTC device is probably in a permanent error state.

PURGE I/O FAILED

An attempt to remove all I/O queued for the signalling path failed.

CONTROL OPERATION FAILED

XCF performs various read and write operations to

manage use of a list structure for signalling. One of these control operations failed.

INTERNAL ERROR

An XCF internal error occurred.

CONNECT TOKEN NO LONGER VALID

The connect token used when invoking XES services to access the list structure is no longer valid. The connect token is returned by the IXLCONN service.

LOST CONNECTIVITY TO STRUCTURE

This system lost connectivity to the coupling facility that contains the structure.

NOT DEFINED AS PATHOUT OR PATHIN

The list structure is defined for neither outbound signal traffic nor inbound signal traffic.

PROPAGATING STOP OF STRUCTURE

A stop request is in progress for a list structure. All the associated list paths must be stopped as well.

NO LIST AVAILABLE FOR USE

A list path no longer has a list allocated within the list structure for its use. For example, a rebuilt structure may not have a list for the path, whereas the original structure did.

UNABLE TO USE REBUILT STRUCTURE

The list structure has been rebuilt, but this system cannot use the rebuilt structure. Although this system may lose signalling capacity by stopping its use of the list structure, it does not lose signalling connectivity. So the other systems in the sysplex are permitted to continue on with the rebuilt structure, and this system disconnects from the structure.

UNABLE TO START REBUILD

The list structure is not usable. An attempt was made to rebuild the structure, but the rebuild could not be started.

LOST CONNECTIVITY TO FACILITY

This system lost connectivity to the coupling facility containing the structure.

MORE LISTS NEEDED

This system determined that the structure was not allocated with enough lists for all the signalling list paths that are needed.

MORE SPACE NEEDED

This system determined that more space was needed in the structure.

PARTICIPANT

This system is participating in a rebuild of the structure. The rebuild was initiated by the operator or some other connector.

PARTICIPANT, STOP REBUILD

This system is participating in a rebuild of the structure. The rebuild was initiated by the operator or some other connector. However, the rebuild

process is being stopped. The protocols for XES rebuild processing require this system to participate in completion of the rebuild process, so the necessary processing is initiated.

IXLVECTR TOKEN NOT VALID

The vector token used by this system when invoking the Local Vector Service (macro IXLVECTR) is no longer valid. A structure failure may cause a vector token to become invalidated. The system initiated rebuild processing in an attempt to connect to a new instance of the structure. A new vector token is assigned for the new structure.

MORE SYSTEMS EXPECTED

The system initiated rebuild processing to allocate the list structure with more lists for signalling paths that new systems entering the sysplex are expected to need in order to establish full signalling connectivity. New systems are expected to enter the sysplex when the primary sysplex couple data set is replaced by a couple data set formatted with a larger MAXSYSTEM specification.

DIAG038: n

Diagnostic data that is provided to assist IBM service personnel with problem determination.

DIAG039: n

Diagnostic data that is provided to assist IBM service personnel with problem determination.

DIAG079: n

Diagnostic data that is provided to assist IBM service personnel with problem determination.

DIAG073: n n n n n

Diagnostic data that is provided to assist IBM service personnel with problem determination.

System action: The system initiates processing of the indicated path request.

RESTARTING

Signals queued for transfer over this path are delayed until restart processing re-establishes the path (or the path completes stop processing). If this path was the only one available for communicating with the other system, signalling connectivity is lost. If the path can be re-established, signalling connectivity will be restored. When there is no signalling connectivity, requests by applications and sub-systems to send signals are rejected. Message IXC466I is issued if the path is re-established.

REBUILDING

No signal transfer occurs through the list structure while the rebuild is in progress. Signals sent by applications or sub-systems are diverted to other signalling paths while the structure is being rebuilt. If there are no other signalling paths available, the signals are queued until rebuild processing completes. If rebuild processing takes too long, the queued signals may use up all the buffer space

available to the XCF signalling service. When the buffer supply is exhausted, requests by applications and sub-systems to send signals are rejected. Message IXC465I is issued to indicate completion of rebuild processing from the perspective of the XCF signalling service.

STOPPING

Signals queued for transfer over this path are resent as needed when stop processing completes. If this path was the only one available for communicating with the other system, signalling connectivity is lost. Other paths may need to be started to restore signalling connectivity. Signals queued for transfer over the stopped path remain queued until signalling connectivity is restored, or the target system is removed from the sysplex. When there is no signalling connectivity, requests by applications and sub-systems to send signals are rejected. Message IXC307I is issued if stop path processing completes successfully.

System programmer response: Use this information for problem determination.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCT1RTT

Routing Code: 1,2

Descriptor Code: 5,12

**IXC468W XCF IS UNABLE TO ACCESS THE CTN
AND HAS PLACED THIS SYSTEM INTO
A NON-RESTARTABLE WAIT STATE
CODE: X'0A2' REASON CODE: X'158'**

Explanation: This system lost access to its primary time reference. All systems in the sysplex must be synchronized to the same primary time source.

If this message appears on every system in the sysplex, the problem may be with the ETR (Sysplex Timer) or with the primary time server itself.

System action: The system enters a non-restartable wait state X'0A2', reason code X'158'. The system writes a machine check record for the timing failure. If this system is not removed from the sysplex the other systems may fail. If there are other active reference time, then XCF on those systems will detect a status update missing condition for this system.

Operator response: Contact hardware support and determine whether to reconfigure the sysplex with assistance from the system programmer.

System programmer response: Do the following:

- If this message appears on every system in the sysplex, there is probably a problem with the primary time reference server itself.
- Determine whether to reconfigure the sysplex and then IPL any systems that will be a part of that sysplex.

- If this message is not issued on every system in the sysplex, but it is issued on every system on the same CEC and the affected systems are all participating in a coordinated time network, there may be a problem with the Coupling Facility links in use by the STP Facility on that CEC. Make sure the coupling facility links from the CEC to the primary reference time server are online and operational.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCS2ETR

Routing Code: 1,10

Descriptor Code: 1

**IXC500I CONFIRM REQUEST TO USE
COUPLING FACILITY**
*type.mfg.plant.sequence PARTITION:
partition side CPCID: cpcid NAMED
cfname AUTHORITY DATA: plexname
mm/dd/yyyy hh:mm:ss*

Explanation: While attempting to gain ownership of the coupling facility for the sysplex, this system has discovered that some other sysplex is the current owner. The coupling facility must not be used concurrently by more than one sysplex. If this system is permitted to proceed and gain ownership of the coupling facility while the other sysplex is still using it, severe errors may occur in both sysplexes. Note that the sysplex that currently owns the coupling facility will be unable to detect that ownership has been changed and will thus continue to use the coupling facility unless it is specifically stopped from doing so. The coupling facility which this system is attempting to gain ownership is identified by the node descriptor. See mapping IXLYNDE. The current owner is identified by the authority data. The authority data as defined by CFRM is the sysplex name and time of day. The system that gains ownership of the coupling facility will set the authority using the current sysplex name and time of gain ownership processing.

Possible explanations for getting this message are:

- the coupling facility is currently owned and being used by the other named sysplex in which case the reply to message IXC501A should be N until the other sysplex has stopped its use
- the coupling facility is currently owned, but no longer being used by the other named sysplex, in which case the reply to message IXC501A may be Y provided the other sysplex has stopped its use
- the CFRM couple data set is different than the last CFRM couple data set used by the sysplex, in which case the reply to message IXC501A depends on whether the desired CFRM couple data set has been specified. Ensure that the coupling facility is not being used by another sysplex before a reply is made.

Coupling facility usage will be based on reply to IXC501A.

IXC501A • IXC502I

In the message text:

type

Node type (see ndetype in IXLYNDE).

mfg

Node manufacturer ID (see ndemfg in IXLYNDE).

plant

Node manufacturer plant ID (see ndeplant in IXLYNDE).

sequence

Node sequence number (see ndesequence in IXLYNDE).

partition

Node LPAR partition number (see ndepartition in IXLYNDE).

side

The node PP/SI mode indicator and configuration code from the IXLYNDE are used to determine the value for *side*. *side* is one of the following:

SIDE: 0

The coupling facility is on SIDE 0 of a partitionable CPC.

SIDE: 1

The coupling facility is on SIDE 1 of a partitionable CPC.

blank

The coupling facility is in a non-partitionable CPC.

cpcid

Node Central Processor Complex (CPC) ID (see ndecpcid in IXLYNDE).

cfname

Name of coupling facility from the CFRM active policy.

plexname

Sysplex name portion of the authority data.

mm/dd/yyyy

The date portion of the time of day from the authority data. The date is in months (01-12), days (01-31), and years.

hh:mm:ss

The time portion of the time of day from the authority data. The time is in hours (00-23), minutes (00-59), and seconds (00-59).

System action: Message IXC501A is issued.

Operator response: Notify the system programmer.

System programmer response: See message IXC501A.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2LHN

Routing Code: 1,10

Descriptor Code: 2

IXC501A **REPLY Y TO USE COUPLING FACILITY NAMED *cfname* OR N TO NOT USE COUPLING FACILITY**

Explanation: This is the prompt associated with message IXC500I.

In the message text:

cfname

Name of coupling facility from the CFRM active policy.

System action: The coupling facility usage is based on the response.

Operator response: Notify the system programmer.

System programmer response: Verify that the CFRM active policy correctly specifies the coupling facility that is to be used by this sysplex and ensure that the sysplex identified in message IXC500I is stopped from using the coupling facility before responding to this message. If Y (yes) is specified, this system will issue message IXC559I to ensure that the operator is made aware of the need to prevent another sysplex from using the coupling facility, and then message IXC560A to prompt for confirmation before allowing this system to gain ownership of the coupling facility. Messages IXC500I and IXC559I identify the coupling facility and the sysplex that currently owns it. Note that a reply of Y to this prompt and a reply of Y to message IXC560A may cause severe errors if the coupling facility is still being used by the sysplex identified in messages IXC500I and IXC559I. If N (no) is specified, the coupling facility will not be used by this system.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2LHN

Routing Code: 1,10

Descriptor Code: 2

IXC502I **CONNECTION INFORMATION WAS NOT ADDED TO THE CFRM ACTIVE POLICY. A COUPLE DATA SET FOR CFRM THAT WILL SUPPORT *totalconn* CONNECT RECORDS IS REQUIRED.**

Explanation: Connections to the structure reside in the coupling facility that were not able to be added into the CFRM active policy during coupling facility cleanup processing.

In the message text:

totalconn

Total number of connections that should be supported by the CFRM active policy.

System action: The connections will remain in the coupling facility until a couple data set for CFRM is

obtained which is large enough to support all connections.

Operator response: Notify the system programmer.

System programmer response: Run the XCF couple data set format utility for TYPE(CFRM) to increase the number of CONNECT records supported. Issue the SETXCF COUPLE operator command to add the new CFRM couple data set as the alternate and then PSWITCH to make the alternate couple data set the primary couple data set for CFRM.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2RC

Routing Code: 2,10

Descriptor Code: 12

IXC503I STRUCTURE INFORMATION WAS NOT ADDED TO THE CFRM ACTIVE POLICY. A COUPLE DATA SET FOR CFRM THAT WILL SUPPORT *totalstr* STR RECORDS IS REQUIRED.

Explanation: Structures reside in the coupling facility that were not able to be added into the CFRM active policy during coupling facility cleanup processing.

In the message text:

totalstr

Total number of structures that should be supported by the CFRM active policy.

System action: The structures will remain in the coupling facility until a couple data set for CFRM is obtained which is large enough to support all structures.

Operator response: Notify the system programmer.

System programmer response: Run the XCF couple data set format utility for TYPE(CFRM) to increase the number of STR records supported. Issue the SETXCF COUPLE operator command to add the new CFRM couple data set as the alternate and then PSWITCH to make the alternate couple data set the primary couple data set for CFRM.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2RC

Routing Code: 2,10

Descriptor Code: 12

IXC504I INCONSISTENCIES BETWEEN COUPLING FACILITY NAMED *cfname* AND THE CFRM ACTIVE POLICY WERE FOUND. THEY HAVE BEEN RESOLVED.

Explanation: Structure and/or connection inconsistencies were found between the CFRM active policy and the coupling facility. A structure inconsistency

is flagged if the CFRM active policy expects a structure to be allocated in the coupling facility and it is not or vice versa. A connection inconsistency is flagged if the CFRM active policy expects a connection to be attached in the coupling facility and it is not or vice versa. Additional messages (IXC505 for structure and IXC506 for connection) are written to the log to record the actions taken.

In the message text:

cfname

Name of the coupling facility in which inconsistencies were found.

System action: The CFRM active policy is updated to reflect the current state of the coupling facility.

Operator response: Notify the system programmer.

System programmer response: The system log contains messages that will indicate the actions that were taken to resolve the inconsistencies.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2RC

Routing Code: 2,10

Descriptor Code: 12

IXC505I STRUCTURE *strname* IN COUPLING FACILITY *type.mfg.plant.sequence* PARTITION: *partition* side **CPCID: *cpcid* status **TRACE THREAD:** *thread*.**

Explanation: Action was taken against the coupling facility or the CFRM active policy for a given structure. The coupling facility containing named structure is identified by the node descriptor. See mapping IXLYNDE.

In the message text:

strname

Name of the structure for which information is recorded.

type

Node type (see ndetype in IXLYNDE).

mfg

Node manufacturer ID (see ndemfg in IXLYNDE).

plant

Node manufacturer plant ID (see ndeplant in IXLYNDE).

sequence

Node sequence number (see ndesequence in IXLYNDE).

partition

Node LPAR partition number (see ndepartition in IXLYNDE).

side

The node PP/SI mode indicator and configuration

code from the IXLYNDE are used to determine the value for *side*. *side* is one of the following:

SIDE: 0

The coupling facility is on SIDE 0 of a partitionable CPC.

SIDE: 1

The coupling facility is on SIDE 1 of a partitionable CPC.

blank

The coupling facility is in a non-partitionable CPC.

cpcid

Node Central Processor Complex (CPC) ID (see ndecpcid in IXLYNDE).

status

One of the following:

DEALLOCATED.

The non-persistent structure was found in both the CFRM active policy and the coupling facility. All non-persistent structures are deallocated and cleared from the CFRM active policy during coupling facility cleanup.

NOT FOUND IN COUPLING FACILITY. CFRM ACTIVE POLICY CLEARED.

The structure described in the CFRM active policy is not allocated in the coupling facility. The CFRM active policy structure information has been updated to indicate that the structure is not allocated.

NOT FOUND IN THE CFRM ACTIVE POLICY. DEALLOCATED FROM COUPLING FACILITY.

The structure found in the coupling facility is not described in the CFRM active policy. It is a non-persistent structure and therefore was deallocated.

NOT FOUND IN THE CFRM ACTIVE POLICY. STRUCTURE ADDED TO THE CFRM ACTIVE POLICY.

The structure was found in the coupling facility and was added to the CFRM active policy.

NOT FOUND IN THE CFRM ACTIVE POLICY. COULD NOT BE ADDED TO THE CFRM ACTIVE POLICY.

The structure was found in the coupling facility and an attempt was made to add it to the CFRM active policy. The structure was not added to the CFRM active policy due to size constraints. Message IXC503I will be issued to indicate the changes required to add the structure to the CFRM active policy.

HAS CONNECTIONS PENDING RECONSTRUCTION INTO THE CFRM ACTIVE POLICY.

The structure in the coupling facility has connections that could not be added into the

CFRM active policy. The CFRM active policy does not have enough CONNECT records to support the connections found in the coupling facility. Message IXC502I will be issued to indicate the changes required to add the connections to the CFRM active policy.

DEALLOCATED. MORE CURRENT VERSION IN THE CFRM ACTIVE POLICY.

The structure in the coupling facility is different than the structure described by the CFRM active policy. The structure in the coupling facility was deallocated. The structure in the CFRM active policy has either been allocated after the one in the coupling facility and/or is already in use by active connections in the sysplex. This can happen if the coupling facility containing the structure is brought on line after a connector has already connected to and allocated the structure in a different coupling facility.

DEALLOCATED. NEW STRUCTURE ALLOCATED FOR REBUILD WHICH HAS BEEN STOPPED.

The structure in the coupling facility is the new structure for which rebuild processing was underway before cleanup processing began. Rebuild is automatically stopped when the first system in the sysplex gains ownership of the coupling facility.

FAILED.

The structure was found in the coupling facility and experienced a failure. The CFRM active policy structure information has been updated to indicate the structure is not allocated and the structure has been deallocated.

ALLOCATED BY A DIFFERENT SYSPLEX HAS BEEN DEALLOCATED AS REQUESTED.

The structure that was found was allocated by another sysplex. The operator was prompted with messages (IXC523I and IXC508A) to determine the action.

NOT FOUND IN COUPLING FACILITY. STRUCTURE FAILURE INITIATED.

The structure described in the CFRM active policy is not allocated in the coupling facility and there are active connections to the structure. Structure failure processing has been initiated in order to notify the connections that the structure no longer exists.

thread

Used to tie together messages and XCF component trace records for a particular coupling facility cleanup process.

System action: The CFRM active policy is updated to reflect the current state of the coupling facility.

Operator response: Not applicable.

System programmer response: Not applicable.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2RC

Routing Code: 10

Descriptor Code: -

IXC506I **CONNECTION** *connname* **TO**
STRUCTURE *strname* **IN COUPLING**
FACILITY *type.mfg.plant.sequence*
PARTITION: *partition* **side** **CPCID:** *cpcid*
status **TRACE THREAD:** *thread*.

Explanation: Action was taken against the coupling facility or the CFRM active policy for a given connection. The coupling facility which this system is attempting to use is identified by the node descriptor. See mapping IXLYNDE.

In the message text:

connname

Name of a connection to a structure.

strname

Name of the structure for which information is recorded.

type

Node type (see ndetype in IXLYNDE).

mfg

Node manufacturer ID (see ndemfg in IXLYNDE).

plant

Node manufacturer plant ID (see ndeplant in IXLYNDE).

sequence

Node sequence number (see ndesequence in IXLYNDE).

partition

Node LPAR partition number (see ndepartition in IXLYNDE).

side

The node PP/SI mode indicator and configuration code from the IXLYNDE are used to determine the value for *side*. *side* is one of the following:

SIDE: 0

The coupling facility is on SIDE 0 of a partitionable CPC.

SIDE: 1

The coupling facility is on SIDE 1 of a partitionable CPC.

blank

The coupling facility is in a non-partitionable CPC.

cpcid

Node Central Processor Complex (CPC) ID (see ndecpcid in IXLYNDE).

status

One of the following:

DETACHED.

The non-persistent connection was found in both the coupling facility and the CFRM active policy. All non-persistent connections are detached from the structure and cleared from the CFRM active policy during coupling facility cleanup.

REMAINS FAILED-PERSISTENT.

The persistent connection was found in both the coupling facility and the CFRM active policy. All persistent connections are placed in a failed state in both the coupling facility and the CFRM active policy.

NOT FOUND IN STRUCTURE. CFRM ACTIVE POLICY CLEARED.

The connection described in the CFRM active policy is not attached in the coupling facility. The CFRM active policy connection information is cleared.

NOT FOUND IN THE CFRM ACTIVE POLICY. DETACHED FROM STRUCTURE.

The non-persistent connection was found attached to the structure but not in the CFRM active policy. It is detached from the structure.

NOT FOUND IN THE CFRM ACTIVE POLICY.

REMAINS FAILED-PERSISTENT.

The persistent connection was found in the structure but not in the CFRM active policy. It is placed in a failed-persistent state in the coupling facility. Message IXC506I will be issued again to indicate if the connection could or could not be added to the CFRM active policy.

NOT FOUND IN THE CFRM ACTIVE POLICY. ADDED TO THE CFRM ACTIVE POLICY.

The persistent connection was found in the structure but not in the CFRM active policy. It has been added to the CFRM active policy.

NOT FOUND IN THE CFRM ACTIVE POLICY. COULD NOT BE ADDED TO THE CFRM ACTIVE POLICY.

The connection was found in the structure and an attempt was made to add it to the CFRM active policy. The connection was not added to the CFRM active policy due to size constraints. Message IXC502I will be issued to indicate the changes required to add the connection to the CFRM active policy.

thread

Used to tie together messages and XCF component trace records for a particular coupling facility cleanup process.

System action: The CFRM active policy is updated to reflect the current state of the coupling facility.

IXC507I • IXC508A

Operator response: Not applicable.

System programmer response: Not applicable.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2RC

Routing Code: 10

Descriptor Code: -

IXC507I	CLEANUP FOR COUPLING FACILITY <i>type.mfg.plant.sequence PARTITION: partition side CPCID: cpcid status TRACE THREAD: thread.</i>
----------------	--

Explanation: Indicates processing status for coupling facility cleanup. The coupling facility which is in cleanup processing is identified by the node descriptor. See mapping IXLYNDE. The coupling facility cleanup process reconciles differences between information in the coupling facility and the CFRM active policy.

In the message text:

type
Node type (see ndetype in IXLYNDE).

mfg
Node manufacturer ID (see ndemfg in IXLYNDE).

plant
Node manufacturer plant ID (see ndeplant in IXLYNDE).

sequence
Node sequence number (see ndesequence in IXLYNDE).

partition
Node LPAR partition number (see ndepartition in IXLYNDE).

side
The node PP/SI mode indicator and configuration code from the IXLYNDE are used to determine the value for *side*. *side* is one of the following:

SIDE: 0

The coupling facility is on SIDE 0 of a partitionable CPC.

SIDE: 1

The coupling facility is on SIDE 1 of a partitionable CPC.

blank

The coupling facility is in a non-partitionable CPC.

cpcid

Node Central Processor Complex (CPC) ID (see ndecpcid in IXLYNDE).

status

One of the following:

HAS STARTED.

The cleanup for a coupling facility has started.

HAS COMPLETED.

The cleanup for a coupling facility has completed.

ENCOUNTERED AN ERROR: READ OF THE CFRM ACTIVE POLICY FAILED.

The CFRM active policy could not be read from the couple data set for CFRM. The coupling facility and the CFRM active policy were not reconciled.

ENCOUNTERED AN ERROR: WRITE OF THE CFRM ACTIVE POLICY FAILED.

The CFRM active policy could not be written to the couple data set for CFRM. The procedure will not be attempted again.

RESTARTED: CFRM ACTIVE POLICY LOCK STOLEN.

The CFRM active policy could not be written to the couple data set for CFRM. The procedure will be attempted again.

ENCOUNTERED AN ERROR: COUPLING FACILITY STRUCTURE VECTOR COULD NOT BE OBTAINED.

An operation to the coupling facility failed. The coupling facility and the CFRM active policy were not reconciled.

thread

Used to tie together messages and XCF component trace records for a particular coupling facility cleanup process.

System action: The CFRM active policy is updated to reflect the current state of the coupling facility.

Operator response: Not applicable.

System programmer response: Not applicable.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2RC

Routing Code: 10

Descriptor Code: -

IXC508A	REPLY K TO KEEP, D TO DELETE STRUCTURES FROM SYSPLEX <i>plexname</i>
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Explanation: This is the prompt associated with message IXC523I.

In the message text:

plexname

Name of the sysplex from which structures were found.

System action: Structures are deleted or kept in the coupling facility based on the response.

Operator response: Notify the system programmer.

System programmer response: Determine if the structures from the other sysplex should be kept in the coupling facility or deleted from the coupling facility and respond. If D (delete) is specified, all structures from sysplex *plexname* will be deleted from the coupling facility identified in message IXC523I. If K (keep) is specified, the structures will remain in the coupling facility. To delete the structures at a later time, ownership of the coupling facility must be gained again to cause coupling facility cleanup process to reoccur.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2RC

Routing Code: 1,10

Descriptor Code: 2

IXC509I CFRM ACTIVE POLICY RECONCILIATION EXIT *status* TRACE THREAD: *thread*.

Explanation: Indicates processing status for a particular reconciliation. Reconciling the CFRM active policy and coupling facilities is initiated when a new couple data set for CFRM is made available or when a change policy causes more space to become available in the current couple data set for CFRM. The assumption is that there may be room to add into the CFRM active policy the structures and connectors that could not be added to the CFRM active policy previously during coupling facility cleanup. Message IXC507I will be issued to indicate which coupling facility is being reconciled with the CFRM active policy.

In the message text:

status

One of the following:

HAS STARTED.

The reconciliation for the CFRM active policy to coupling facilities has started.

HAS COMPLETED.

The reconciliation for the CFRM active policy to coupling facilities has completed.

ENCOUNTERED AN ERROR: READ OF THE CFRM ACTIVE POLICY FAILED.

The CFRM active policy could not be read from the couple data set for CFRM. The reconciliation process was not completed.

RESTARTED: CFRM ACTIVE POLICY LOCK STOLEN.

The CFRM active policy could not be written to the couple data set for CFRM. The procedure will be attempted again.

ENCOUNTERED AN ERROR: WRITE OF THE CFRM ACTIVE POLICY FAILED.

The CFRM active policy could not be written to

the couple data set for CFRM. The procedure will not be attempted again.

thread

Used to tie together messages and XCF component trace records for a particular reconciliation process.

System action: The CFRM active policy is updated to reflect the current state of the coupling facility.

Operator response: Not applicable.

System programmer response: Not applicable.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2RC

Routing Code: 10

Descriptor Code: -

IXC510I STOP POLICY FOR CFRM ACCEPTED

Explanation: The operator issued SETXCF STOP,POLICY,TYPE=CFRM. The policy change was accepted.

System action: System processing continues. Policy change processing will issue IXC512I and/or IXC513I messages to indicate progress and completion of operator request.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2POL

Routing Code: #

Descriptor Code: 5

IXC511I START ADMINISTRATIVE POLICY *polname* FOR CFRM ACCEPTED

Explanation: The operator issued SETXCF START,POLICY,TYPE=CFRM,POLNAME=*polname*. The policy change was accepted.

In the message text:

polname

The name of the policy to be started.

System action: System processing continues. Policy change processing will issue IXC512I and/or IXC513I messages to indicate progress and completion of operator request.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2POL

Routing Code: #

Descriptor Code: 5

IXC512I	POLICY CHANGE IN PROGRESS FOR CFRM TO MAKE <i>polname</i> POLICY ACTIVE. <i>numpend</i> POLICY CHANGE(S) PENDING.
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Explanation: The policy change is in progress.

In the message text:

polname

The name of the administrative policy specified on the SETXCF START,POLICY operator command or NO to indicate SETXCF STOP,POLICY issued.

numpend

The number of structures in the current policy which have a policy change pending plus the number of structures with deallocation pending when structure dump exists. A structure will not be deleted from the active policy if the structure is allocated. A facility will not be deleted from the active if structures are allocated in the facility or if structures with deallocation pending when structure dump exists are in the facility. D XCF,STR will show structures in CFRM active policy. D XCF,CF will show facilities in CFRM active policy.

System action: The policy change is expected to complete successfully. For CFRM, use the DISPLAY XCF,CF or STR command to determine if the changes for coupling facilities and structures have completed.

System programmer response: If the policy change is not completing, then additional actions may be required. The SETXCF FORCE command can be used to force the deletion of failed-persistent structures and connections. The SETXCF FORCE command can be used to delete structure dumps. Adding dump data sets to allow the completion of SVC dumps will also delete structure dumps. The SETXCF START,REBUILD command can be used to relocate structures with active connections to another coupling facility. A CFRM active policy with more STR records might be required. If necessary, run the format utility for couple data sets for TYPE(CFRM) to increase the number of STR records supported. Issue the SETXCF COUPLE operator command to add the new CFRM couple data set as the alternate, and then issue the SETXCF COUPLE,PSWITCH command to make the alternate couple data set the primary couple data set for CFRM.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2POL

Routing Code: #

Descriptor Code: 5

IXC513I	COMPLETED POLICY CHANGE FOR CFRM. <i>polname</i> POLICY IS ACTIVE.
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Explanation: Indicates the completion of change policy processing.

In the message text:

polname

For SETXCF START,POLICY processing it is the name of the current CFRM active policy. For SETXCF STOP,POLICY processing it indicates that the active CFRM policy is empty. An empty policy will prevent the use of coupling facilities.

System action: System processing continues.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2POL

Routing Code: #

Descriptor Code: 5

IXC514I	CONNECTION TO STRUCTURE <i>strname</i> BY CONNECTOR <i>connname</i> FAILED DUE TO A SIZE CONSTRAINT IN THE CFRM ACTIVE POLICY. A CFRM ACTIVE POLICY THAT WILL SUPPORT MORE CONNECTIONS IS REQUIRED.
----------------	--

Explanation: Connections reside in the structure that were not able to be added into the CFRM active policy during coupling facility cleanup processing. A connection has attempted to reconnect to the structure but has been rejected since the CFRM active policy is not large enough to support all connections.

In the message text:

strname

Name of the structure to which the connection failed.

connname

Connection name supplied by the connector on the IXLCONN service.

System action: The connections will remain in the structure until a policy large enough to support all connections is obtained.

Operator response: Notify the system programmer.

System programmer response: Use the DISPLAY XCF,STR command to determine the values to use to format a larger couple data set for CFRM. Run the XCF couple data set format utility for TYPE(CFRM) to increase the number of connections supported. Then add the new couple data set as the alternate by issuing SETXCF COUPLE,ACOUPLE. Make sure the data set is catalogued in the master catalog before issuing the command. After adding a new alternate couple data set, enter a SETXCF COUPLE,PSWITCH command to switch the primary couple data set with the new alternate one.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2ASR

Routing Code: 2,10

Descriptor Code: 12

IXC515I STRUCTURE *strname* IN COUPLING FACILITY *type.mfg.plant.sequence*
PARTITION: *partition* side CPCID: *cpcid* DEALLOCATED. MORE CURRENT VERSION OF STRUCTURE FOUND IN COUPLING FACILITY
type.mfg.plant.sequence **PARTITION: *partition* side CPCID: *cpcid* TRACE**
THREAD: *thread*

Explanation: The structure *strname* was deallocated from the 1st coupling facility. The more current version of the structure *strname* remains allocated in the 2nd coupling facility. The CFRM active policy structure information is about the more current version of the structure. Both coupling facilities are identified by the node descriptor. See mapping IXLYNDE.

In the message text:

strname
Name of the structure for which information is recorded.

type
Node type (see ndetype in IXLYNDE).

mfg
Node manufacturer ID (see ndemfg in IXLYNDE).

plant
Node manufacturer plant ID (see ndeplant in IXLYNDE).

sequence
Node sequence number (see ndesequence in IXLYNDE).

partition
Node LPAR partition number (see ndepartition in IXLYNDE).

side
The node PP/SI mode indicator and configuration code from the IXLYNDE are used to determine the value for *side*. *side* is one of the following:
SIDE: 0
The coupling facility is on SIDE 0 of a partitionable CPC.
SIDE: 1
The coupling facility is on SIDE 1 of a partitionable CPC.
blank
The coupling facility is in a non-partitionable CPC.

cpcid
Node Central Processor Complex (CPC) ID (see ndecpcid in IXLYNDE).

thread
Used to tie together messages and XCF component trace records for a particular coupling facility cleanup process.

System action: The CFRM active policy is updated to reflect the current state of the coupling facility.

Operator response: Not applicable.

System programmer response: Not applicable.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2RC

Routing Code: 10

Descriptor Code: -

IXC516I REBUILD FOR STRUCTURE *strname* status TRACE THREAD: *thread*.

Explanation: During CFRM initialization, additional cleanup of the records in the CFRM active policy is completed. Structure rebuild is either stopped or completed based on the rebuild phase indicated in the CFRM active policy for all structures found in the rebuild process.

In the message text:

strname
Name of the structure for which information is recorded.

status
One of the following:
STOPPED.
The rebuild for the structure has been stopped.
COMPLETED.
The rebuild for the structure has been completed.

thread
Used to tie together messages and XCF component trace records during CFRM initialization and processing to gain ownership and cleanup coupling facilities.

System action: The CFRM active policy is updated to reflect the fact that rebuild is no longer in progress.

Operator response: Not applicable.

System programmer response: Not applicable.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2CRS

Routing Code: 10

Descriptor Code: -

IXC517I SYSTEM *sysname* ABLE TO USE COUPLING FACILITY
type.mfg.plant.sequence **PARTITION: *partition* side CPCID: *cpcid* NAMED *cfname***

Explanation: Indicates that the coupling facility is in the CFRM active policy and connected to this system.

IXC518I

The coupling facility is eligible for use by this system. The coupling facility which this system is able to use is identified by the node descriptor. See mapping IXLYNDE. This message is issued by each system that is using the CFRM active policy when the system determines that it can use the coupling facility. If the system also gains ownership of the coupling facility for the sysplex, then additional messages are written to the log for coupling facility cleanup processing.

In the message text:

sysname

Name of the system which is using the coupling facility.

type

Node type (see ndetype in IXLYNDE).

mfg

Node manufacturer ID (see ndemfg in IXLYNDE).

plant

Node manufacturer plant ID (see ndeplant in IXLYNDE).

sequence

Node sequence number (see ndesequence in IXLYNDE).

partition

Node LPAR partition number (see ndepartition in IXLYNDE).

side

The node PP/SI mode indicator and configuration code from the IXLYNDE are used to determine the value for *side*. *side* is one of the following:

SIDE: 0

The coupling facility is on SIDE 0 of a partitionable CPC.

SIDE: 1

The coupling facility is on SIDE 1 of a partitionable CPC.

blank

The coupling facility is in a non-partitionable CPC.

cpcid

Node Central Processor Complex (CPC) ID (see ndecpcid in IXLYNDE).

cfname

Name of coupling facility from the CFRM active policy

System action: The CFRM active policy is updated to reflect the current state of the coupling facility usage by this system.

Operator response: Not applicable.

System programmer response: Not applicable.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2INT

Routing Code: 2,10

Descriptor Code: 4

IXC518I **SYSTEM *sysname* NOT USING COUPLING FACILITY**
type.*mfg.plant.sequence* PARTITION: *partition* side CPCID: *cpcid* NAMED *cfname* REASON: *text*

Explanation: Indicates that the coupling facility cannot be used by this system. Reasons include not in CFRM active policy, not connected, or error in gain ownership processing. The coupling facility which this system is not able to use is identified by the node descriptor. See mapping IXLYNDE.

In the message text:

sysname

Name of the system which is not able to use the coupling facility

type

Node type (see ndetype in IXLYNDE).

mfg

Node manufacturer ID (see ndemfg in IXLYNDE).

plant

Node manufacturer plant ID (see ndeplant in IXLYNDE).

sequence

Node sequence number (see ndesequence in IXLYNDE).

partition

Node LPAR partition number (see ndepartition in IXLYNDE).

side

The node PP/SI mode indicator and configuration code from the IXLYNDE are used to determine the value for *side*. *side* is one of the following:

SIDE: 0

The coupling facility is on SIDE 0 of a partitionable CPC.

SIDE: 1

The coupling facility is on SIDE 1 of a partitionable CPC.

blank

The coupling facility is in a non-partitionable CPC.

cpcid

Node Central Processor Complex (CPC) ID (see ndecpcid in IXLYNDE).

cfname

Name of coupling facility from the CFRM active policy

reason

Information that IBM might request for diagnosis. The **reason flag** is in the form xxxx yyyy. xxxx identifies the discovering module. If xxxx is equal to 1330 then yyyy is an index for use by IBM. For all other values of xxxx, yyyy indicates the following:

- 0001 - coupling facility operation failed
- 0002 - coupling facility operation failed
- 0003 - coupling facility operation failed
- 0004 - CFRM active policy no longer contains the coupling facility. A policy change has occurred in parallel to gain ownership processing
- 0005 - coupling facility operation failed
- 0006 - operator replied NO to IXC501A
- 0007 - another sysplex is now using the coupling facility
- 0008 - coupling facility operation failed

NOT IN THE CFRM ACTIVE POLICY. REASON FLAG:***reason***

The CFRM active policy does not have this coupling facility defined. The coupling facility is connected to the system but will not be used since not in CFRM active policy.

NOT CONNECTED TO SYSTEM. REASON FLAG:***reason***

The coupling facility is defined in the CFRM active policy but the system does not have connectivity. The coupling facility cannot be used by this system.

ERROR IN GAIN OWNERSHIP PROCESS. REASON FLAG: *reason*.

The process to gain ownership and establish system usage has failed. The error is either due to a problem with coupling facility or the CFRM active policy. The coupling facility cannot be used by this system.

OPERATOR REPLIED NO TO IXC501A OR IXC560A. REASON FLAG: *reason*.

The process to gain ownership and establish system usage has failed due to operator response to IXC501A or IXC560A. The coupling facility cannot be used by this system.

CONNECTIVITY LOST. REASON FLAG: *reason*.

The system has lost connectivity to the coupling facility. The coupling facility cannot be used by this system.

CFRM POLICY CHANGE COMPLETED. REASON FLAG: *reason*.

The system has stopped using because the coupling facility has been deleted from the CFRM active policy. The coupling facility cannot be used by this system.

CFRM POLICY NOT STARTED OR STOP**COMPLETE. REASON FLAG:** *reason*.

A CFRM policy has not been started or a stop for CFRM policy has completed. The coupling facility is

connected to the system but will not be used since the CFRM active policy is empty.

System action: The CFRM active policy is updated to reflect the current state of the coupling facility.

Operator response: Notify the system programmer.

System programmer response: Determine that the CFRM active policy and the configuration of the coupling facility are correct. If a CFRM policy change is required then use the XCF administrative data utility to define the policy and the SETXCF command to start policy.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2INT

Routing Code: 2,10

Descriptor Code: 12

IXC519E COUPLING FACILITY DAMAGE RECOGNIZED FOR COUPLING FACILITY *type.mfg.plant.sequence*
PARTITION: *partition* **side CPCID:** *cpcid*
NAMED *cfname*

Explanation: Indicates that the coupling facility has suffered a permanent failure. The coupling facility which is damaged is identified by the node descriptor. See mapping IXLYNDE. All the structures allocated in this coupling facility are marked failed in the CFRM active policy and the connected users notified via the event exit. Based on the structure the connected users may be able to recover assuming another coupling facility is available.

In the message text:

type

Node type (see ndetype in IXLYNDE).

mfg

Node manufacturer ID (see ndemfg in IXLYNDE).

plant

Node manufacturer plant ID (see ndeplant in IXLYNDE).

sequence

Node sequence number (see ndesequence in IXLYNDE).

partition

Node LPAR partition number (see ndepartition in IXLYNDE).

side

The node PP/SI mode indicator and configuration code from the IXLYNDE are used to determine the value for *side*. *side* is one of the following:

SIDE: 0

The coupling facility is on SIDE 0 of a partitionable CPC.

SIDE: 1

The coupling facility is on SIDE 1 of a partitionable CPC.

blank

The coupling facility is in a non-partitionable CPC.

cpcid

Node Central Processor Complex (CPC) ID (see ndecpcid in IXLYNDE).

cfname

Name of coupling facility from the CFRM active policy

System action: The CFRM active policy is updated to reflect the current state of the coupling facility. Processing continues but depending on the structures allocated in the failed coupling facility, using subsystems may require further operator intervention.

Operator response: Notify the system programmer.

System programmer response: Look in the logrec error records for problems with the coupling facility. Contact the IBM Support Center. Provide the logrec error records and the XCF and XES component trace.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2LSC

Routing Code: 2,10

Descriptor Code: 11

IXC520I SYSTEM *sysname* NOT USING COUPLE DATA SET FOR CFRM REASON: *text*

Explanation: Indicates why a system cannot use the couple data set for CFRM. If the reason is XES function not available, since the couple data set for CFRM is only used to manage this resource the data set is not needed by this system. If the reason is couple data set has the wrong version, then the installation should format another couple data set for CFRM then use the SETXCF COUPLE operator command to make the data set available to the sysplex.

In the message text:

sysname

Name of the system which is not using the couple data set for CFRM.

XES FUNCTION NOT AVAILABLE

The XES function is not available to this system. This can be because the necessary hardware is not present.

PRIMARY COUPLE DATA SET HAS THE WRONG VERSION

The primary couple data set was formatted with a version of the CFRM format utility exit that is not

supported by this system. The CFRM format utility exit is invoked by the XCF couple data set format utility.

ALTERNATE COUPLE DATA SET HAS THE WRONG VERSION

The alternate couple data set was formatted with a version of the CFRM format utility exit that is not supported by this system. The CFRM format utility exit is invoked by the XCF couple data set format utility.

System action: Processing continues.

- If the reason was **XES function not available** then this system will not support using the DISPLAY XCF CF or STR operator commands to provide information and the SETXCF START, STOP, or POLICY TYPE=CFRM will not effect the CFRM policy.
- If the reason is **alternate couple data set has the wrong version**, then the sysplex is running with only the primary couple data set. Loss of the primary will result in the system loading a non-restartable wait. System availability may be impacted if the installation does not provide a suitable couple data set for CFRM as an alternate.
- If the reason is **primary couple data set has the wrong version**, then the sysplex is running without the couple data set for CFRM which is required to use XES services. XES services will not be available until a primary couple data set for CFRM is provided.

Operator response: Notify the system programmer.

System programmer response: If the XES function is expected to be available look in the logrec error records for problems with the XES function. Contact the IBM Support Center. Provide the logrec error records and the XCF and XES component trace. If the alternate couple data set for CFRM can not be used then run the XCF administrative data utility using the report option to determine the options used in formatting the primary and the rejected alternate couple data sets for CFRM. The alternate data set must have been formatted with options equal to or greater than the primary data set. Format a new data set then use the SETXCF COUPLE operator command to make the data set available to the sysplex as an alternate.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2FDF

Routing Code: 2,10

Descriptor Code: 12

IXC521I REBUILD FOR STRUCTURE *strname* *action*

Explanation: Information is provided to indicate the status of structure rebuild processing. The type of process is either rebuild or duplexing rebuild and the method is user-managed.

In the message text:

strname

Name of the structure for which information is recorded.

action

One of the following:

HAS BEEN COMPLETED

Structure rebuild processing has completed.

HAS BEEN STOPPED

Structure rebuild processing has been stopped.

HAS REACHED THE DUPLEXING ESTABLISHED PHASE

The user-managed duplexing rebuild has reached the duplexing established phase.

HAS BEEN STARTED

Structure rebuild processing has started.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2BLD, IXCL2RHT, IXCL2RSR

Routing Code: 2

Descriptor Code: 5

IXC522I *rebuildtype FOR STRUCTURE strname IS BEING STOPPED action DUE TO reason [codetype stopcode]*

Explanation: The request to rebuild a structure is being stopped.

In the message text:

rebuildtype

One of the following:

REBUILD

A structure rebuild process is being stopped. The type of process is either rebuild or duplexing rebuild and the method is user-managed.

SYSTEM-MANAGED REBUILD

A system-managed rebuild is being stopped.

PENDING REBUILD

A pending rebuild from a POPULATECF rebuild request is being stopped.

SYSTEM-MANAGED DUPLEXING REBUILD

A system-managed duplexing rebuild is being stopped.

strname

Name of the structure for which information is recorded.

action

The action that is taken when the rebuild process is stopped. *action* is one of the following:

TO FALL BACK TO THE OLD STRUCTURE

The rebuild process is stopping to fall back to the old structure.

TO SWITCH TO THE NEW STRUCTURE

The rebuild process is stopping to switch to the new structure.

blank

The rebuild process is stopping because the target structure is being deallocated, due to disconnect of the last connector.

reason

One of the following:

LOSS OF CONNECTIVITY TO THE OLD STRUCTURE

The reason specified for stopping the rebuild process was lost connectivity to the coupling facility where the old structure was located.

LOSS OF CONNECTIVITY TO THE NEW STRUCTURE

The reason specified for stopping the rebuild process was lost connectivity to the coupling facility where the new structure was located.

FAILURE OF THE OLD STRUCTURE

The reason specified for stopping the rebuild process was structure failure of the old structure.

FAILURE OF THE NEW STRUCTURE

The reason specified for stopping the rebuild process was structure failure of the new structure.

CONNECTOR SPECIFIC REASON

The reason specified for stopping the rebuild process was provided by the issuer of IXLREBLD. IXLREBLD is the programming interface for structure rebuild processing.

REQUEST FROM AN OPERATOR

The reason specified for stopping the rebuild process was the operator issuing the SETXCF STOP,REBUILD command.

NO COUPLING FACILITY PROVIDING BETTER CONNECTIVITY

No other facility has better connectivity than the current one. The rebuild, which was initiated due to a loss of connectivity, would cause a further degradation in connectivity if accepted. The system evaluated the set of active connections which lost connectivity to the current structure as compared to the set of active connections which would not be able to connect to the rebuild new structure, since the result of the rebuild would cause additional active connections to lose connectivity, the system terminates structure rebuild processing.

NO COUPLING FACILITY PROVIDING BETTER OR EQUIVALENT CONNECTIVITY

No other facility has better connectivity than the current one. The rebuild would cause a degradation in connectivity as determined by SFM system weights, if accepted.

Note: When this reason is received for an operator initiated rebuild by STRNAME or CFNAME and the installation needs to rebuild the structure(s), a SETXCF START,REBUILD command specifying LESSCONN=CONTINUE may be used to force the rebuild to continue despite this condition. Because this may cause active connections to the structure to lose connectivity to the structure, do not use LESSCONN=CONTINUE unless you understand the impact to the application or subsystem. Consult the application or subsystem documentation for recommendations.

THE SPECIFIED POPULATECF IS LESS SUITABLE

The specified PopulateCF is less suitable than the coupling facility where the structure is currently allocated.

A CHANGE IN THE CFRM ACTIVE POLICY FOR THE STRUCTURE

The reason specified for stopping the rebuild process was a change in either the CFRM active policy DUPLEX specification for the structure or a change in the structure preference list such that the facility in which either the old or new structure is allocated is no longer in the preference list. When the CFRM active policy DUPLEX specification for a structure is changed to DUPLEX(DISABLED) for a change policy request, duplexing rebuild is stopped by MVS when the change is processed. Duplexing rebuild is also stopped when the facility in which the old or new structure is allocated is removed from the preference list.

LOSS OF CONNECTIVITY TO THE STRUCTURE

The reason specified for stopping the rebuild process was lost connectivity to either the coupling facility where the old structure was allocated or the coupling facility where the new structure was allocated.

FAILURE OF THE STRUCTURE

The reason specified for stopping the rebuild process was structure failure of either the new or the old structure.

INSUFFICIENT CONNECTIVITY DUE TO CHANGE IN THE SET OF CONNECTORS

The reason specified for stopping the rebuild

process was insufficient connectivity due to a change in the set of connectors.

FAILURE OF A SYSTEM-MANAGED PROCESS PHASE

A phase of a system-managed process was unsuccessful. Message IXC573I may have been issued to provide additional information.

CONNECTOR DISCONNECTED FROM STRUCTURE

The rebuild was stopped in response to a connection disconnecting from the structure. A user-managed rebuild cannot continue after the last connector disconnects, even if the structure persists.

DEALLOCATION OF THE STRUCTURE

The rebuild was stopped because the structure was deallocated (for example, the last connector disconnected from a non-persistent structure).

DUMP SERIALIZATION HELD ON STRUCTURE

The rebuild was stopped because dump serialization prevented access to either the old or the new structure instance.

UNEXPECTED ERROR

The rebuild was stopped due to an unexpected error condition.

FAILURE OF A DUPLEXED REQUEST

The system-managed duplexing rebuild was stopped due to the failure of a duplexed request.

INABILITY TO PRESERVE DUPLEXING

The system-managed duplexing rebuild was stopped to allow the first connection to the structure after a total loss of connectivity to a coupling facility containing an instance of the duplexed pair or after a sysplex failure. To preserve duplexing, both instances of the duplexed pair must be accessible to the system where the first connection to the structure is running.

DETECTION OF A DUPLEX OUT OF SYNCH CONDITION

The system-managed duplexing rebuild was stopped due to the detection of an out of synch condition. The condition is detected by a duplexed request issued during the duplex established phase of a system-managed duplexing rebuild. Both structure instances are no longer usable and are failed by the system.

codetype

One of the following:

USER CODE:

The stop code was specified by a user.

SYSTEM CODE:

The stop code was specified by the system.

stopcode

When the rebuild is stopped due to CONNECTOR SPECIFIC REASON, this is the USERCODE specified by the issuer of the IXLREBLD STOP request. Consult the documentation for the application that initiated the rebuild for the meaning of this value.

When the rebuild was stopped due to FAILURE OF A SYSTEM-MANAGED PROCESS PHASE, FAILURE OF A DUPLEXED REQUEST, or DETECTION OF A DUPLEX OUT OF SYNC CONDITION, this is an internal value indicating the reason for the rebuild stop, and is diagnostic data provided to help IBM service personnel with problem determination.

System action: The system stops the rebuild process for the structure as indicated. Depending on the reason for stopping the rebuild process, other actions may be initiated when the stop of the current rebuild process completes. For example, if the structure is to be duplexed as indicated by a CFRM policy DUPLEX(ENABLED) specification, the system may initiate a duplexing rebuild when the current rebuild process is stopped.

Operator response: If the rebuild process was stopped due to a problem in allocating or connecting to the rebuild new structure, gather the information that the system programmer will need to determine the cause of the problem and correct it. In particular, messages (such as IXL013I, IXL015I, IXC573I, or IXC574I) may have been issued to the hardcopy log to document any rebuild connection failures or rebuild new structure allocation failures which may have occurred, and caused the rebuild process to be stopped. The hardcopy log around the time of the failure should be provided.

System programmer response: If the rebuild process was stopped due to a problem with connectors connecting to the rebuild new structure or a problem in allocating the rebuild new structure, this message will have been preceded by message IXL013I, IXL015I, IXC573I, or IXC574I. Look for these messages in the hardcopy log. They contain more detailed information about the connection failure or the allocation failure that caused the rebuild process to be stopped. Using this information, determine the cause of the rebuild failure, and if desired, correct the problem and re-start the rebuild process.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2ASR, IXCL2BLD, IXCL2RSR

Routing Code: 2

Descriptor Code: 5

**IXC523I STRUCTURE(S) FOUND FROM
SYSPLEX *plexname* IN COUPLING
FACILITY NAMED *cfname***

Explanation: Structures from another sysplex may be deallocated at this time. All structures from sysplex *plexname* will be kept or deleted based on reply to IXC508A.

In the message text:

plexname

Name of the sysplex from which structures were found.

cfname

Name of the coupling facility from the CFRM active policy in which the structures were found.

System action: Message IXC508A is issued.

Operator response: Notify the system programmer.

System programmer response: See message IXC508A.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2RC

Routing Code: 1,10

Descriptor Code: 2

**IXC526I STRUCTURE *strname* IS REBUILDING
FROM COUPLING FACILITY *oldcfname*
TO COUPLING FACILITY *newcfname*.
REBUILD START REASON: *text*
INFO108: *data1* *data2*.**

Explanation: XCF has chosen a facility to contain the structure that is being rebuilt. This facility might or might not be the same facility in which the structure resided previously.

In the message text:

strname

Name of the structure.

oldcfname

Name of the coupling facility that contains the old copy of the structure being rebuilt.

newcfname

Name of the coupling facility that contains the new copy of the structure being rebuilt.

CONNECTIVITY LOST TO STRUCTURE

The user who initiated the rebuild has indicated that the structure should be rebuilt because loss of connectivity has occurred. Note that loss of connectivity may or may not have occurred. Rebuild processing does NOT verify the reason indicated by the user.

STRUCTURE FAILURE

The user who initiated the rebuild has indicated that

the structure should be rebuilt because structure failure has occurred. Note that structure failure might or might not have occurred. Rebuild processing does not verify the reason indicated by the user.

CONNECTOR-SPECIFIED REASON

The user who initiated the rebuild specified its own reason for the rebuild. Consult the documentation for the application that initiated the rebuild for the meaning of this value.

OPERATOR INITIATED

The user who initiated the rebuild has indicated that the rebuild was initiated in response to an operator request. Note that the user who initiated the rebuild might or might not actually be processing an operator request; rebuild processing does not verify the reason indicated by the user.

data1

Data to be used by IBM if this message contains unexpected information.

data2

Data to be used by IBM if this message contains unexpected information.

System action: System processing continues.

Source: Cross System Coupling Facility (SCXCF)

Routing Code: 10

Descriptor Code: 12

IXC527I THE REBUILD OF *totalrebstr* STRUCTURES IN COUPLING FACILITY *cfname* COULD NOT BE {STARTEDSTOPPED}. SPECIFIC ERROR MESSAGES FOLLOW.
THREAD: *thread*

Explanation: For START of structure rebuild processing, all structures in a coupling facility are examined to determine if the requested type (rebuild or duplexing rebuild) can be started for the structure. Message IXC528I will be issued for each structure that could not have structure rebuild processing started. For STOP of structure rebuild processing, all structures in a coupling facility with the requested type (rebuild or duplexing rebuild) of structure rebuild in progress are examined to determine if the process can be stopped. Message IXC528I will be issued for each structure that could not have structure rebuild processing stopped.

In the message text:

totalrebstr

Total number of structures for which the rebuild request could not be processed.

cfname

The name of the coupling facility.

STARTED

The request was to start structure rebuild processing.

STOPPED

The request was to stop in progress structure rebuild processing.

thread

Used to tie together messages and XCF component trace records for a particular coupling facility process.

System action: Structure rebuild processing continues or terminates for those structures for which the process was successfully started or stopped.

Operator response: Contact the system programmer for advice and assistance in determining whether to manually move the structures or cancelling the rest of the CFNAME level rebuild. Ensure the related IXC528I messages are preserved for the system programmer to use in determining next action.

System programmer response: Examine the related IXC528I messages for the correct next action. Note that depending on the application using the structure, the structure rebuild process may not be supported. Consult the application or subsystem documentation for recommendations.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2BLD

Routing Code: 10

Descriptor Code: 12

IXC528I THE REBUILD OF STRUCTURE *strname* IN COUPLING FACILITY *cfname* COULD NOT BE {STARTEDSTOPPED}: *reason*
THREAD: *thread*

Explanation: A request was made to start structure rebuild processing or to stop in progress structure rebuild processing for all structures in one or more coupling facilities, but the request was not successful for one or more of the structures in that coupling facility. Structure rebuild processing type can be either rebuild or duplexing rebuild. The request was either due to a SETXCF command or invocation of an IXLREBLD macro.

For rebuild one of the following was specified:

- SETXCF START/STOP REBUILD
- IXLREBLD REQUEST=START/STOP

For duplexing rebuild one of the following was specified:

- SETXCF START/STOP,REBUILD,DUPLEX
- IXLREBLD REQUEST=STARTDUPLEX/STOPDUPLEX

In the message text:

<i>strname</i>	CLEANUP HAS BEGUN, REBUILD CANNOT BE STOPPED NOW
The name of the structure.	Rebuild has entered the cleanup phase. Rebuild cannot be stopped now.
<i>cfname</i>	XES FUNCTION NOT AVAILABLE
The name of the coupling facility.	XES functions are not available. This can be because the hardware necessary to provide XES functions is not present.
STARTED	AN UNEXPECTED ERROR OCCURRED
The request was to start structure rebuild processing.	An unexpected error occurred during rebuild processing.
STOPPED	NO ELIGIBLE STRUCTURES FOUND IN COUPLING FACILITY
The request was to stop structure rebuild processing.	On a rebuild start request, no structures eligible for rebuild were found in the coupling facility specified. On a rebuild stop request, no structures eligible for rebuild stop were found in the coupling facility specified.
<i>reason</i>	COUPLING FACILITY NOT DEFINED IN THE CFRM ACTIVE POLICY
One of the following:	The coupling facility is not defined in the CFRM active policy.
STRUCTURE NOT DEFINED IN THE CFRM ACTIVE POLICY	NO COUPLING FACILITY PROVIDED BETTER CONNECTIVITY
The structure is not defined in the CFRM active policy and therefore is not allocated in any coupling facility.	No other facility has better connectivity than the current one. The rebuild, which was initiated due to a loss of connectivity, would cause a further degradation in connectivity if accepted. The system evaluated the set of active connections which lost connectivity to the current structure as compared to the set of active connections which would not be able to connect to the rebuild new structure, since the result of the rebuild would cause additional active connections to lose connectivity, the system terminates structure rebuild processing.
STRUCTURE NOT ALLOCATED	NO COUPLING FACILITY PROVIDED BETTER OR EQUIVALENT CONNECTIVITY
The structure is not allocated in any coupling facility.	No other facility has better connectivity than the current one. The rebuild would cause a degradation in connectivity as determined by SFM system weights, if accepted.
REBUILD HAS ALREADY BEEN INITIATED FOR THE STRUCTURE	Note: When this reason is received for an operator initiated rebuild by STRNAME or CFNAME and the installation needs to rebuild the structure(s), a SETXCF START,REBUILD command specifying LESSCONN=CONTINUE may be used to force the rebuild to continue despite this condition. Because this may cause active connections to the structure to lose connectivity to the structure, do not use LESSCONN=CONTINUE unless you understand the impact to the application or subsystem. Consult the application or subsystem documentation for recommendations.
The structure rebuild process is already in progress for the structure. Use the DISPLAY XCF,STR command to determine the type (rebuild or duplexing rebuild0 and method (user-managed or system-managed) of the structure rebuild process.	
REBUILD STOP HAS ALREADY BEEN INITIATED FOR THE STRUCTURE	
Stop has already been initiated for the structure rebuild process.	
AT LEAST ONE ACTIVE CONNECTION INDICATED THAT REBUILD IS NOT ALLOWED	
Rebuild not permitted because IXLCONN with ALLOWREBLD=NO was specified by at least one active connection.	
COUPLE DATA SET FOR CFRM NOT AVAILABLE	
The couple data set for CFRM is not available to this system.	
NO ACTIVE CONNECTIONS TO THE STRUCTURE	
The rebuild request would have resulted in a user-managed rebuild, but the structure has no active connectors to participate in rebuild.	
REBUILD STOP IS IN PROGRESS FOR THE STRUCTURE	
Rebuild stop is in progress for the structure.	
STRUCTURE NOT IN REBUILD PROCESS	
The structure is not in the rebuild process.	

XCF SIGNALLING STRUCTURES CANNOT BE REBUILT USING CFNAME KEYWORD

Due to the availability constraints of XCF Signalling Structures, these structures cannot be rebuilt using the CFNAME option. They must be rebuilt individually using the STRNAME option.

DUPLEXING REBUILD NOT ALLOWED FOR THE STRUCTURE

The structure does not support duplexing rebuild for one of the following reasons:

- DUPLEX(DISABLED) was specified or defaulted to in the CFRM active policy for the structure.
- There are failed-persistent connections that are unavailable until a larger CFRM couple data set is made available.
- A user-managed duplexing rebuild could not be started because:
 - User-managed duplexing rebuilds are not supported for the structure type.
 - At least one active or failed-persistent connection specified or defaulted to IXLCONN ALLOWDUPREBLD=NO.
- A system-managed duplexing rebuild could not be started because:
 - The structure has at least one active connector, and none of the connectors (active or failed-persistent) specified IXLCONN ALLOWAUTO=YES when connecting.
 - A system-managed duplexing rebuild is not supported when a CFRM policy change is pending for the structure.

TYPE OF STOP REQUEST DOES NOT MATCH TYPE OF REBUILD IN PROGRESS

SETXCF STOP,REBUILD or IXLREBLD REQUEST=STOP was issued to stop a duplexing rebuild OR SETXCF STOP,REBUILD,DUPLEX or IXLREBLD REQUEST=STOPDUPLEX was requested to stop a non-duplexing rebuild.

DUPLEXING NOT ESTABLISHED, CANNOT STOP TO KEEP NEW STRUCTURE

SETXCF STOP,REBUILD,DUPLEX,KEEP=NEW or IXLREBLD REQUEST=STOPDUPLEX KEEP=NEW was requested and the rebuild has not yet entered the duplex established phase. Stop requests to switch to the new structure are not accepted until the rebuild enters the duplex established phase.

ALREADY STOPPING IN THE OTHER DIRECTION

The request to stop a duplexing rebuild was not processed because duplex rebuild stop has already been initiated for this structure name in

the other direction. Either KEEP=OLD was requested and KEEP=NEW type of duplex rebuild stop is in progress or KEEP=NEW was requested and KEEP=OLD type of duplex rebuild stop is in progress.

STRUCTURE HAS FAILED

The rebuild start request was rejected for one of the following reasons:

- The request was to start a duplexing rebuild and the structure has failed. Duplexing rebuild is not allowed when the structure is in the failed state.
- The rebuild start request would result in a system-managed rebuild. System-managed rebuild is not allowed when the structure is in the failed state.

NO OTHER COUPLING FACILITY FOUND IN PREFERENCE LIST

On a rebuild start request, either LOCATION=OTHER was specified or defaulted to for a request to start a duplexing rebuild. In addition to avoiding the facility in which the structure is currently allocated, when a duplexing rebuild is stopped by the operator and DUPLEX(ENABLED) is specified in the active policy, the subsequent duplexing request initiated due to DUPLEX(ENABLED) will avoid the coupling facility in which the previous instance of the structure was allocated when the duplexing rebuild was stopped.

STRUCTURE DOES NOT SUPPORT SYSTEM-MANAGED PROCESSES

The structure does not support system-managed processes (for example, rebuild) for one of the following reasons:

- The structure was not allocated in a coupling facility at or above the minimum CFLEVEL required for the current process by a system supporting system-managed processing.
- The structure has connections that have not been reconciled into the CFRM active policy.
- Structure cleanup is in progress for the structure.

CONNECTORS DO NOT SUPPORT SYSTEM-MANAGED PROCESSES

The requested system-managed process cannot be initiated for one of the following reasons:

- The structure has at least one active connector, and at least one of the connectors (active or failed-persistent) did not specify IXLCONN ALLOWAUTO=YES when connecting.
- A duplexing rebuild cannot be initiated for a structure that has only failed-persistent connectors, and at least one of the

failed-persistent connectors did not specify IXLCONN ALLOWAUTO=YES when connecting.

NO SUITABLE COUPLING FACILITY IN PREFERENCE LIST

The requested system-managed process cannot be initiated for one or more of the following reasons:

- The preference list is empty.
- The preference list contains no other coupling facility at or above the minimum CFLEVEL required for the current process.
- The structure already exists in the only suitable coupling facility. The same coupling facility can only be selected as the target for the system-managed process if a CFRM policy change is pending for the structure and one of the following is true:
 - The policy change does not affect the SIZE or the INITSIZE parameters.
 - The policy change affects the SIZE or the INITSIZE parameter and all of the structure connectors specified IXLCONN ALLOWALTER=YES.
- A potentially suitable coupling facility is being removed from the CFRM active policy.

START REASON INAPPROPRIATE FOR SYSTEM-MANAGED PROCESS

An IXLREBLD REQUEST=START invocation would have resulted in system-managed processing (for example, rebuild). The request specified a STARTREASON of LOSSCONN or STRFAILURE, which are not valid reasons for the requested process.

AT LEAST ONE CONNECTOR HAS LOST CONNECTIVITY TO THE STRUCTURE

The requested system-managed process (for example, rebuild) cannot be initiated because one or more of the connectors to the target structure has lost connectivity to the coupling facility containing the target structure.

CFRM COUPLE DATA SET DOES NOT SUPPORT SYSTEM-MANAGED PROCESS

The CFRM couple data set does not support the requested system-managed process (for example, rebuild) because the CFRM couple data set was not formatted at or above the minimum version for the system-managed process requested. Use the DISPLAY XCF,COUPLE,TYPE=CFRM command to determine the format of the CFRM couple data set. To support system-managed rebuild the CFRM couple data set should be formatted specifying "ITEM NAME(SMREBLD) NUMBER(1)". For system-managed duplexing rebuild, "ITEM NAME(SMDUPLEX) NUMBER(1)" should also be specified when

formatting a CFRM couple data set. Specifying "ITEM NAME(SMDUPLEX) NUMBER(1)" implicitly formats a CFRM couple data set that supports both system-managed rebuild and system-managed duplexing rebuild.

STRUCTURE WITH NO CONNECTORS HAS NEVER BEEN SYSTEM-MANAGED DUPLEXED

A system-managed duplexing rebuild cannot be initiated because there are no connections to the structure and the structure has not previously been duplexed using system-managed processing.

ALLOCATION OF REBUILD NEW STRUCTURE FOR DUPLEXING REBUILD NOT FEASIBLE

Allocation of the rebuild new structure instance in support of a duplexing rebuild is not feasible. Message IXC574I will contain additional diagnostic information.

thread

Used to tie together messages and XCF component trace records for a particular coupling facility rebuild process.

System action: The system does not process the request for that structure. Requested processing continues for those structures which had structure rebuild processing successfully started or stopped.

Operator response: Contact the system programmer for advice and assistance in determining whether to manually move the structures or cancel the rest of the CFNAME level rebuild. Ensure the IXC528I messages are preserved for the system programmer to use in determining next action.

System programmer response: Examine the IXC528I messages for the correct next action. Note that depending on the application using the structure, structure rebuild may not be possible. Consult the application or subsystem documentation for recommendations.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2BLD

Routing Code: 10

Descriptor Code: 12

IXC529I DUPLEX REBUILD NEW STRUCTURE
strname IS BEING ALLOCATED IN
COUPLING FACILITY *newcfname* OLD
STRUCTURE IS ALLOCATED IN
COUPLING FACILITY *oldcfname*.
REBUILD START REASON: *reason*
INFO108: *data1 data2*

Explanation: XCF has chosen a facility to contain the duplexing rebuild new structure.

In the message text:

strname

The name of the structure

newcfname

The name of the coupling facility that contains the duplexing rebuild new structure.

oldcfname

The name of the coupling facility that contains the duplexing rebuild old structure.

reason

One of the following:

CONNECTIVITY LOST TO STRUCTURE

The user who initiated the duplexing rebuild has indicated that the structure should be rebuilt because loss of connectivity has occurred. Duplexing rebuild processing does not verify the reason indicated by the user.

STRUCTURE FAILURE

The user who initiated the duplexing rebuild has indicated that the structure should be rebuilt because structure failure has occurred. Note that structure failure may or may not have occurred. Duplexing rebuild processing does not verify the reason indicated by the user.

CONNECTOR-SPECIFIED REASON:

The user who initiated the duplexing rebuild specified its own reason for the rebuild. Consult the documentation for the application that initiated the duplexing rebuild for the meaning of this value.

OPERATOR INITIATED

The user who initiated the duplexing rebuild or duplexing rebuild stop has indicated that he is the operator. Note that the user who initiated the duplexing rebuild or duplexing rebuild stop may or may not be the operator. Duplexing rebuild processing does not verify the reason indicated by the user.

MVS INITIATED BASED ON POLICY

The duplexing rebuild was initiated by MVS based on the specification of the DUPLEX option in the CFRM active policy. A specification of DUPLEX(ENABLED) will cause MVS to attempt to establish or re-establish duplexing as necessary.

data1

Data to be used by IBM if this message contains unexpected information.

data2

Data to be used by IBM if this message contains unexpected information.

System action: Duplex rebuild processing continues.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2AAL

Routing Code: 2

Descriptor Code: 5

IXC530I SETXCF [START|STOP] ALTER REQUEST FOR STRUCTURE *strname* ACCEPTED.

Explanation: The operator issued a SETXCF command to start or stop the alteration of a structure. The request was accepted.

In the message text:

START

The SETXCF START,ALTER,STRNAME=*strname*,SIZE=*size* request command was issued to adjust the size of the structure.

STOP

The SETXCF STOP,ALTER,STRNAME=*strname* command was issued to end structure alter processing.

strname

The name of the structure.

System action: System processing continues. The request will be processed asynchronously on a system in the sysplex that is capable of performing the function and that has connectivity to the coupling facility containing the structure. Structure alter processing will issue message IXC532I or IXC533I to indicate completion of the operator request.

Operator response: None.

System programmer response: None.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2ALT

Routing Code: 5

Descriptor Code: -

IXC531I SETXCF [START|STOP] ALTER REQUEST FOR STRUCTURE *strname* REJECTED. REASON: *text*

Explanation: The operator issued a SETXCF command to start or stop a structure alter. The request was rejected.

In the message text:

START

The request is to start structure alter.

STOP

The request is to stop structure alter.

strname

The name of the structure.

text

The reason the request was rejected. *text* is one of the following:

XES FUNCTION NOT AVAILABLE

The XES function is not available to this system. This could be because the necessary hardware is not present. The request should be routed to a system that is capable of processing a structure alter request.

STRUCTURE NOT IN THE CFRM ACTIVE POLICY

The structure is not defined in the CFRM active policy. The structure must be in the CFRM active policy and allocated in order to proceed with the structure alter request.

STRUCTURE NOT ALLOCATED

The specified structure is not allocated. The structure must be in the CFRM active policy and allocated in order to proceed with the structure alter request.

COUPLE DATA SET FOR CFRM NOT AVAILABLE

The CFRM couple data set is not available to this system. The CFRM couple data set must be made available to this system or the request should be routed to a system that is capable of processing a structure alter request.

REBUILD IN PROGRESS

The specified structure is in a structure rebuild process and structure alter is not allowed. Either wait for the process to complete or to reach the duplex established phase before requesting the structure alter or stop the structure rebuild process.

REBUILD STOP IN PROGRESS

The specified structure is in the rebuild stop process. Structure alter is not allowed while rebuild stop is in progress. Reissue the structure alter request when the rebuild stop is complete.

COUPLING FACILITY DOES NOT SUPPORT ALTER

The specified structure is allocated in a coupling facility that does not support structure alter. The structure must be rebuilt or reallocated in a coupling facility that supports structure alter (CFLEVEL equal to one).

ALTER ALREADY IN PROGRESS

The structure alter start request cannot be performed because structure alter is in progress. Either wait for the structure alter to complete or issue SETXCF to stop the structure alter.

AT LEAST ONE CONNECTION INDICATED THAT ALTER IS NOT ALLOWED

The structure alter start request cannot be

performed because at least one active, failing, or failed-persistent connection indicated that it does not support structure alter. Issue DISPLAY XCF,STR,STRNAME=*structure name*,CONNNAME=ALL to display connection information. Use this information to determine which connections do not allow structure alter.

STRUCTURE NOT IN ALTER PROCESS

The structure alter stop request cannot be performed because the structure is not being altered.

AN UNEXPECTED ERROR OCCURRED

The structure alter request cannot be performed because an unexpected error occurred in alter processing.

ALTER STOP ALREADY IN PROGRESS

The structure alter stop request cannot be performed because an alter stop request is already in progress for the structure.

STRUCTURE FAILED

The structure alter request cannot be performed because the structure has failed.

SYSTEM-MANAGED DUPLEXING REBUILD IS IN DUPLEX ESTABLISHED PHASE

The structure alter stop request cannot be performed because the structure is in the duplex established phase of a system-managed duplexing rebuild process. Either wait for the structure alter to complete or stop the duplexing rebuild.

System action: System processing continues. The SETXCF command was rejected.

Operator response: Notify the system programmer.

System programmer response: Where applicable, take action described for the specific rejection reason.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2ALT, IXCL2TSK

Routing Code: 5

Descriptor Code: -

IXC532I SETXCF REQUEST TO ALTER STRUCTURE *strname* *text*

Explanation: The operator-initiated structure alter processing has finished.

In the message text:

strname

The name of the structure

text

One of the following:

ENDED. STRUCTURE FAILED.

The structure alter request ended because the structure failed.

ENDED. REQUESTED ATTRIBUTES INCONSISTENT WITH ALLOCATED STRUCTURE.

Structure alter processing ended because the requested attributes are inconsistent with the allocated structure. This condition is encountered only with a request to change the entry-to-element ratio. Since the operator cannot initiate a change to the entry-to-element ratio, this message appears only when the operator has stopped a structure alter that was program-initiated.

ENDED. NO CONNECTIVITY TO STRUCTURE.

Structure alter processing ended because all systems that are capable of performing structure alter processing do not have connectivity to the coupling facility containing the structure.

ENDED. REBUILD STARTED.

The structure alter request ended because of a rebuild request for the same structure.

ENDED. STRUCTURE HAS BEEN DEALLOCATED.

The structure alter request ended because of the deallocation of the structure.

ENDED. ALTER STOPPED BEFORE ANY CHANGES TO THE STRUCTURE OCCURRED.

The structure alter processing ended because of a request to stop alter processing. This request was processed before any coupling facility operations with respect to the alter request could be performed. The structure was not changed by the initial alter request.

text is blank

A rebuild is not in progress so no further information is given.

ALTER OF REBUILD-OLD STRUCTURE INSTANCE WAS ATTEMPTED.

The structure alter request that ended was processing the Rebuild-Old structure instance during a duplexing rebuild.

ALTER OF REBUILD-NEW STRUCTURE INSTANCE WAS ATTEMPTED.

The structure alter request that ended was processing the Rebuild-New structure instance during a duplexing rebuild.

System action: System processing continues.

Operator response: None.

System programmer response: None.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2ALT

Routing Code: 5

Descriptor Code: -

IXC533I SETXCF REQUEST TO ALTER STRUCTURE *strname* *text* CURRENT SIZE: *currentsize* TARGET: *targetsize*

Explanation: The operator-initiated structure alter processing has finished.

In the message text:

strname

The name of the structure

text

One of the following:

COMPLETED. TARGET ATTAINED.

Structure alter processing completed and the requested target was attained. If a size change was requested, the target structure size might have been rounded to a storage increment boundary or bounded to the minimum structure size.

COMPLETED. TARGET NOT ATTAINED.

Structure alter processing completed and the requested target was not attained. If the operator has stopped an alter that was initiated with the IXALTER macro, it is possible that the current structure size matches the target structure size. The IXALTER must have been requesting a change to the ratio in this case.

Message IXC534I contains the complete size, entry count, and element count information. IXC534I is written to the system log only.

- The target might not have been attained when contracting the structure because the entry/elements are in use and cannot be removed from the structure or because, if the entry/elements that are not in use are removed, the size of the structure would fall below the connector-specified minimum entry and element percentage of free space.
- The target might not have been attained when expanding the structure because there was not enough available space in the coupling facility.

text is blank

A duplexing rebuild is not in progress so no further information is given.

ALTER OF REBUILD-OLD STRUCTURE INSTANCE WAS COMPLETED.

The structure alter request that ended was processing the Rebuild-Old structure instance during a duplexing rebuild.

ALTER OF REBUILD-NEW STRUCTURE INSTANCE WAS COMPLETED.

The structure alter request that ended was

processing the Rebuild-New structure instance during a duplexing rebuild.

currentsize

The current size of the structure in 1K blocks

targetsize

The target size of the structure in 1K blocks

System action: System processing continues.

Operator response: None.

System programmer response: None.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2ALT

Routing Code: 5

Descriptor Code: -

IXC534I **SETXCF REQUEST TO ALTER STRUCTURE** *strname text CURRENT SIZE: currentsize TARGET: targetsize CURRENT ENTRY COUNT: currententrycount TARGET: targetentrycount CURRENT ELEMENT COUNT: currenlementcount TARGET: targetelementcount CURRENT EMC COUNT: currentemccount TARGET: targetemccount*

Explanation: The operator-initiated structure alter processing has finished. This message is written to the system log only.

In the message text:

strname

The name of the structure

text

One of the following:

COMPLETED. TARGET ATTAINED.

The structure alter processing completed and the requested target was attained.

COMPLETED. TARGET NOT ATTAINED.

The structure alter processing completed and the requested target was not attained.

text is blank.

A duplexing rebuild was not in progress so no further information is given.

ALTER OF REBUILD-OLD STRUCTURE INSTANCE WAS COMPLETED.

The structure alter request that ended was processing the Rebuild-Old structure instance during a duplexing rebuild.

ALTER OF REBUILD-NEW STRUCTURE INSTANCE WAS COMPLETED.

The structure alter request that ended was processing the Rebuild-New structure instance during a duplexing rebuild.

currentsize

The current size of the structure in 1K blocks

targetsize

The target size of the structure in 1K blocks

current entrycount

The current number of entries. This number is an approximation.

targetentrycount

The target number of entries.

currenttelemcount

The current number of elements. This number is an approximation.

targettelemcount

The target number of elements.

System action: System processing continues.

Operator response: None.

System programmer response: None.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2ALT

Routing Code: #

Descriptor Code: 10

IXC535I **START ADMINISTRATIVE POLICY** *polname FOR CFRM REJECTED. STRUCTURES MUST BE REMOVED FROM THE FOLLOWING COUPLING FACILITIES: cfname*

:

:

Explanation: The operator issued SETXCF START,POLICY,TYPE=CFRM,POLNAME=*polname*. The policy change was rejected.

In the message text:

polname

The name of the policy to be started.

cfname

The name of the coupling facility whose structures must be removed before the change policy request can complete.

System action: System processing continues. The system does not complete the policy change request.

Operator response: The structures in the coupling facilities identified must be removed from the facilities. If possible, rebuild should be initiated for the structures in the identified facilities via the SETXCF START,REBUILD,CFNAME=facility

name,LOCATION=OTHER command. If rebuild is not possible, the structure must be deallocated from the coupling facility. For non-persistent structures and connections, this can be accomplished by shutting down the application using the structure. For persistent

structures and connections, the application using the structure must be shut down and then the connections and/or the structure must be forced via the SETXCF FORCE,CONNECTION and/or the SETXCF FORCE,STRUCTURE command. The SETXCF START,POLICY,TYPE=CFRM,POLNAME=*polname* command should be reissued once the structures have been removed from the coupling facilities.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2POL

Routing Code: #

Descriptor Code: 5

IXC536I DUPLEXING REBUILD OF STRUCTURE
strname text REASON: reason

Explanation: Duplexing rebuild is initiated and stopped by MVS in response to various system events. The message text describes the event that prompted MVS to either initiate or stop duplexing rebuild. MVS will initiate duplexing rebuild in response to certain events if the DUPLEX(ENABLED) option is specified in the CFRM active policy for the structure. MVS will stop duplexing rebuild if the CFRM policy DUPLEX option is changed to DISABLED, if the coupling facility in which either the old or new instance of the structure is allocated is removed from the preference list of the structure, or if the CFRM active policy is stopped.

In the message text:

strname

The name of the structure

text

One of the following:

INITIATED

The duplexing rebuild was initiated by MVS for the reason indicated.

STOPPED TO FALL BACK TO THE OLD STRUCTURE

The duplexing rebuild was stopped by MVS to fall back to the old structure for the reason indicated.

STOPPED TO SWITCH TO THE NEW STRUCTURE

The duplexing rebuild was stopped by MVS to switch to the new structure for the reason indicated.

reason

One of the following:

CONNECTOR CONNECTED TO STRUCTURE

The duplexing rebuild was initiated by MVS in response to a user connecting to a structure.

PREVIOUS REBUILD PROCESS COMPLETED

The duplexing rebuild was initiated by MVS in

response to a previous rebuild process completing or a previous rebuild stop process completing.

CONNECTOR FORCED FROM STRUCTURE

The duplexing rebuild was initiated by MVS in response to a connection being forced from the structure.

CONNECTOR DISCONNECTED FROM STRUCTURE

The duplexing rebuild was initiated by MVS in response to a connection disconnecting from the structure.

GAINED CONNECTIVITY TO A COUPLING FACILITY

The duplexing rebuild was initiated by MVS in response to gaining connectivity to a given coupling facility.

COUPLING FACILITY ADDED TO THE PREFERENCE LIST

The duplexing rebuild was initiated by MVS in response to a change policy request that added a coupling facility to the structure preference list.

COUPLING FACILITY DELETED FROM THE PREFERENCE LIST

The duplexing rebuild was stopped by MVS in response to a change policy request that deleted a coupling facility from the structure preference list.

CHANGE IN CFRM ACTIVE POLICY DUPLEX OPTION

The duplexing rebuild was either initiated or stopped by MVS in response to a change policy request that modified the DUPLEX option in the CFRM active policy. A change to specify DUPLEX(ENABLED) will cause MVS to attempt to establish duplexing. A change to specify DUPLEX(DISABLED) will cause MVS to stop duplexing.

CFRM ACTIVE POLICY STOPPED

The duplexing rebuild was stopped by MVS in response to the CFRM active policy being stopped.

SETXCF FORCE COMMAND PROCESSING FOR STRUCTURE

The rebuild is being stopped due to a SETXCF FORCE command issued by the operator.

PROGRAM INITIATED REQUEST TO FORCE STRUCTURE

The rebuild is being stopped due to a program initiated request to force the structure.

ALL CONNECTORS RECONCILED INTO THE POLICY

The duplexing rebuild was initiated by MVS in response to all connectors being reconciled into the active policy.

COUPLING FACILITY GAINED CF-TO-CF LINK CONNECTIVITY

The duplexing rebuild was initiated by MVS in response to a gain in CF-to-CF link connectivity by the coupling facility in which the structure resides.

DUPLEX ENABLED MONITORING IDENTIFIED STRUCTURE

The duplexing rebuild was initiated by MVS as a result of the Duplex Enabled Monitor identifying this structure as one which could be duplexed.

STOP DIRECTION CHANGED FOR SITE RECOVERY MANAGEMENT

The duplexing rebuild stop direction was changed by MVS in order to keep the structure in the coupling facility at the recovery site. Message IXC522I contains the reason why the duplexing rebuild was stopped.

System action: Duplexing rebuild processing stopped or initiated as indicated.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2BLD

Routing Code: 2

Descriptor Code: 10

IXC537I **ALTER OF STRUCTURE** *strname*
COMPLETED FOR REBUILD-OLD
INSTANCE, CONTINUING WITH
REBUILD-NEW.

Explanation: Structure alter processing was initiated for a structure that is in duplexing rebuild. The alter is being driven serially, and the alter of the rebuild-old instance has completed, allowing XCF to now alter the rebuild-new instance.

In the message text:

strname

The name of the structure.

System action: System processing continues.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2SLT

Routing Code: 10

Descriptor Code: -

IXC538I **DUPLEXING REBUILD OF STRUCTURE** *strname* **WAS NOT INITIATED BY MVS.**
REASON: *reason*

Explanation: Duplexing rebuild is initiated by MVS in response to various system events. This attempt to start a duplexing rebuild process failed. Failure to start a duplexing rebuild usually means that the environmental

conditions required for a duplexing rebuild have not all been met, and may not necessarily require urgent action. This message is issued to draw attention to the fact that a structure which could potentially be duplexed has not been.

In the message text:

strname

The name of the structure

reason

One of the following:

STRUCTURE NOT DEFINED IN THE CFRM ACTIVE POLICY

The structure is not defined in the CFRM active policy and therefore is not allocated in any coupling facility.

STRUCTURE NOT ALLOCATED

The structure is not allocated in any coupling facility.

AT LEAST ONE ACTIVE CONNECTION INDICATED THAT REBUILD IS NOT ALLOWED

Rebuild not permitted because IXLCONN with ALLOWREBLD=NO was specified by at least one active connection.

COUPLE DATA SET FOR CFRM NOT AVAILABLE

The couple data set for CFRM is not available to this system.

NO ACTIVE CONNECTIONS TO THE STRUCTURE

The structure has no connectors to participate in rebuild.

REBUILD STOP IS IN PROGRESS FOR THE STRUCTURE

Rebuild stop is in progress for the structure.

XES FUNCTION NOT AVAILABLE

XES functions are not available. This can be because the hardware necessary to provide XES functions is not present.

AN UNEXPECTED ERROR OCCURRED

An unexpected error occurred during rebuild processing.

NO ELIGIBLE STRUCTURES FOUND IN COUPLING FACILITY

On a rebuild start request, no structures eligible for rebuild were found in the coupling facility specified. On a rebuild stop request, no structures eligible for rebuild stop were found in the coupling facility specified.

COUPLING FACILITY NOT DEFINED IN THE CFRM ACTIVE POLICY

The coupling facility is not defined in the CFRM active policy.

NO COUPLING FACILITY PROVIDED BETTER CONNECTIVITY

No other coupling facility has better connectivity than the current one. The rebuild, which was initiated due to a loss of connectivity, would cause a further degradation in connectivity if accepted. The system evaluated the set of active connections which lost connectivity to the current structure as compared to the set of active connections which would not be able to connect to the rebuild new structure, since the result of the rebuild would cause additional active connections to lose connectivity, the system terminates structure rebuild processing.

NO COUPLING FACILITY PROVIDED BETTER OR EQUIVALENT CONNECTIVITY

No other coupling facility has better connectivity than the current one. The rebuild would cause a degradation in connectivity as determined by SFM system weights, if accepted.

DUPLEXING REBUILD NOT ALLOWED FOR THE STRUCTURE

The structure does not support duplexing rebuild for one of the following reasons:

- DUPLEX(DISABLED) was specified or defaulted to in the CFRM active policy for the structure.
- There are failed persistent connections that are unavailable until a larger CFRM couple data set is made available.
- A user-managed duplexing rebuild could not be started because:
 - User-managed duplexing rebuilds are not supported for the structure type.
 - At least one active or failed-persistent connection specified or defaulted to IXLCONN ALLOWDUPREBLD=NO.
- A system-managed duplexing rebuild could not be started because:
 - The structure has at least one active connector, and none of the connectors (active or failed-persistent) specified IXLCONN ALLOWAUTO=YES when connecting.
 - A system-managed duplexing rebuild is not supported when a CFRM policy change is pending for the structure.

STRUCTURE HAS FAILED

The request was to start a duplexing rebuild and the structure has failed. Duplexing rebuild is not allowed when the structure is in the failed state.

NO OTHER COUPLING FACILITY FOUND IN PREFERENCE LIST

SETXCF START,REBUILD was requested and

LOCATION=OTHER was either specified on the rebuild request or defaulted to for STARTREASON=LOSSCONN or for a request to start a duplexing rebuild. In addition to avoiding the coupling facility in which the structure is currently allocated, when a duplexing rebuild is stopped by the operator and DUPLEX(ENABLED) is specified in the active policy, the subsequent duplexing request initiated due to DUPLEX(ENABLED) will avoid the coupling facility in which the previous instance of the structure was allocated when the duplexing rebuild was stopped.

STRUCTURE DOES NOT SUPPORT SYSTEM-MANAGED PROCESSES

The structure does not support system-managed processes (for example, rebuild) for one of the following reasons:

- The structure was not allocated in a coupling facility at or above the minimum CFLEVEL required for the current process by a system supporting system-managed processing.
- The structure has connections that have not been reconciled into the CFRM active policy.
- Structure cleanup is in progress for the structure.

CONNECTORS DO NOT SUPPORT SYSTEM-MANAGED PROCESSES

The requested system-managed process cannot be initiated for one of the following reasons:

- The structure has at least one active connector and at least one of the connectors (active or failed-persistent) did not specify IXLCONN ALLOWAUTO=YES when connecting.
- A duplexing rebuild cannot be initiated for a structure that has only failed-persistent connectors, and at least one of the failed-persistent connectors did not specify IXLCONN ALLOWAUTO=YES when connecting.

NO SUITABLE COUPLING FACILITY IN PREFERENCE LIST

The requested system-managed process cannot be initiated for one or more of the following reasons:

- The preference list is empty.
- The preference list contains no other coupling facility at or above the minimum CFLEVEL required for the current process.
- A potentially suitable coupling facility is being removed from the CFRM active policy.

AT LEAST ONE CONNECTOR HAS LOST CONNECTIVITY TO THE STRUCTURE

The requested system-managed process (for example, rebuild) cannot be initiated because

one or more of the connectors to the target structure has lost connectivity.

CFRM COUPLE DATA SET DOES NOT SUPPORT SYSTEM-MANAGED PROCESS

The CFRM couple data set does not support the requested system-managed process (for example, rebuild), because the CFRM couple data set was not formatted at or above the minimum version for the system-managed process requested. Use the DISPLAY XCF,COUPLE,TYPE=CFRM command to determine the format of the CFRM couple data set. To support system-managed rebuild the CFRM couple data set should be formatted specifying "ITEM NAME(SMREBLD) NUMBER(1)". For system-managed duplexing rebuild, "ITEM NAME(SMDUPLEX) NUMBER(1)" should also be specified when formatting a CFRM couple data set. Specifying "ITEM NAME(SMDUPLEX) NUMBER(1)" implicitly formats a CFRM couple data set that supports both system-managed rebuild and system-managed duplexing rebuild.

STRUCTURE WITH NO CONNECTORS HAS NEVER BEEN SYSTEM-MANAGED DUPLEXED

A system-managed duplexing rebuild cannot be initiated because there are no connections to the structure and the structure has not previously been duplexed using system-managed processing.

ALLOCATION OF REBUILD NEW STRUCTURE FOR DUPLEXING REBUILD NOT FEASIBLE

Allocation of the rebuild new structure instance in support of a duplexing rebuild is not feasible. Message IXC574I will contain additional diagnostic information.

System action: Not applicable.

Operator response: Not applicable.

System programmer response: Not applicable.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2BLD

Routing Code: 10

Descriptor Code: -

IXC539I CF STR(S) HAVE BEEN DUMPED DUE TO *dumptrigger*.
TRACE THREAD:*thread*
THE FOLLOWING STRUCTURES HAVE BEEN DUMPED:
StrNameList

Explanation: XCF issues this message after successfully invoking SDUMP processing to dump coupling facility (CF) structures. CF structure(s) are dumped by XCF either due to taking over dump processing or initiating dump processing. For normal

SVC dump processing, SDUMP provides the requested CF structure(s) in the requested dump. The processing to dump CF structure(s) captures the data in a dump table associated with an instance of the CF structure. Once the captured data has been written to a dump data set by SDUMP, the dump table is deleted.

For failures during normal SVC dump processing, XCF will perform dump takeover processing. Dump takeover will handle recovery for CF structure dumps when a system that was taking the dump terminates or loses connectivity to the coupling facility containing the CF structure. XCF will also initiate dump processing for CF structure(s) that the installation has designated to be dumped via the CHNGDUMP command.

Dump initiation processing will initiate dumps of CF structure(s) as follows:

- When a system that had active connection(s) to the structure terminates.
- When all systems in a sysplex terminate.
- When all systems connected to a coupling facility terminate.

For both dump takeover and initiation, the dump contains only data captured from CF structure(s). The dump with title "COMPON=XCF,COMPID=...SCXCF, ISSUER=IXCL2STR,TRACE THREAD: *thread*,CF STR(S) — *dumptrigger*" can be related to this message by using the trace thread.

In the message text:

dumptrigger

The trigger for taking the dump of coupling facility structure(s). Possible reasons for dumping a structure include:

- The installation requested structure(s) to be dumped via a CHNGDUMP command.
- The coupling facility already had dump data captured for structure(s).

dumptrigger is one of the following:

GAIN OWNERSHIP OF CF

During the processing to gain ownership for the sysplex of a coupling facility, a dump of coupling facility structure(s) was initiated.

LOST CF CONNECTIVITY

Due to a system having lost connectivity to a coupling facility, another system having connectivity to the coupling facility has initiated a dump of coupling facility structure(s).

SYSTEM FAILURE

Due to the failure of a system in the sysplex, another system has initiated a dump of coupling facility structure(s)

thread

Used to tie together this message, the dump title for the CF STR(S) dump, and XCF component

IXC540I

trace records from the processing to take the dump of coupling facility structure(s).

THE FOLLOWING STRUCTURES HAVE BEEN DUMPED:

This line is followed by a list of structures that have been dumped.

StrNameList

The list of structures than have been dumped. Up to three structure names will appear on each line. When more than one instance of a structure had been dumped, the structure name will appear in the list once for each instance in the dump. For example, a duplexed structure has two instances allocated and both could be in the same dump.

System action: System processing continues.

Operator response: Not applicable.

System programmer response: Use the trace thread to locate the dump taken by the system issuing this message. To aid in problem determination, provide the dump to the application(s) or subsystem(s) associated with the listed CF structure(s).

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2STR

Routing Code: 10

Descriptor Code: –

IXC540I POPULATECF REBUILD FOR *cfname* REQUEST *action*. THE FOLLOWING STRUCTURES ARE PENDING REBUILD: *strnamelist* THE FOLLOWING WILL NOT BE REBUILT: *strname*: *reason*

Explanation: A request to initiate a **POPULATECF** rebuild for coupling facility *cfname* was received by the system. A PopulateCF rebuild can be requested either by invoking the **SETXCF START,REBUILD,POPULATECF=*cfname*** operator command or by using the **IXLREBLD** macro, specifying **POPULATECF=*cfname***. XES has considered the set of allocated coupling facility structures in the sysplex and issued message IXC540I to document the disposition of each structure.

In the message text:

cfname

The coupling facility to be populated, specified on the **SETXCF** operator command or the **IXLREBLD** macro.

action

The action taken by the system on the PopulateCF rebuild request. *action* is one of the following:

ACCEPTED

The request was accepted.

REJECTED

The request was rejected.

THE FOLLOWING STRUCTURES ARE PENDING REBUILD:

This line is followed by a list of structures that have been selected for PopulateCF processing.

strnamelist

The list of structures that have been selected for PopulateCF processing. Up to three structure names will appear on each line. XES will serially initiate structure rebuilds for each of these structures. If no structures are to be rebuilt, this line is **(NONE)**.

THE FOLLOWING WILL NOT BE REBUILT:

This line is followed by a list of structures that will not be rebuilt by PopulateCF processing.

strname

The name of a structure that will not be rebuilt for PopulateCF processing. If all structures are to be rebuilt, this line is **(NONE)**.

reason

The reason why the structure was not selected for the PopulateCF request. *reason* is one of the following:

POPULATECF IS NOT IN THE PREFERENCE LIST

The specified PopulateCF is not in the structure's preference list.

STRUCTURE ALREADY ALLOCATED IN THE POPULATECF

The structure was already allocated in the specified PopulateCF

STRUCTURE HAS NO ACTIVE CONNECTORS

The rebuild request would have resulted in a user-managed rebuild, but the structure has no active connectors to participate in rebuild.

AT LEAST ONE CONNECTOR DOES NOT SUPPORT REBUILD

At least one of the active connectors to the structure does not support rebuild.

STRUCTURE IS ALREADY BEING REBUILT

The structure rebuild process is already in progress for the structure. Use the **DISPLAY XCF,STR** command to determine the type (rebuild or duplexing rebuild) and method (user-managed or system-managed) of the structure rebuild process.

STRUCTURE IS ALLOCATED IN A MORE PREFERRED CF

The structure is allocated in a CF that is preferred over the specified PopulateCF.

COMPONENT ERROR

An unknown XES component error has occurred.

STRUCTURE DOES NOT SUPPORT SYSTEM-MANAGED PROCESSES

The structure does not support system-managed processes (for example, rebuild) for one of the following reasons:

- The structure was not allocated in a coupling facility at or above the minimum CFLEVEL required for the current process by a system supporting system-managed processing.
- The structure has connections that have not been reconciled into the CFRM active policy.
- Structure cleanup is in progress for the structure.

CONNECTORS DO NOT SUPPORT SYSTEM-MANAGED PROCESSES

The structure has at least one active connector, and at least one of the connectors (active or failed-persistent) did not specify IXLCONN ALLOWAUTO=YES when connecting.

POPULATECF COUPLING FACILITY NOT SUITABLE

The requested system-managed process cannot be initiated because the specified POPULATECF is not of a CFLEVEL at or above the minimum required for the current process.

SYSTEM-MANAGED PROCESS START REASON INAPPROPRIATE

An IXLREBLD REQUEST=START invocation would have resulted in system-managed processing (for example, rebuild). The request specified a STARTREASON of LOSSCONN or STRFAILURE, which are not valid reasons for the requested process.

AT LEAST ONE CONNECTOR HAS LOST CONNECTIVITY

The requested system-managed process (for example, rebuild) cannot be initiated because one or more of the connectors to the target structure has lost connectivity.

CFRM CDS DOES NOT SUPPORT SYSTEM-MANAGED PROCESS

The CFRM couple data set does not support the requested system-managed process (for example, rebuild) because the couple data set was not formatted at or above the minimum version for the system-managed process requested. Use the DISPLAY XCF,COUPLE,TYPE=CFRM command to determine the format of the CFRM couple data set. To support system-managed rebuild the CFRM couple data set should be formatted specifying "ITEM NAME(SMREBUILD) NUMBER(1)". For system-managed duplexing rebuild, "ITEM NAME(SMDUPLEX) NUMBER(1)" should also be specified when formatting a CFRM couple data set. Specifying

"ITEM NAME(SMDUPLEX) NUMBER(1)" implicitly formats a CFRM couple data set that supports both system-managed rebuild and system-managed duplexing rebuild.

STRUCTURE HAS FAILED

The rebuild start request was rejected because it would result in a system-managed rebuild. System-managed rebuild is not allowed when the structure is in the failed state.

System action: The system will rebuild coupling facility structures in the pending rebuild state sequentially, in the order listed. Structures that are not to be rebuilt are unaffected.

Operator response: Not applicable.

System programmer response: If there are any structures listed that should not be rebuilt, have the operator issue: **SETXCF**

STOP,REBUILD,STRNAME=strname to stop the rebuild of that structure. To cancel the entire rebuild, have the operator issue: **SETXCF**

STOP,REBUILD,POPULATECF=cfname.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2BLD

Routing Code: 2

Descriptor Code: 5

IXC541I POPULATECF REBUILD FOR cfname COMPLETE. REBUILD-OLD INSTANCE, CONTINUING WITH REBUILD-NEW.

Explanation: XES has completed processing associated with the POPULATECF rebuild for *cfname*. Structures have been rebuilt in *cfname*, a coupling facility that has been restored or added to the sysplex configuration.

In the message text:

cfname

The coupling facility to be populated, specified on the SETXCF operator command or the IXLREBLD macro.

System action: Processing continues.

Operator response: None required. If another POPULATECF rebuild is desired, it will be accepted now.

Source: Cross System Coupling Facility (SCXCF)

Routing Code: 2

Descriptor Code: 5

IXC542I	POPULATECF REBUILD FOR STRUCTURE <i>strname</i> NOT PROCESSED: <i>text</i>
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Explanation: The request to rebuild a structure is being stopped.

In the message text:

strname

Name of the structure for which information is recorded.

THE SPECIFIED POPULATECF HAS BEEN REMOVED FROM THE POLICY

A policy change caused the PopulateCF coupling facility to be removed from the active policy. No allocations can occur in that facility, so the structure rebuild initiated to populate that facility cannot be started.

THE SPECIFIED POPULATECF IS BEING REMOVED FROM THE POLICY

A policy change caused the PopulateCF coupling facility to be marked as DELETE PENDING. The facility is in the process of being removed from use, so the structure rebuild initiated to populate that facility cannot be started.

THE SPECIFIED POPULATECF HAS FAILED

The coupling facility has failed. No allocations can occur in the facility, so the structure rebuild initiated to populate that facility cannot be started.

AT LEAST ONE ACTIVE CONNECTION INDICATED THAT REBUILD IS NOT ALLOWED

Rebuild not permitted because IXLCONN with ALLOWREBLD=NO was specified by at least one active connection.

NO ACTIVE CONNECTIONS TO THE STRUCTURE

The rebuild request would have resulted in a user-managed rebuild, but the structure has no active connectors to participate in rebuild.

THE SPECIFIED POPULATECF IS NOT IN THE STRUCTURES PREFLIST

A policy change caused the PopulateCF facility to be removed from the structures preference list. Since the rebuild was started to populate the specified facility, and this structure cannot be allocated in that facility, the rebuild was not started.

ANOTHER REBUILD REQUEST SUPERSEDED THE PENDING POPULATECF REQUEST

While this structures rebuild was pending, another rebuild was requested. The new rebuild request was processed immediately, and the pending rebuild was cancelled.

AN UNEXPECTED ERROR OCCURRED

An unexpected error occurred during rebuild processing.

NO COUPLING FACILITY PROVIDED BETTER CONNECTIVITY

No other coupling facility has better connectivity than the current one. The rebuild, which was initiated due to a loss of connectivity, would cause a further degradation in connectivity if accepted. The system evaluated the set of active connections which lost connectivity to the current structure as compared to the set of active connections which would not be able to connect to the rebuild new structure, since the result of the rebuild would cause additional active connections to lose connectivity, the system terminates structure rebuild processing.

NO COUPLING FACILITY PROVIDED BETTER OR EQUIVALENT CONNECTIVITY

No other coupling facility has better connectivity than the current one. The rebuild would cause a degradation in connectivity as determined by SFM system weights, if accepted.

THE STRUCTURE IS BEING DEALLOCATED

The last connector to the structure has disconnected, causing the structure to be deallocated. It cannot be rebuilt for the PopulateCF rebuild that is in progress.

STRUCTURE HAS FAILED

The rebuild start request was rejected because it would result in a system-managed rebuild. System-managed rebuild is not allowed when the structure is in the failed state.

STRUCTURE DOES NOT SUPPORT SYSTEM-MANAGED PROCESSES

The structure does not support system-managed processes (for example, rebuild) for one of the following reasons:

- The structure was not allocated in a coupling facility at or above the minimum CFLEVEL required for the current process by a system supporting system-managed processing.
- The structure has connections that have not been reconciled into the CFRM active policy.
- Structure cleanup is in progress for the structure.

CONNECTORS DO NOT SUPPORT SYSTEM-MANAGED PROCESSES

The structure has at least one active connector, and at least one of the connectors (active or failed-persistent) did not specify IXLCONN ALLOWAUTO=YES when connecting.

POPULATECF COUPLING FACILITY NOT SUITABLE

The requested system-managed process cannot be initiated because the specified POPULATECF is not of a CFLEVEL at or above the minimum required for the current process.

START REASON INAPPROPRIATE FOR SYSTEM-MANAGED PROCESS

An IXLREBLD REQUEST=START invocation would

have resulted in system-managed processing (for example, rebuild). The request specified a STARTREASON of LOSSCONN or STRFAILURE, which are not valid reasons for the requested process.

AT LEAST ONE CONNECTOR HAS LOST CONNECTIVITY TO THE STRUCTURE

The requested system-managed process (for example, rebuild) cannot be initiated because one or more of the connectors to the target structure has lost connectivity.

CFRM COUPLE DATA SET DOES NOT SUPPORT SYSTEM-MANAGED PROCESS

The CFRM couple data set does not support the requested system-managed process (for example, rebuild), because the couple data set was not formatted at or above the minimum version for the system-managed process requested. Use the DISPLAY XCF,COUPLE,TYPE=CFRM command to determine the format of the CFRM couple data set. To support system-managed rebuild the CFRM couple data set should be formatted specifying "ITEM NAME(SMREBUILD) NUMBER(1)". For system-managed duplexing rebuild, "ITEM NAME(SMDUPLEX) NUMBER(1)" should also be specified when formatting a CFRM couple data set. Specifying "ITEM NAME(SMDUPLEX) NUMBER(1)" implicitly formats a cfrm couple data set that supports both system-managed rebuild and system-managed duplexing rebuild.

System action: Not applicable.

Operator response: Not applicable.

System programmer response: Not applicable.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2BLD, IXCL2FOR, IXCL2RSR

Routing Code: 2

Descriptor Code: 5

**IXC543I THE REQUESTED {START,REALLOCATE I
STOP,REALLOCATE I
STOP,REALLOCATE,FORCE} WAS {ACCEPTED, IREJECTED: I
COMPLETED.} reason**

Explanation: A SETXCF START/STOP operator command was issued to start or stop a REALLOCATE process or XCF forced an in-progress REALLOCATE process to terminate. The requested START or STOP was either rejected with a reason provided for explanation or accepted.

Once started, the REALLOCATE process will examine each allocated structure to determine the need for activation of a pending policy and/or changing the location of instance(s) allocated in CF(s). The XCF allocation algorithm is used to determine whether or not

the CFs containing the structure instances are the preferred CFs. Message IXC574I is written to the hardcopy log to show the current location of instance(s) allocated in CF(s), the policy information used, and the results of applying the XCF allocation criteria.

REALLOCATE processing uses these results when evaluating the allocated structure. When the structure needs to be adjusted, REALLOCATE processing predetermines the necessary steps and uses structure rebuild processing to accomplish the adjustment. Messages associated with the structure rebuild process (IXC57nl and IXC52nl) and the deallocation process (IXC579I) will be issued. Message IXC546I is issued for an error encountered when starting a structure rebuild process for the next step to adjust the target structure. When REALLOCATE processing does not attempt adjustment of an allocated structure, message IXC544I will be issued to provide an explanation.

IXC543I will be issued to indicate processing is complete. REALLOCATE processing is complete when one of the following occurs:

- All allocated structures have been evaluated with appropriate action taken.
- The REALLOCATE process was stopped and relocation steps for the current target structure have finished.
- Either a SETXCF STOP,REALLOCATE,FORCE command or internal XCF processing has resulted in the immediate termination of the REALLOCATE process. The structure which is the current target of the REALLOCATE process will continue the in-progress structure rebuild process but this may not complete all the steps for relocation.

In addition, message IXC545I will be issued to provide the summary of the actions taken.

In the message text:

START,REALLOCATE
STOP,REALLOCATE
STOP,REALLOCATE,FORCE

ACCEPTED.

The request to start or stop a REALLOCATE process was accepted.

REJECTED:

The request to start or stop a REALLOCATE process was rejected for the specified reason.

COMPLETED.

The system has completed processing for an accepted request to START or STOP the REALLOCATE process.

reason

One of the following:

AN UNEXPECTED ERROR OCCURRED

The REALLOCATE request cannot be performed because an unexpected error occurred.

XES FUNCTION NOT AVAILABLE

XES functions are not available. This can be because the hardware necessary to provide XES functions is not present.

COUPLE DATA SET FOR CFRM NOT AVAILABLE

The couple data set for CFRM is not available to this system.

A REALLOCATE PROCESS OR POPULATECF REBUILD IS ALREADY IN PROGRESS

An attempt to start a REALLOCATE process was rejected for one of the following reasons:

- A REALLOCATE process is in progress or stopping.
- A ROPULATECF rebuild is in progress.

Only one POPULATECF rebuild or REALLOCATE process is supported at a time. Use DISPLAY XCF,STR,STATUS=ALLOCATED to identify the process.

AT LEAST ONE SYSTEM DOES NOT SUPPORT THE REALLOCATE PROCESS

A SETXCF START,REALLOCATE request was rejected or an in-progress REALLOCATE process is terminated because there is at least one system in the sysplex that does not support the REALLOCATE process. Since the REALLOCATE process uses structure rebuild processing which can be completed on any system in the sysplex, all systems must support REALLOCATE processing in order either to accomplish the relocation steps for the current target structure or to continue the necessary actions for the in-progress REALLOCATE process.

NO ALLOCATED STRUCTURES EXIST FOR REALLOCATE TO EVALUATE

An attempt to start a REALLOCATE process was rejected because there are no allocated structures to evaluate. The REALLOCATE process is only applicable for allocated structures with instance(s) which are displayed as the ACTIVE, REBUILD OLD/NEW, or DUPLEXING REBUILD OLD/NEW structure.

NO REALLOCATE PROCESS IS IN PROGRESS

An attempt to stop a REALLOCATE process was rejected for one of the following reasons:

- No REALLOCATE process is in progress.
- A POPULATECF rebuild is in progress and must be stopped with a SETXCF STOP,REBUILD command specifying POPULATECF. Use DISPLAY XCF,STR,STATUS=ALLOCATED to identify the structure(s) in the POPULATECF rebuild.

REALLOCATE STOP ALREADY IN PROGRESS

The SETXCF STOP,REALLOCATE request cannot be performed because a stop request

has already been accepted. The REALLOCATE process will finish processing for the structure that is having the location adjusted prior to completing the stop request. Use DISPLAY XCF,STR,STATUS=ALLOCATED to identify the structure with "REALLOCATE PROCESS STOPPING".

System action: When the command is accepted, the system processes the request. When the command is rejected, the system ignores the request.

Operator response: Notify the system programmer.

System programmer response: When the start or stop request was accepted, use the DISPLAY XCF,STR,STATUS=ALLOCATED command to determine the state of the REALLOCATE processing. The state of the REALLOCATE process will be shown as "IN PROGRESS" or "STOPPING". The structure that is the current target will indicate "TARGET OF REALLOCATE PROCESS". When the REALLOCATE process is "IN PROGRESS", structures which have not been evaluated will indicate "REALLOCATE EVALUATION PENDING". Structures which have been processed will not have additional status indicators displayed but the log can be examined to determine the action taken.

When the start or stop request was rejected, based on the specified reason take the necessary steps to correct the problem and reissue the command.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2BLD, IXCL2TSK

IXC544I REALLOCATE PROCESSING FOR STRUCTURE *strname* WAS NOT ATTEMPTED BECAUSE *reason*

Explanation: A SETXCF START,REALLOCATE operator command was issued to start the REALLOCATE process. Once started, the REALLOCATE process will examine each allocated structure to determine the need for adjustment by either activating a pending policy change and/or changing the location of instance(s) allocated in CF(s). When the structure needs to be adjusted, messages associated with the structure rebuild process (IXC57nl and IXC52nl) and the deallocation process (IXC579l) will be issued.

When the structure is not adjusted, message IXC544I will be issued to provide an explanation.

In the message text:

strname

Name of the structure for which information is recorded.

WAS NOT ATTEMPTED BECAUSE

The REALLOCATE process did not process the name structure for the specified reason.

reason

One of the following:

AN UNEXPECTED ERROR OCCURRED

The REALLOCATE process cannot be performed because an unexpected error occurred.

STRUCTURE IS ALLOCATED IN PREFERRED CF

The structure is allocated in preferred CF.

OF A PENDING POLICY CHANGE TO DELETE THE STRUCTURE DEFINITION

There is an administrative policy change pending. The pending policy change is to delete the policy definition for the structure. Since the change is to delete the structure from the CFRM active policy, the structure rebuild process cannot be used to make the pending policy changes active.

OF A PENDING POLICY CHANGE TO SIZE/INITSIZE BUT ALTER NOT ALLOWED

There is an administrative policy change pending. The pending policy change includes a change to the SIZE or INITSIZE specifications. Since at least one of the active or failed-persistent connections to the structure does not allow alter processing AND system-managed rebuild is required, the structure rebuild process cannot be used to make the pending policy changes active.

THERE IS NO CONNECTIVITY TO COUPLING FACILITY

The CFRM active policy indicates that this system does not have connectivity to the coupling facility where an instance of the structure is allocated.

OF AN UNEXPECTED ERROR WHEN BUILDING THE LIST OF ELIGIBLE CFS

The REALLOCATE process encountered an unexpected error during processing to build the list of coupling facilities where an instance of the structure could be allocated. When this processing accessed an allocated instance to determine the structure parameters, either connectivity to the CF was lost or the command to the CF failed unexpectedly.

A STRUCTURE REBUILD PROCESS IS IN PROGRESS

The structure rebuild process is already in progress for the structure. The structure rebuild process type could be either rebuild or duplexing rebuild. For a duplexing rebuild, the in-progress processing could be one of the following:

- The structure is duplexed.
- Process is in progress but has not reached duplexing established.
- Process has been stopped with KEEP=OLD.

- Process has been stopped with KEEP=NEW.

THE STRUCTURE HAS FAILED

The rebuild start request was rejected because it would result in a system-managed rebuild. System-managed rebuild is not allowed when the structure is in the failed state.

THE STRUCTURE HAS NO ACTIVE CONNECTORS

The request would have resulted in a user-managed process, but the structure has no active connectors to participate in structure rebuild processing.

AT LEAST ONE CONNECTOR DOES NOT SUPPORT REBUILD

At least one of the active connectors to the structure does not support rebuild.

NO SUITABLE COUPLING FACILITY FOR REBUILD WITH LOCATION=OTHER

The rebuild start request was rejected because LOCATION=OTHER was necessary and no other eligible coupling facility was found in the preference list.

NO COUPLING FACILITY PROVIDED BETTER OR EQUIVALENT CONNECTIVITY

No other facility has better connectivity than the current one. The rebuild would cause a degradation in connectivity as determined by SFM system weights, if accepted.

THE STRUCTURE DOES NOT SUPPORT SYSTEM-MANAGED PROCESSES

The structure does not support system-managed processes (for example, rebuild) for one of the following reasons:

- The structure was not allocated in a coupling facility at or above the minimum CFLEVEL required for the current process by a system supporting system-managed processing.
- The structure has connections that have not been reconciled into the CFRM active policy.
- Structure cleanup is in progress for the structure.

NO SUITABLE COUPLING FACILITY IN PREFERENCE LIST

The requested system-managed process cannot be initiated for one or more of the following reasons:

- The preference list is empty.
- The preference list contains no other coupling facility at or above the minimum CFLEVEL required for the current process.
- The structure already exists in the only suitable coupling facility. The same coupling facility can only be selected as the target for the system-managed rebuild if a CFRM policy change is pending, and either:

- The policy changes does not involve updates to the SIZE or INITSIZE values, or
- the policy change does involve updates to SIZE or INITSIZE and all the structure connectors specified IXLCONN ALLOWALTER=YES.
- A potentially suitable coupling facility is being removed from the CFRM active policy.

CONNECTORS DO NOT SUPPORT SYSTEM-MANAGED PROCESSES

The structure has at least one active connector, and at least one of the connectors (active or failed-persistent) did not specify IXLCONN ALLOWAUTO=YES when connecting.

AT LEAST ONE CONNECTOR HAS LOST CONNECTIVITY

The requested system-managed process (for example, rebuild) cannot be initiated because one or more of the connectors to the target structure has lost connectivity.

THE CFRM CDS DOES NOT SUPPORT SYSTEM-MANAGED PROCESS

The CFRM couple data set does not support the requested system-managed process (for example, rebuild), because the CFRM couple data set was not formatted at or above the minimum version for the system-managed process requested. Use the DISPLAY XCF,COUPLE,TYPE=CFRM command to determine the format of the CFRM couple data set. To support system-managed rebuild the CFRM couple data set should be formatted specifying "ITEM NAME(SMREBLD) NUMBER(1)". For system-managed duplexing rebuild, "ITEM NAME(SMDUPLEX) NUMBER(1)" implicitly formats a CFRM couple data set that supports both system-managed rebuild and system-managed duplexing rebuild.

A CFRM ACTIVE POLICY DATA AREA COULD NOT BE OBTAINED

The requested system-managed process (for example, rebuild) cannot be initiated because the necessary CFRM active policy data area could not be obtained.

System action: The system continues the REALLOCATE process.

Operator response: Notify the system programmer.

System programmer response: Use the DISPLAY XCF,STR,STRNAME=*strname* operator command to show the current state of the structure. Based on the current state of the structure, use SETXCF and/or subsystem commands as required to activate a pending policy change or adjust the structure location.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2BLD

IXC545I	REALLOCATE PROCESSING RESULTED IN THE FOLLOWING: <i>numadjsimplex</i> STRUCTURE(S) REALLOCATED - SIMPLEX <i>numadjduplex</i> STRUCTURE(S) REALLOCATED - DUPLEXED <i>numpolsimplex</i> STRUCTURE(S) POLICY CHANGE MADE - SIMPLEX <i>numpolduplex</i> STRUCTURE(S) POLICY CHANGE MADE - DUPLEXED <i>numoksimplex</i> STRUCTURE(S) ALREADY ALLOCATED IN PREFERRED CF - SIMPLEX <i>numokduplex</i> STRUCTURE(S) ALREADY ALLOCATED IN PREFERRED CF - DUPLEXED <i>numbypassed</i> STRUCTURE(S) NOT PROCESSED <i>numnotalloc</i> STRUCTURE(S) NOT ALLOCATED <i>numnotused</i> STRUCTURE(S) NOT DEFINED ----- <i>totalnum</i> TOTAL <i>notcompletenum</i> ERROR(S) ENCOUNTERED DURING PROCESSING
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Explanation: A SETXCF START,REALLOCATE operator command was issued to start a REALLOCATE process. When the REALLOCATE process completes, IXC545I is issued to summarize the results of the processing. As each structure is examined counters are incremented to track the decision whether or not to process the structure. The total of these counters provides the number of structures examined. In addition, message IXC543I will be issued to indicate processing is complete.

In the message text:

numadjsimplex

The number of simplex structures for which reallocation was initiated. Structure rebuild processing was used to adjust the structure location. For user-managed process, message IXC52nl is issued to track processing. For system-managed process, messages IXC57nl and IXC52nl are issued to track processing. Reallocation of simplex structures may also have activated pending policy changes.

numadjduplex

The number of duplexed structures for which reallocation was initiated. Structure rebuild processing was used to adjust the structure location. For user-managed process, message IXC52nl is issued to track processing. For system-managed process, messages IXC57nl and IXC52nl are issued to track processing. Reallocation of duplexed structures may also have activated pending policy changes.

numpolsimplex

The number of simplex structures for which

reallocation was initiated only to activate a pending policy change. Structure rebuild processing was used to make a pending policy change active. For user-managed process, message IXC52nl is issued to track processing. For system-managed process, messages IXC57nl and IXC52nl are issued to track processing.

numpolduplex

The number of duplexed structures for which reallocation was initiated only to activate a pending policy change. Structure rebuild processing was used to make a pending policy change active. For user-managed process message IXC52nl is issued to track processing. For system-managed process, messages IXC57nl and IXC52nl are issued to track processing.

numoksimplex

The number of simplex structures which were already allocated in the preferred coupling facility. Message IXC544I is issued indicating that the structure instance is allocated in the coupling facility selected by the XCF allocation algorithm.

numokduplex

The number of duplexed structures which were already allocated in the preferred coupling facilities. Message IXC544I is issued indicating that the structure instances are allocated in the coupling facilities selected by the XCF allocation algorithm.

numbypassed

The number of structures which were not processed. Message IXC544I is issued for each bypassed structure to provide the reason for not processing the structure.

numnotalloc

The number of structures which were not processed since the structure is not currently allocated in a coupling facility. No additional message issued.

numnotused

The number of structures for which a name has not been defined but the CFRM couple data set has been formatted to support additional structure definitions. No additional message issued.

totalnum

The total number of structures examined by the REALLOCATE process. Assuming the REALLOCATE process completes without being stopped, then the total number of examined structures should equal the number of structures the primary CFRM couple data set is formatted to support. When the REALLOCATE process is stopped, processing completes for current target structure and any structure(s) pending evaluation are not processed. There are no additional messages for these bypassed structures and they will not be reflected in the total. Use the DISPLAY

XCR,COUPLE,TYPE=CFRM operator command to show the format data for the CFRM couple data set.

notcompletenum

The number of times message IXC546I was issued by the REALLOCATE process to indicate that processing could not complete for a structure. The REALLOCATE process predetermines the necessary steps and if one or more of these steps cannot start structure rebuild then IXC546I is issued to provide the reason and type of structure rebuild process. Structure rebuild processing can be of type rebuild or duplexing rebuild.

If notcompletenum is zero then no further action is necessary.

If notcompletenum is nonzero then find in the log the IXC546I message(s) to determine the name of the structure(s) for which REALLOCATE processing could not complete. Use the DISPLAY XCF,STR,STRNAME=*strname* operator command to show the current state of the structure. Based on the current state of the structure use SETXCF and/or subsystem commands as required to activate a pending policy change or adjust the structure location.

Operator response: Notify the system programmer.

System programmer response: The REALLOCATE process has completed, use the IXC52nl, IXC544I, IXC545I, IXC546I, and IXC57nl messages to understand the processing results.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2BLD

IXC546I REALLOCATE PROCESSING FOR STRUCTURE *strname* COULD NOT COMPLETE. THE REQUIRED *strrbldtype* WAS NOT STARTED BECAUSE *reason*

Explanation: A SETXCF START,REALLOCATE operator command was issued to start the REALLOCATE process. The named structure was the target of the REALLOCATE process but a relocation step could not be started for the specified reason. The relocation step was to start either a rebuild or a duplexing rebuild. The rebuild is used to activate a pending policy change and/or to adjust the location. The duplexing rebuild is required since the structure was duplexed when the REALLOCATE process selected the structure for adjustment.

In the message text:

strname

Name of the structure for which information is recorded.

strrbldtype

One of the following:

REBUILD

The required type of structure rebuild processing was rebuild.

DUPLEXING REBUILD

The required type of structure rebuild processing was duplexing rebuild.

WAS NOT STARTED BECAUSE

The required structure rebuild process could not be started for the specified reason. The type of processing (strrbldtype) for structure rebuild can be either rebuild or duplexing rebuild.

reason

One of the following:

AN UNEXPECTED ERROR OCCURRED

The REALLOCATE process cannot be performed because an unexpected error occurred.

A STRUCTURE REBUILD PROCESS IS IN PROGRESS

The structure rebuild process is already in progress for the structure. Use the DISPLAY XCF,STR command to determine the type (rebuild or duplexing rebuild) and method (user-managed or system-managed) of the structure rebuild process.

THE STRUCTURE HAS FAILED

The rebuild start request was rejected for one of the following reasons:

- The request was to start a duplexing rebuild and the structure has failed. Duplexing rebuild is not allowed when the structure is in the failed state.
- The rebuild start request would result in a system-managed rebuild. System-managed rebuild is not allowed when the structure is in the failed state.

THE STRUCTURE HAS NO ACTIVE CONNECTORS

The request would have resulted in a user-managed process, but the structure has no active connectors to participate in structure rebuild processing.

A REBUILD STOP IS IN PROGRESS FOR THE STRUCTURE

Rebuild stop is in progress for the structure.

AT LEAST ONE CONNECTOR DOES NOT SUPPORT REBUILD

At least one of the active connectors to the structure does not support rebuild.

NO SUITABLE COUPLING FACILITY FOR REBUILD WITH LOCATION=OTHER

The rebuild start request was rejected because LOCATION=OTHER was necessary and no other eligible coupling facility was found in the preference list.

NO COUPLING FACILITY PROVIDED BETTER OR EQUIVALENT CONNECTIVITY

No other facility has better connectivity than the current one. The rebuild would cause a degradation in connectivity as determined by SFM system weights, if accepted.

A DUPLEXING REBUILD IS NOT ALLOWED FOR THE STRUCTURE

The structure does not support duplexing rebuild for one of the following reasons:

- DUPLEX(DISABLED) was specified or defaulted to in the CFRM active policy for the structure.
- There are failed persistent connections that are unavailable until a larger CFRM couple data set is made available.
- A user-managed duplexing rebuild could not be started because:
 - User-managed duplexing rebuilds are not supported for the structure type.
 - At least one active or failed-persistent connection specified or defaulted to IXLCONN ALLOWDUPREBLD=NO.
- A system-managed duplexing rebuild could not be started because:
 - The structure has at least one active connector, and none of the connectors (active or failed-persistent) specified IXLCONN ALLOWAUTO=YES when connecting.
 - A system-managed duplexing rebuild is not supported when a CFRM policy change is pending for the structure.

THE STRUCTURE DOES NOT SUPPORT SYSTEM-MANAGED PROCESSES

The structure does not support system-managed processes (for example, rebuild) for one of the following reasons:

- The structure was not allocated in a coupling facility at or above the minimum CFLEVEL required for the current process by a system supporting system-managed processing.
- The structure has connections that have not been reconciled into the CFRM active policy.
- Structure cleanup is in progress for the structure.

NO SUITABLE COUPLING FACILITY IN PREFERENCE LIST

The requested system-managed process cannot be initiated for one or more of the following reasons:

- The preference list is empty.
- The preference list contains no other coupling facility at or above the minimum CFLEVEL required for the current process.

- The structure already exists in the only suitable coupling facility. The same coupling facility can only be selected as the target for the system-managed rebuild if a CFRM policy change is pending, and either:
 - The policy changes does not involve updates to the SIZE or INITSIZE values, or
 - the policy change does involve updates to SIZE or INITSIZE and all the structure connectors specified IXLCONN ALLOWALTER=YES.
- A potentially suitable coupling facility is being removed from the CFRM active policy.

CONNECTORS DO NOT SUPPORT SYSTEM-MANAGED PROCESSES

The structure has at least one active connector, and at least one of the connectors (active or failed-persistent) did not specify IXLCONN ALLOWAUTO=YES when connecting.

AT LEAST ONE CONNECTOR HAS LOST CONNECTIVITY

The requested system-managed process (for example, rebuild) cannot be initiated because one or more of the connectors to the target structure has lost connectivity.

THE CFRM CDS DOES NOT SUPPORT SYSTEM-MANAGED PROCESS

The CFRM couple data set does not support the requested system-managed process (for example, rebuild), because the CFRM couple data set was not formatted at or above the minimum version for the system-managed process requested. Use the DISPLAY XCF,COUPLE,TYPE=CFRM command to determine the format of the CFRM couple data set. To support system-managed rebuild the CFRM couple data set should be formatted specifying "ITEM NAME(SMREBLD) NUMBER(1)". For system-managed duplexing rebuild, "ITEM NAME(SMDUPLEX) NUMBER(1)" implicitly formats a CFRM couple data set that supports both system-managed rebuild and system-managed duplexing rebuild.

A STRUCTURE WITH NO CONNECTORS HAS NEVER BEEN SYSTEM-MANAGED DUPLEXED

A system-managed duplexing rebuild cannot be initiated because there are no connections to the structure and the structure has not previously been duplexed using system-managed processing.

A CFRM ACTIVE POLICY DATA AREA COULD NOT BE OBTAINED

The requested system-managed process (for example, rebuild) cannot be initiated because the necessary CFRM active policy data area could not be obtained.

System action: The system continues REALLOCATE process.

Operator response: Notify the system programmer.

System programmer response: Message IXC546I was issued by the REALLOCATE process to indicate that processing could not complete for a structure. The REALLOCATE process predetermines the necessary steps and if one or more of these steps cannot start structure rebuild processing then IXC546I is issued to provide the reason and type of structure rebuild process. Structure rebuild process type can be either rebuild or duplexing rebuild.

Use the DISPLAY XCF,STR,STRNAME=*strname* operator command to show the current state of the structure. Based on the current state of the structure use SETXCF and/or subsystem commands as required to activate a pending policy change or adjust the structure location.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2BLD

| **IXC547I THE SETXCF {START|STOP},
MSGBASED REQUEST
{COMPLETED|FAILED}: *reason***

| **Explanation:** An operator entered a SETXCF START|STOP,MSGBASED command to specify the CFRM event management protocol.

| In the message text:

| **START**

| The request was to start message-based event processing.

| **STOP**

| The request was to stop message-based event processing (that is, to revert to policy-based processing).

| *(reason)*

| **CFRM COUPLE DATA SET IS NOT AVAILABLE**

| The CFRM active policy could not be read because the couple data set supporting CFRM is not accessible to this system.

| **CFRM COUPLE DATA SET DOES NOT SUPPORT MESSAGE-BASED PROCESSING.**

| The CFRM couple data set was not formatted at or above the minimum version required for message-based event processing, and therefore can support only policy-based processing.

| To support message-based event processing the CFRM couple data set should be formatted specifying "ITEM NAME(MSGBASED) NUMBER(1)".

| **ALREADY USING SPECIFIED PROTOCOL**

| The requested event delivery protocol is

<p>already in use. For a SETXCF START,MSGBASED command, message-based event processing is already in effect. For a SETXCF STOP,MSGBASED command, policy-based event processing is already in effect.</p> <p>AN UNEXPECTED ERROR OCCURRED</p> <p>An unexpected error occurred during command processing. The results of the request are unpredictable.</p> <p>System action: When the command completes successfully, the system has updated the CFRM event management protocol as requested. When the command fails, the event management protocol remains unchanged.</p> <p>Operator response: If the request fails, report the failure to the system programmer.</p> <p>System programmer response: If the request fails for reasons other than ALREADY USING SPECIFIED PROTOCOL, correct the conditions that caused the failure as documented for the message reason text, and reissue the command.</p> <p>Source: Cross System Coupling Facility (SCXCF)</p> <p>Detecting Module: IXC01SCP</p> <p>Routing Code: 2</p> <p>Descriptor Code: 5</p>	<p>FIRST USE OF MSGBASED-CAPABLE COUPLE DATA SET</p> <p>A CFRM couple data set formatted at or above the minimum version required for message-based event processing was made available, either at IPL (when the active CFRM policy did not require policy-based processing), or through a SETXCF COUPLE,PSWITCH command.</p> <p>FAILURE OF MANAGING SYSTEM</p> <p>While message-based processing was in effect, the system assigned as event manager failed. The named system is the new manager.</p> <p>SETXCF COMMAND</p> <p>The operator issued a SETXCF START,MSGBASED command to initiate message-based processing or a SETXCF STOP,MSGBASED command to revert to policy-based processing.</p> <p>COMPONENT RECOVERY</p> <p>The system restarted message-based processing to prevent or correct a potential hang condition.</p> <p>transeqnum The transition sequence number associated with the reported update. The sequence number is incremented every time the event delivery protocol changes and whenever the managing system changes.</p> <p>trantime The date/time when the event processing update occurred, in the format mm/dd/yyyy hh:mm:ss.fffffff.</p> <p>sysname The name of the system assigned to manage events. Applicable only to message-based event processing. A name of '*****' indicates that no manager is assigned.</p> <p>sysid The system slot and sequence number of the system assigned to manage events. Applicable only to message-based event processing.</p> <p>System action: The system continues processing.</p> <p>Operator response: N/A</p> <p>System programmer response: N/A</p> <p>Source: Cross System Coupling Facility (SCXCF)</p> <p>Detecting Module: IXCL2MBU</p> <p>Routing Code: 2</p> <p>Descriptor Code: 4</p>
<p>IXC548I</p> <p>CFRM EVENT MANAGEMENT</p> <p>ENVIRONMENT UPDATED</p> <p>EVENT MANAGEMENT PROTOCOL: {MESSAGE-BASED POLICY-BASED}</p> <p>REASON FOR CHANGE: <i>trigger</i></p> <p>TRANSITION SEQUENCE NUMBER: <i>transeqnum</i></p> <p>TRANSITION TIME: <i>trantime</i></p> <p>[MANAGER SYSTEM NAME: sysname]</p> <p>[MANAGER SYSTEM NUMBER: sysid]</p> <p>Explanation: The CFRM event processing environment has been updated. Either the event processing protocol has changed, or, in message-based processing, the system assigned to manage events has changed.</p> <p>In the message text:</p> <p>MESSAGE-BASED CFRM is now using the message-based event delivery protocol.</p> <p>POLICY-BASED CFRM is now using the policy-based event delivery protocol.</p> <p><i>trigger</i></p>	

IXC549I	EVENT MANAGEMENT: <i>evtmgmt</i>
	Explanation: When CFRM initialization is done for a system in the sysplex, the current state of event management protocol is written to the hardcopy log.
	In the message text:
	EVENT MANAGEMENT
	The CFRM event management protocol according to the CFRM active policy. Except for XCF signaling structures, messaged-based processing can be used for any allocated structure.
	When the CFRM event management protocol is message-based, message-based processing is enabled for an allocated structure during event processing. When the CFRM event management protocol is policy-based, event processing is policy-based for all allocated structures.
	<i>evtmgmt</i>
	One of the following:
	POLICY-BASED
	For the sysplex, event management for an allocated structure is controlled on each system having a structure connection and the CFRM active policy is accessed to obtain event data.
	MESSAGE-BASED MANAGER SYSTEM NAME: <i>mgrsysname</i>
	For the sysplex, allocated structures enabled for message-based processing have event processing managed by an event manager system using messages sent by way of XCF signaling for communication with the participant system(s). The manager system updates the CFRM active policy once all participating system(s) distribute the event to active connections.
	The event manager system is identified by <i>mgrsysname</i> .
	MESSAGE-BASED TRANSITIONING TO NEW MANAGER
	For the sysplex, allocated structures enabled for message-based processing have event processing managed by an event manager system but the sysplex is transitioning to a new manager system. Once the new manager system is assigned, the name of the event manager system can be displayed. The sysplex changes to a new manager system as the result of removing the prior manager system from the sysplex.
	<i>mgrsysname</i>
	When event management is policy-based, no system name is displayed. When event management is message-based, the manager

system name (<i>mgrsysname</i> is displayed. When transitioning to a new manager system, no system name is displayed.
System action: The system continues processing.
Operator response: N/A
System programmer response: N/A
Source: Cross System Coupling Facility (SCXCF)
Detecting Module: IXCL2INT
Routing Code: 2
Descriptor Code: 4

IXC550I	CFRM RECORD CLEANUP <i>status</i>
	TRACE THREAD: <i>thread</i>
	Explanation: During CFRM initialization, additional cleanup of the records in the CFRM active policy is done. Message IXC516I and IXC551I may also be issued during this processing.
	In the message text:
	<i>status</i>
	One of the following:
	BEGINNING.
	During CFRM initialization, additional record cleanup for structures started.
	BEGINNING WITH FULL CFRM CHECKPOINT AREA.
	During CFRM initialization, additional record cleanup for structures started and the checkpoint area of the CFRM active policy is full. The special checkpoint record used to limit the number of times this processing is done for the sysplex is not written to the CFRM active policy. Until the special checkpoint record is written, other systems in the sysplex will also do this processing.
	ENDING.
	During CFRM initialization, additional record cleanup for structures completed.
	ENDING WITHOUT UPDATES FOR CFRM ACTIVE POLICY.
	During CFRM initialization, additional record cleanup for structures completed without updating the CFRM active policy.
	<i>thread</i>
	Used to tie together messages and XCF component trace records during CFRM initialization and processing to gain ownership and cleanup coupling facilities.
	System action: The CFRM active policy is updated to reflect any action taken.
	Operator response: Not applicable.
	System programmer response: Not applicable.

IXC551I

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2CRS

Routing Code: 10

Descriptor Code: -

**IXC551I STRUCTURE *strname* IN COUPLING
FACILITY *type.mfg.plant.sequence*
PARTITION: *partition* side CPCID: *cpcid*
status TRACE THREAD: *thread*.**

Explanation: During CFRM initialization, additional cleanup of the records in the CFRM active policy is completed. The action for a structure is based on the information in the CFRM active policy.

In the message text:

strname

Name of the structure for which information is recorded.

type

Node type (see ndetype in IXLYNDE).

mfg

Node manufacturer ID (see ndemfg in IXLYNDE).

plant

Node manufacturer plant ID (see ndeplant in IXLYNDE).

sequence

Node sequence number (see ndesequence in IXLYNDE).

partition

Node LPAR partition number (see ndepartition in IXLYNDE).

side

The node PP/SI mode indicator and configuration code from the IXLYNDE are used to determine the value for *side*. *side* is one of the following:

SIDE: 0

The coupling facility is on SIDE 0 of a partitionable CPC.

SIDE: 1

The coupling facility is on SIDE 1 of a partitionable CPC.

blank

The coupling facility is in a non-partitionable CPC.

cpcid

Node Central Processor Complex (CPC) ID (see ndecpcid in IXLYNDE).

status

One of the following:

TO BE DEALLOCATED.

The non-persistent structure was found in the CFRM active policy. The structure information

has been cleared from the CFRM active policy and a checkpoint record added to the CFRM active policy to indicate that the structure should be deallocated. The non-persistent structure will be deallocated during processing to cleanup the coupling facility in which the structure is allocated. Using the DISPLAY XCF,STR command will show the status as STRUCTURE IN TRANSITION until the structure is deallocated.

The structure deallocation may remain pending if the coupling facility containing the structure is not connected to any system. Use the DISPLAY XCF,CF or DISPLAY CF command to show the connectivity status of the coupling facility.

TO BE DUMPED AND DEALLOCATED.

The non-persistent structure with valid dump options was found in the CFRM active policy. The structure information has been cleared from the CFRM active policy and a checkpoint record added to the CFRM active policy to indicate that the structure should be dumped prior to deallocating the structure. The non-persistent structure will have dump processing initiated during processing to cleanup the coupling facility in which the structure is allocated. The structure will be deallocated when dump processing completes. Using the DISPLAY XCF,STR command will show the status as STRUCTURE IN TRANSITION until the structure is deallocated.

The structure deallocation may remain pending if the coupling facility containing the structure is not connected to any system. Use the DISPLAY XCF,CF or DISPLAY CF command to show the connectivity status of the coupling facility.

thread

Used to tie together messages and XCF component trace records during CFRM initialization and processing to gain ownership and cleanup coupling facilities.

System action: The CFRM active policy is updated to reflect the action taken for the specified structure.

Operator response: Not applicable.

System programmer response: Not applicable.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2CRS

Routing Code: 10

Descriptor Code: -

**IXC552I DUPLEX REBUILD NEW STRUCTURE
strname WAS ALLOCATED IN A
COUPLING FACILITY THAT IS NOT
FAILURE ISOLATED FROM THE OLD
STRUCTURE.**

Explanation: The structure allocated for this duplexing rebuild could not be made failure isolated with respect to the old structure. This is not an optimum use of duplexing since failure of a processor with both coupling facility LPARs in it would result in the loss of both structures.

In the message text:

strname

The name of the structure.

System action: The duplexing rebuild continues.

Operator response: Notify the system programmer.

System programmer response: Review your coupling facility configuration. When possible, duplex failure isolation is recommended.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2ASR

Routing Code: 2,10

Descriptor Code: 11

**IXC553E DUPLEXING REBUILD NEW
STRUCTURE *strname* IS NOT FAILURE
ISOLATED FROM THE DUPLEXING
REBUILD OLD STRUCTURE.**

Explanation: The duplexing rebuild new structure allocated by system-managed duplexing rebuild could not be made failure isolated with respect to the duplexing rebuild old structure. This is not an optimum use of duplexing since failure of a processor with both CF partitions in it would result in the loss of both structures.

In the message text:

strname

The name of the structure.

System action: The system-managed duplexing rebuild continues. This message will be DOMed when the duplexing rebuild is stopped or completed, and may be reissued if the structure is subsequently reduplicated.

Operator response: Notify the system programmer.

System programmer response: Review your coupling facility configuration. When possible, duplex failure isolation is recommended. IBM recommends that the installation make the necessary configuration changes (for example, making new coupling facilities available, configuring new CF-to-CF links between existing coupling facilities, updating CFRM policy to add coupling facilities to the preference list for the structure,

etc.) to allow the old and new instances of the duplexed structure to be allocated in coupling facilities that are failure-isolated from one another.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2ATH,IXCL2MON

Routing Code: 2,10

Descriptor Code: 10

**IXC559I THE RESPONSE TO MESSAGE
IXC501A WAS Y WHICH WILL CAUSE
COUPLING FACILITY *cfname* TO BE
USED BY *plexname1*. THIS MAY
RESULT IN SEVERE ERRORS IF
SYSPLEX *plexname2* IS STILL
ACTIVELY USING IT. ENSURE THAT
THE COUPLING FACILITY IS NOT
CURRENTLY BEING USED BY
SYSPLEX *plexname2* BEFORE
CONFIRMING.**

Explanation: This message appears when the reply to message IXC501A is Y. It is issued to warn the operator that severe errors may occur if the coupling facility is still being used by the sysplex that currently owns it. The operator is asked to ensure that the coupling facility is not being used by the currently owning sysplex before confirming its use for the sysplex identified in this message.

In the message text:

cfname

Name of the coupling facility from the CFRM active policy.

plexname1

Sysplex name that is attempting to gain ownership.

plexname2

Sysplex name portion of the authority data.

System action: Message IXC560A is issued.

Operator response: Notify the system programmer.

System programmer response: Verify that the CFRM active policy correctly identifies that the coupling facility should be used by this sysplex and ensure that the sysplex identified in this message is stopped from using the coupling facility before responding to IXC560A. This message identifies the coupling facility and the sysplex that currently owns it. Note that a reply of Y to IXC560A may cause severe errors if the coupling facility is still being used by the sysplex identified in this message.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2HN

Routing Code: 1,10

Descriptor Code: 2

IXC560A REPLY Y TO CONFIRM THAT COUPLING FACILITY NAME *cfname* SHOULD BE USED BY *plexname1* OR N TO DENY THE USE.

Explanation: This message appears in conjunction with message IXC559I when the reply to message IXC501A is Y. Message IXC559I is issued to warn the operator that severe errors may occur if the coupling facility is still being used by the sysplex that currently owns it. The operator is asked to ensure that the coupling facility is not being used by the currently owning sysplex and then asked to either confirm or deny the use of the coupling facility.

In the message text:

cfname

Name of the coupling facility from the CFRM active policy.

plexname1

Sysplex name that is attempting to gain ownership.

System action: The coupling facility usage is based on the response.

Operator response: Notify the system programmer.

System programmer response: Verify that the CFRM active policy correctly identifies that the coupling facility should be used by this sysplex and ensure that the sysplex identified in messages IXC500I and IXC559I is stopped from using the coupling facility before responding to this message. If Y (yes) is specified, this system will gain ownership of the coupling facility for the sysplex and coupling facility cleanup will occur.

Messages IXC500I and IXC559I identify the coupling facility and the sysplex that currently owns it. Note that a reply of Y may cause severe errors if the coupling facility is still being used by the sysplex identified in these messages. If N (no) is specified, the coupling facility will not be used by this system.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2HN

Routing Code: 1,10

Descriptor Code: 2

IXC561 FIRST CONNECTOR TO FAILED-PERSISTENT STRUCTURE *strname* COULD NOT CONNECT. TO ALLOW THE CONNECT, *text*

Explanation: The system takes appropriate action to allow another connection attempt.

In the message text:

strname

The name of the structure.

text

One of the following:

THE STRUCTURE WAS FORCED.

The structure was forced so that allocation can be reattempted.

THE DUPLEXING REBUILD WAS COMPLETED.

The duplexing rebuild was completed so that a connection can be reattempted to the alternate structure.

THE DUPLEXED STRUCTURE WAS FORCED.

The duplexed structure was forced so that allocation can be reattempted.

System action: System processing continues.

Operator response: Not applicable.

System programmer response: Not applicable.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2ASR

Routing Code: 10

Descriptor Code: 12

IXC570I SYSTEM-MANAGED *process* STARTED FOR STRUCTURE *strname* IN COUPLING FACILITY *oldcname* PHYSICAL STRUCTURE VERSION: *physicalver1* *physicalver2* LOGICAL STRUCTURE VERSION: *logicalver1* *logicalver2* START REASON: *reason* [connreason] AUTO VERSION: *procid1* *procid2*

Explanation: The system has accepted a request to start a system-managed process.

In the message text:

process

One of the following:

REBUILD

Initiation of a system-managed rebuild has been requested.

DUPLEXING REBUILD

Initiation of a system-managed duplexing rebuild has been requested.

strname

The name of the structure.

oldcname

The coupling facility in which the original instance of the structure resides.

physicalver1

First half of the physical version number of the original instance of the structure.

physicalver2

Second half of the physical version number of the original instance of the structure.

logicalver1

First half of the logical structure version number.

logicalver2

Second half of the logical structure version number.

reason

One of the following:

CONNECTOR-SPECIFIED REASON

The user that initiated the process specified its own reason for starting it.

OPERATOR-INITIATED

The request that caused the process to be started indicated that the request was initiated by the operator.

POLICY-INITIATED

The request that caused the process to be started indicated that the request was initiated by the system based on the contents of the CFRM policy. Message IXC536I will contain additional information.

connreason

Connector-specified reason for starting the system-managed process. Present only when START REASON is CONNECTOR-SPECIFIED REASON. Consult the documentation for the application that initiated the process for the meaning of this value.

AUTO VERSION:

A unique value identifying the system-managed process being started. It can be used to correlate messages and XCF component trace records associated with the current system-managed process.

procid1

First half of the auto version.

procid2

Second half of the auto version.

System action: The system-managed process begins.

Operator response: Not applicable.

System programmer response: Not applicable.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2BLD

Routing Code: 2

Descriptor Code: 5

IXC571I SYSTEM-MANAGED process FOR STRUCTURE *strname* HAS COMPLETED THE *phase1* PHASE AND IS ENTERING THE *phase2* PHASE. TIME: *phasetime* AUTO VERSION: *procid1 procid2*

Explanation: A system-managed process has

completed one phase of the process and is continuing to the next.

In the message text:

process

One of the following:

REBUILD

A system-managed rebuild is in progress.

DUPLEXING REBUILD

A system-managed duplexing rebuild is in progress.

strname

Name of the structure undergoing the system-managed process.

phase1

One of the following:

STARTUP

Initiation of the system-managed process.

QUIESCE

Quiescing activity against the structure.

ALLOCATION

Allocation of the new instance of the structure.

ATTACH

Connection of users to the new instance of the structure.

COPY

Copying of all required data from the old instance of the structure to the new.

COPY STOP

Interruption of the copy phase in order to stop the system-managed process.

DUPLEX ESTABLISHED

Long-lasting phase of duplexing rebuild in which both structure instances exist simultaneously.

QUIESCE FOR STOP

Quiescing activity against the structure due to stopping the system-managed process with KEEP=OLD.

SWITCH

Quiescing activity against the structure due to stopping the system-managed process with KEEP=NEW.

phase2

One of the following:

QUIESCE

Quiescing activity against the structure.

ALLOCATION

Allocation of the new instance of the structure.

ATTACH

Connection of users to the new instance of the structure.

COPY

Copying of all required data from the old instance of the structure to the new.

CLEANUP

Cutover to the new structure.

STOP

Stopping the system-managed process.

COPY STOP

Interruption of the copy phase in order to stop the system-managed process.

DUPLEX ESTABLISHED

Long-lasting phase of duplexing rebuild in which both structure instances exist simultaneously.

QUIESCE FOR STOP

Quiescing activity against the structure due to stopping the system-managed process with KEEP=OLD.

SWITCH

Quiescing activity against the structure due to stopping the system-managed process with KEEP=NEW.

phasetime

The date/time when the phase transition occurred, in the format mm/dd/yyyy hh:mm:ss.fffff.

AUTO VERSION:

A unique value identifying the system-managed process in progress. It can be used to correlate messages and XCF component trace records associated with the current system-managed process.

procid1

First half of the auto version.

procid2

Second half of the auto version.

System action: The system-managed process continues.

Operator response: Not applicable.

System programmer response: Not applicable.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2BLD, IXCL2ATC, IXCL2ATH

Routing Code: 2

Descriptor Code: 4

IXC572I SYSTEM-MANAGED *process* FOR STRUCTURE *strname* HAS COMPLETED THE *subphase1* SUBPHASE OF THE *phase* PHASE AND IS ENTERING THE *subphase2* SUBPHASE. TIME: *subphasetime* AUTO VERSION: *procid1 procid2*

Explanation: A system-managed process has completed one subphase of the specified phase and is continuing to the next subphase.

In the message text:

process

One of the following:

REBUILD

A system-managed rebuild is in progress.

DUPLEXING REBUILD

A system-managed duplexing rebuild is in progress.

strname

Name of the structure undergoing the system-managed process.

subphase1

One of the following:

INITIALIZATION

Phase initialization.

ATTACH

Connection of users to the new instance of the structure.

CASTOUT CLASS

Copying cache structure directory entries.

WRITE WITH CASTOUT

Copying cache structure directory entries.

STORAGE CLASS REGISTRATION

Copying cache structure storage class directory entry registration information.

STORAGE CLASS COUNTERS

Copying cache structure storage class statistical information.

LIST

Copying list or lock structure data.

LOCK

Copying lock data for a list or lock structure.

LOCK CLEANUP

Copying lock data for a list or lock structure.

EVENT QUEUE

Copying list structure event monitoring event queue data.

subphase2

One of the following:

ATTACH

Connection of users to the new instance of the structure.

CASTOUT CLASS

Copying cache structure directory entries.

WRITE WITH CASTOUT

Copying cache structure directory entries.

STORAGE CLASS REGISTRATION

Copying cache structure storage class directory entry registration information.

STORAGE CLASS COUNTERS

Copying cache structure storage class statistical information.

LIST

Copying list or lock structure data.

LOCK

Copying lock data for a list or lock structure.

LOCK CLEANUP

Copying lock data for a list or lock structure.

EVENT QUEUE

Copying list structure event monitoring event queue data.

EXIT

Phase completion.

subphasetime

The date/time when the subphase transition occurred, in the format mm/dd/yyyy hh:mm:ss.fffff.

AUTO VERSION:

A unique value identifying the system-managed process in progress. It can be used to correlate messages and XCF component trace records associated with the current system-managed process.

procid1

First half of the auto version.

procid2

Second half of the auto version.

System action: The system-managed process continues.

Operator response: Not applicable.

System programmer response: Not applicable.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2SCT

Routing Code: 2

Descriptor Code: 4

IXC573I ***phase* PROCESSING DURING A SYSTEM-MANAGED *process* FOR STRUCTURE *strname* ENCOUNTERED AN ERROR. ERROR DATA: *reason* [*reldata1* *reldata2* *reldata3* *reldata4*]**
AUTO VERSION: *procid1* *procid2*

Explanation: A system-managed process was in progress for the specified structure. This system was processing the indicated phase of that process, but encountered an error. The internal reason code and optional related data provide diagnostic information.

In the message text:

phase

One of the following:

ALLOCATE

This system attempted to allocate a new instance of the structure. Message IXC574I may provide further diagnostic information. In addition, the system may write a symptom record to the LOGREC data set.

ATTACH

This system was attempting to connect users to the new instance of the structure.

COPY

This system was attempting to copy data from the old instance of the structure to the new.

process

One of the following:

REBUILD

A system-managed rebuild was in progress.

DUPLEXING REBUILD

A system-managed duplexing rebuild was in progress.

strname

Name of the structure undergoing the system-managed process.

reason

Internal value identifying the error encountered. This is diagnostic data provided to help IBM service personnel with problem determination. The high-order halfword identifies the module in which the error was recognized. The low-order halfword is a module-unique code identifying the error.

reldata1

Data related to the error, if applicable. This is diagnostic data provided to help IBM service personnel with problem determination.

reldata2

Data related to the error, if applicable. May be presented when *reldata1* is presented. This is diagnostic data provided to help IBM service personnel with problem determination.

reldata3

Data related to the error, if applicable. May be presented when *reldata2* is presented. This is diagnostic data provided to help IBM service personnel with problem determination.

reldata4

Data related to the error, if applicable. May be presented when *reldata3* is presented. This is diagnostic data provided to help IBM service personnel with problem determination.

AUTO VERSION:

A unique value identifying the system-managed

IXC574I

process in progress. It can be used to correlate messages and XCF component trace records associated with the current system-managed process.

procid1

First half of the auto version.

procid2

Second half of the auto version.

System action: If error recovery is not possible, the system-managed process is stopped. If recovery is possible, the system-managed process continues, although the system issuing the message may end its participation in the specified phase of the process.

Operator response: Notify the system programmer.

System programmer response: If a SYSXCF component trace with the CFRM option is available, format the trace and examine it for indications of a problem. If the trace is not available, start the trace and restart the system-managed process.

If the phase is ALLOCATION examine the diagnostic information provided by message IXC574I and the ConaFacilityArray section of the LOGREC symptom record, if any. Determine the reason for the error during the structure allocation attempt. If the reason for the error cannot be determined from this information, contact IBM service for assistance in evaluating the internal reason code and the remainder of the symptom record.

Correct the conditions that caused the error, and, if the system-managed process was stopped as a result of the error, start the system-managed process again. If the conditions that caused the error cannot be determined, contact the IBM support center. Supply the error data included in the message, along with other data from the system log.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2ATC, IXCL2ATH, IXCL2BAP, IXCL2SCT

Routing Code: 2

Descriptor Code: -

IXC574I *text OF STRUCTURE strname[AUTO
VERSION: procid1 procid2] [stralloc
STRUCTURE ALLOCATED IN
COUPLING FACILITY: cfname1 cfname2
{ ACTIVE POLICY INFORMATION
USED. I PENDING POLICY
INFORMATION USED.}]text2*

Explanation: For the specified structure, either the REALLOCATE process was evaluating the structure or a structure rebuild process of the specified type was being started or in progress. This message provides further information about the evaluation, feasibility, or allocation decision based on the coupling facilities in the

structure's preference list. Note that for a POPULATECF rebuild request, only the POPULATECF is considered as a possible location for the new instance of the structure, and only that coupling facility will be listed.

In the message text:

text

One of the following:

ALLOCATION INFORMATION FOR SYSTEM-MANAGED REBUILD

A system-managed rebuild was in progress for the specified structure. This system attempted to allocate the rebuild new instance of the structure, and succeeded or failed as described by message IXC578I and IXC582I, or IXC573I, respectively.

ALLOCATION INFORMATION FOR SYSTEM-MANAGED DUPLEXING REBUILD

A system-managed duplexing rebuild was in progress for the specified structure. This system attempted to allocate the rebuild new instance of the structure, and succeeded or failed as described by message IXC578I and IXC582I, or IXC573I, respectively.

ALLOCATION FEASIBILITY INFORMATION FOR DUPLEXING REBUILD

A request to start a user-managed duplexing rebuild for the specified structure was being processed. This system determined that allocation of the rebuild new structure instance was not feasible.

EVALUATION INFORMATION FOR REALLOCATE PROCESSING

The REALLOCATE process is evaluating an allocated structure using the XCF allocation criteria to analyze the coupling facilities in the preferred list. The preferred coupling facilities are used in determining whether the location of the structure instance(s) should be adjusted by using structure rebuild processing.

strname

Name of the structure for which information is recorded.

AUTO VERSION:

A unique value identifying the system-managed process in progress. It can be used to correlate messages and XCF component trace records associated with the current system-managed process.

procid1

First half of the auto version.

procid2

Second half of the auto version.

stralloc

One of the following:

SIMPLEX

The structure is simplex with one instance allocated.

DUPLEXED

The structure is duplexed with two instances allocated.

cfname1

Name of coupling facility from the CFRM active policy. For a simplex structure, this is the name of the coupling facility containing the only instance. For a duplexed structure, this is the name of the coupling facility containing the old instance.

cfname2

Name of coupling facility from the CFRM active policy. For a simplex structure, this is blank. For a duplexed structure, this is the name of the coupling facility containing the new instance.

ACTIVE POLICY INFORMATION USED.

The current active policy definition was used.

PENDING POLICY INFORMATION USED.

The pending policy definition was used.

text2

CFNAME	STATUS/FAILURE REASON
<i>cfname</i>	<i>status</i> [INFO110: <i>data1 data2 data3</i> [i <i>data4 data5 data6 [i<i>subreason</i>] </i>

cfname

Name of the coupling facility for which information is recorded.

status

One of the following:

STRUCTURE ALLOCATED

Structure was successfully allocated in the specified coupling facility.

NO CONNECTIVITY

The CFRM active policy indicates that this system does not have connectivity to the specified coupling facility. This message may be accompanied by message IXC575I, indicating that another system will attempt to allocate the structure. That system will also issue message IXC574I to record the results of its allocation attempt. If no system succeeded in allocating the structure, re-establish physical connectivity to the coupling facility and re-initiate the system-managed process for which allocation was attempted.

COUPLING FACILITY NOT IN ACTIVE POLICY

The coupling facility is not listed in the active policy so it is not viable until the policy is changed.

CONNECTIVITY LOST

An attempt to allocate the structure in this coupling facility was unsuccessful because connectivity to the coupling facility has been lost. If structure allocation failed, establish physical connectivity to the coupling facility and reinitiate the system-managed process for which allocation was attempted.

COUPLING FACILITY FAILURE

The coupling facility has failed.

STRUCTURE FAILURE

The new instance of the structure failed during the allocation process.

PARAMETER ERROR

The requested structure attributes are inconsistent with the model-dependent attributes of the coupling facility. Contact IBM service.

INVALID STRUCTURE SIZE

The target structure size was too small to allocate the structure with the attributes specified. If the allocation failed, the CONAFACILITYMINREQSIZE field of the ConaFacilityArray section of the LOGREC symptom record provided with message IXC573I is set to the minimum storage required to allocate the structure in this coupling facility with the requested attributes. Increase the maximum structure size specified in the CFRM policy.

ALLOCATION NOT PERMITTED

New structures cannot be allocated in the coupling facility according to the CFRM active policy. One or more *subreason* message lines explain why the structure cannot be allocated in the specified coupling facility.

XCF COMPONENT ERROR

An XCF component error has occurred. Contact IBM service.

UNKNOWN HARDWARE ERROR

An unknown hardware error has occurred. Contact IBM service.

INSUFFICIENT SPACE

There was not sufficient space in the coupling facility to allocate the structure. If structure allocation failed, examine the ConaFacilityArray section of the LOGREC symptom record provided with message IXC573I. CONAFACILITYMINREQSIZE is set to the minimum storage required to allocate the structure in this coupling facility with the requested attributes. Make sure there is a coupling facility in the structure's preference list with sufficient space.

RESTRICTED BY REBUILD OTHER

LOCATION=OTHER was specified on the rebuild request. Since the original structure was allocated in this coupling facility, the system did not use this coupling facility when trying to allocate the new structure for rebuild. If the structure allocation failed, make sure there is another suitable coupling facility in the structure's preference list.

INSUFFICIENT CONNECTIVITY

The coupling facility does not provide connectivity at least equivalent to the connectivity provided by the coupling facility in which the original structure resided.

PREFERRED CF ALREADY SELECTED

The system did not select the coupling facility because a preferable coupling facility was already selected.

RESTRICTED BY OPERATOR STOP OF DUPLEXING REBUILD

The system did not select the coupling facility because the operator had previously stopped the duplexing rebuild and the structure that was not kept was allocated in this coupling facility.

POPULATECF NOT SUITABLE

The system did not select the coupling facility because it was not as suitable as the facility in which the structure is currently located.

REBUILD IN PLACE NOT ALLOWED WITHOUT CFRM POLICY CHANGE

The coupling facility contains the original instance of the structure, and since there is no CFRM policy change pending, system-managed rebuild into the same facility is not permitted.

INSUFFICIENT CFLEVEL FOR CONNECTOR EXPLOITATION

The coupling facility was not at or above the minimum required CFLEVEL for the current set of active and failed-persistent connectors.

INSUFFICIENT CFLEVEL FOR SYSTEM-MANAGED PROCESSING

The coupling facility CFLEVEL was not at or above the minimum required for the current system-managed process.

INSUFFICIENT MAXIMUM NUMBER OF CONNECTIONS

The maximum number of users that can connect to a structure in this facility is less than the maximum number that can connect to the original instance of the structure.

RESTRICTED BY STRUCTURE LIMITS

Maximum values for some structure attributes are limited by the coupling facility in which they reside. At least one of these structure limits for structures in this coupling facility is less than the corresponding limit on the original instance of the structure.

ALLOCATED ATTRIBUTES**UNACCEPTABLE**

An attempt to allocate the new structure in the specified facility resulted in a structure with attributes (for example, size or object counts) less suitable than those of the old structure. Adjust the CFRM policy size values to accommodate the attributes of the old structure.

COMPUTED STRUCTURE SIZE WAS NOT VALID

When the structure size was computed from the required object counts (for example, entries, elements, list headers, etc), the command failed, or the computed maximum structure size required was larger than the policy specified SIZE value plus a toleration amount.

NO CF-TO-CF CONNECTIVITY FROM THE PRIMARY TO THIS CF

When CF-to-CF link information was obtained from the CF containing the rebuild old (primary) structure, this CF did not have connectivity (via CF-to-CF link) to the CF containing the rebuild old structure as required for system-managed duplexing rebuild.

NO CF-TO-CF CONNECTIVITY FROM THIS CF TO THE PRIMARY

When CF-to-CF link information was obtained from this CF, the CF containing the rebuild old (primary) structure did not have connectivity (via CF-to-CF link) to this CF as required for system-managed duplexing rebuild.

PREFERRED CF 1

Using the XCF allocation criteria, the system selected this coupling facility as the first CF. When evaluating the structure, the REALLOCATE process will compare this CF to the CF containing the only instance for a simplex structure or to the CF containing the old instance for a duplexed structure.

PREFERRED CF 2

Using the XCF allocation criteria, the system selected this coupling facility as the second CF. When evaluating the structure, the REALLOCATE process will

	compare this CF to the CF containing the new instance for a duplexed structure.	01000000 If on, Facility satisfies the volatility requirement as specified by the connector
INFO110:	One or more lines of additional diagnostic data may supplement the coupling facility status line to provide rationale for the selection or rejection of the named coupling facility.	00100000 If on, the facility is a stand-alone CF, and as such is failure isolated from all MVS systems
<i>data1</i>	Diagnostic data to be used by IBM in evaluating structure allocation processing.	00010000 Indicates that the facility satisfies the failure isolation requirement as specified by the connector
<i>data2</i>	Diagnostic data to be used by IBM in evaluating structure allocation processing. This fullword is a description of the attributes of the 'current' CF. This fullword is also supplied as the reason on IXL015I.	00001100 Indication of how closely the exclusion list requirement is met. These two bits break down as follows:
• BYTE1:		<ul style="list-style-type: none"> 10 CF contains no instances of any structures from the exclusion list. 01 CF contains instances of structures from the exclusion list, but each is one of 2 instances 00 CF contains the only instance of one or more structures from the exclusion list.
10000000	This CF is accessible to the system trying to allocate the structure. For a rebuild request it means that this facility is accessible to all systems on which connections to the old structure are running.	00000010 System managed duplexing rebuild is a possibility if the structure is allocated on this CF as there is another CF available with sufficient storage and connected by peer links for the allocation of a secondary structure in the future, should a duplexing rebuild be started in the future.
01110000	Indication of the suitability of the CF level of this CF for the likely types of connections and services required.	00000001 Same as above except that sufficient storage is not included in the description.
00001000	Duplex Failure Isolation indication if this bit is On then the facility is isolated from the old structure OR this is not a duplex-rebuild-connect request.	• BYTE4: NOT RELEVANT.
00000111	Indication that this CF has sufficient space.	<i>data3</i> Diagnostic data to be used by IBM in evaluating structure allocation processing. This fullword are those attributes that the target CF didn't have that the current CF did. Thus the meanings are the exact opposite of those described for the 2nd fullword.
000000100	Free space is sufficient.	<i>data4</i> Diagnostic data to be used by IBM in evaluating structure allocation processing.
000000010	Enough free and control space to allocate the minimum required structure size.	<i>data5</i> Diagnostic data to be used by IBM in evaluating structure allocation processing.
000000001	Enough space to allocate the cache structure with "changed data" only.	<i>data6</i> Diagnostic data to be used by IBM in evaluating structure allocation processing.
• BYTE2: Reserved for future use.		
• BYTE3:		
10000000	CF operational level is lower than that specified by the connection or is lower than that required for system managed processing.	

subreason

One or more subreason lines appear when the coupling facility status is ALLOCATION NOT PERMITTED. *subreason* is one of the following:

COUPLING FACILITY BEING REMOVED

The coupling facility is in the process of being removed from the CFRM active policy.

COUPLING FACILITY BEING RECONCILED

The coupling facility is in the process of being cleaned up due to couple data set serialization.

CFRM INDICATES COUPLING FACILITY FAILURE

The coupling facility has failed. All data in the coupling facility is lost.

System action: For REALLOCATE processing or when the allocation was successful for structure rebuild processing, the system continues the in-progress process. When the allocation failed or was not feasible, the system terminates the structure rebuild process.

Operator response: Contact the system programmer for advice and assistance if messages IXC367I, IXC528I, IXC538I, or IXC573I indicate the structure rebuild process could not continue.

System programmer response: For the REALLOCATE process, evaluation of the specified structure will be completed to determine whether or not there is a need to adjust the location of the structure instance(s). Refer to the description for message IXC543I, which provides an explanation of the messages issued during REALLOCATE processing.

- | For the specified type of structure rebuild processing which is being started or in progress, refer to the description for message IXC367I, IXC528I, IXC538I, IXC573I, IXC578I, or IXC582I, as appropriate.

If the rebuild new structure was successfully allocated no action is required.

- | If the rebuild new structure allocation failed or was not feasible, examine the diagnostic information provided for each coupling facility by the message and the ConaFacilityArray section of the LOGREC symptom record, if any. Determine the reason why there are no coupling facilities in which to allocate the rebuild new structure. For failure reasons indicating a possible problem with the CFRM policy size values, insure that the values specified are sufficient to accommodate the attributes of the original structure. The following references provide information for sizing coupling facility structures:

- | • Coupling Facility Sizing Tool (CFSizer)
- | • z/OS MVS Setting Up a Sysplex
- | • z/OS MVS Programming: Sysplex Services Guide
- | • PR/SM Planning Guide

Correct the conditions that caused the error, and either start the structure rebuild process again, or wait for MVS to automatically initiate a duplexing rebuild for the structure.

If the conditions that caused the error cannot be determined, contact the IBM support center. Supply the error data included in the message, along with other data from the system log.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2ATH

Routing Code: 2

Descriptor Code: -

**IXC575I ALLOCATION WAS NOT SUCCESSFUL
ON {CURRENT SYSTEM|FAILED
SYSTEM} *oldsysname* FOR
SYSTEM-MANAGED *process* OF
STRUCTURE *strname*. PROCESSING
WILL CONTINUE ON
{SYSTEM|RECOVERING SYSTEM}
newsysname. AUTO VERSION: *procid1*
*procid2***

Explanation: A system-managed process is in progress for the specified structure. The specified system attempted to allocate the new instance of the structure, but one of the following conditions prevented the allocation from succeeding:

- The system failed before completing the allocation of the new structure.
- The system did not have connectivity to the coupling facility in which the original instance of the structure is located.
- The system did not have connectivity to the coupling facility that was determined to be the optimum location for the new structure.

This system has chosen another system in the sysplex to attempt structure allocation. Message IXC574I provides additional diagnostic information.

In the message text:

CURRENT SYSTEM

The specified system attempted to allocate the new structure, but did not succeed.

FAILED SYSTEM

The specified system failed while attempting to allocate the new structure.

oldsysname

The name of the system that was unable to allocate the structure.

process

One of the following:

REBUILD

A system-managed rebuild is in progress for the specified structure.

DUPLEXING REBUILD

A system-managed duplexing rebuild is in progress for the specified structure.

strname

The name of the structure.

SYSTEM

The specified system will attempt to allocate the new structure.

RECOVERING SYSTEM

The specified system will attempt to recover for the failed system and allocate the new structure.

newsysname

The name of the system chosen to attempt structure allocation.

AUTO VERSION:

A unique value identifying the system-managed process in progress. It can be used to correlate messages and XCF component trace records associated with the current system-managed process.

procid1

First half of the auto version.

procid2

Second half of the auto version.

System action: The system-managed process continues.

Operator response: Not applicable.

System programmer response: If the system-managed process ultimately stops because the attempt to allocate the new structure instance on the specified system also fails, examine the information provided by message IXC574I to identify connectivity problems. Establish physical connectivity to the appropriate coupling facilities and reinitiate the system-managed process for which structure allocation was attempted.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2ATH

Routing Code: 2

Descriptor Code: 5

IXC576I

SYSTEM-MANAGED process OF STRUCTURE *strname* COULD NOT MAKE CFRM PENDING POLICY CHANGES ACTIVE BECAUSE *reason*

AUTO VERSION: *procid1 procid2*

Explanation: The system could not make a CFRM pending policy change active during a system-managed process.

In the message text:

process

One of the following:

REBUILD

A system-managed rebuild is in progress for the specified structure.

DUPLEXING REBUILD

A system-managed duplexing rebuild is in progress for the specified structure.

strname

The name of the structure.

reason

One of the following:

SIZE CHANGE IS PENDING AND CONNECTORS**DO NOT SUPPORT ALTER**

The pending policy change includes a change to the SIZE or INITSIZE specifications. Since at least one of the active or failed-persistent structure connectors does not allow alter processing, the system cannot change the structure size.

AUTO VERSION:

A unique value identifying the system-managed process in progress. It can be used to correlate messages and XCF component trace records associated with the current system-managed process.

procid1

First half of the auto version.

procid2

Second half of the auto version.

System action: The system-managed process continues using the SIZE, PRELIST, and EXCLLIST attributes from the CFRM policy which is currently active. The CFRM policy which is currently pending remains pending until the structure is deallocated or rebuilt via user-managed rebuild, or until another CFRM policy is activated which removes the SIZE change.

Operator response: Not applicable.

System programmer response: Not applicable.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2ATH

Routing Code: 2

Descriptor Code: 5

IXC577I SYSTEM-MANAGED process HAS BEEN {COMPLETEDSTOPPED} FOR STRUCTURE *strname* STRUCTURE *status* PHYSICAL STRUCTURE VERSION: *physicalver1 physicalver2* LOGICAL STRUCTURE VERSION: *logicalver1 logicalver2* AUTO VERSION: *procid1 procid2*

Explanation: The system-managed process identified by the auto version has been completed, stopped, or reached the duplex established phase. If the process was stopped before completion or a duplexing rebuild was stopped in the duplex established phase, then additional information may be provided by other messages (IXC522I, IXC536I, IXC561I, and IXC573I).

In the message text:

process

One of the following:

REBUILD

A system-managed rebuild has been completed or stopped.

DUPLEXING REBUILD

A system-managed duplexing rebuild has been completed or stopped, or reached the duplex established phase.

text1

One of the following:

BEEN COMPLETED

The system-managed process has completed.

BEEN STOPPED

The system-managed process has been stopped.

REACHED THE DUPLEX ESTABLISHED PHASE

The system-managed process has reached the duplex established phase.

strname

The name of the structure.

status

status is one of the following:

NOW IN COUPLING FACILITY *cname*

The remaining structure instance is allocated in the named coupling facility.

BEING DEALLOCATED NORMALLY

The structure is deallocated to support one of the following connector actions:

- All connectors have disconnected from this non-persistent structure. This causes the rebuild to be stopped or completed, and all instances of the structure to be deallocated.
- The first attempt to connect a persistent structure duplexed by a system-managed process was attempted on a system which is not connected to either of the coupling

facilities containing the structure instances. This causes the duplexing rebuild to be stopped, and all instances of the structure to be deallocated.

- The structure and any failed-persistent connections have been forced. This causes the duplexing rebuild to be stopped, and all instances of the structure to be deallocated.

IS DUPLEXED

The structure is duplexed.

physicalver1

First half of the physical structure version number.

physicalver2

Second half of the physical structure version number.

logicalver1

First half of the logical structure version number.

logicalver2

Second half of the logical structure version number.

AUTO VERSION:

A unique value identifying the system-managed process being completed or stopped. It can be used to correlate messages and XCF component trace records associated with the current system-managed process.

procid1

First half of the auto version.

procid2

Second half of the auto version.

System action: The system-managed process terminates or continues in the duplex established phase.

Operator response: Not applicable.

System programmer response: Not applicable.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2ASR, IXCL2BLD, IXCL2FOR, IXCL2RSR

Routing Code: 2

Descriptor Code: 5

IXC578I SYSTEM-MANAGED process SUCCESSFULLY ALLOCATED STRUCTURE *strname*. OLD COUPLING FACILITY: *oldcname* OLD PHYSICAL STRUCTURE VERSION: *oldphysver1 oldphysver2* NEW COUPLING FACILITY: *newcname* NEW PHYSICAL STRUCTURE VERSION: *newphysver1 newphysver2* LOGICAL STRUCTURE VERSION: *logicalver1 logicalver2* AUTO VERSION: *procid1 procid2*

Explanation: A system-managed process is in

progress for the specified structure. This system has successfully allocated the new instance of the structure in the specified coupling facility. Message IXC574I and IXC582I provide additional information about the successful allocation.

In the message text:

process

One of the following:

REBUILD

A system-managed rebuild is in progress for the specified structure.

DUPLEXING REBUILD

A system-managed duplexing rebuild is in progress for the specified structure.

strname

The name of the structure.

oldcfname

Name of the coupling facility in which the old structure instance was allocated.

oldphysver1

First half of the physical version number of the old instance of the structure.

oldphysver2

Second half of the physical version number of the old instance of the structure.

newcfname

Name of the coupling facility in which the new structure instance was allocated.

newphysver1

First half of the physical version number of the new instance of the structure.

newphysver2

Second half of the physical version number of the new instance of the structure.

logicalver1

First half of the logical structure version number.

logicalver2

Second half of the logical structure version number.

AUTO VERSION:

A unique value identifying the system-managed process in progress. It can be used to correlate messages and XCF component trace records associated with the current system-managed process.

procid1

First half of the auto version.

procid2

Second half of the auto version.

System action: The system-managed process continues.

Operator response: None.

System programmer response: None.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2ATH

Routing Code: 2

Descriptor Code: 5

IXC579I *dealloctype DEALLOCATION FOR STRUCTURE strname IN COUPLING FACILITY type.mfg.plant.sequence PARTITION: partition side CPCID: cpcid HAS BEEN COMPLETED. PHYSICAL STRUCTURE VERSION: physicalver1 physicalver2 INFO116: modidfp dealloc1 dealloc2 dealloc3 TRACE THREAD: thread.*

Explanation: A structure instance was deallocated, because its last active connector disconnected or because a rebuild completed or stopped. The resources associated with the structure instance (for example, space within the facility) are now freed.

In the message text:

dealloctype

One of the following:

PENDING

The deallocation could not be completed immediately, due to connectivity, dump serialization, or other factors. The factors impeding the deallocation have now been resolved and the deallocation has been completed.

NORMAL

The deallocation was completed when requested.

strname

The name of the structure.

type

Node type (see ndetype in IXLYNDE).

mfg

Node manufacturer ID (see ndemfg in IXLYNDE).

plant

Node manufacturer plant ID (see ndeplant in IXLYNDE).

sequence

Node sequence number (see ndesequence in IXLYNDE).

partition

Node LPAR partition number (see ndepartition in IXLYNDE).

side

The node PP/SI mode indicator and configuration code from the IXLYNDE are used to determine the value for *side*. *side* is one of the following:

SIDE: 0	IXC580I	SYSTEM-MANAGED process OF STRUCTURE strname AUTO VERSION: procid1 procid2 RESULTED IN THE FOLLOWING STRUCTURE ATTRIBUTES: PHYSICAL STRUCTURE VERSION: physicalver1 physicalver2 LOGICAL STRUCTURE VERSION: logicalver1 logicalver2 CURRENT SIZE: currentsize K CURRENT ENTRY COUNT: currententrycnt CURRENT ELEMENT COUNT: currentelemcount [CURRENT EMC COUNT: currentemccount]
The coupling facility is on SIDE 0 of a partitionable CPC.		
SIDE: 1		
The coupling facility is on SIDE 1 of a partitionable CPC.		
blank		
The coupling facility is in a non-partitionable CPC.		
<i>cpcid</i>		
Node Central Processor Complex (CPC) ID (see ndecpcid in IXLYNDE).		
<i>physicalver1</i>		
First half of the physical structure version number.		
<i>physicalver2</i>		
Second half of the physical structure version number.		
<i>modidfp</i>		
Internal value identifying the module initiating structure deallocation. The high-order halfword identifies the module. The low-order halfword is module-unique data. This is diagnostic data provided to help IBM service personnel evaluate structure deallocation processing.		
<i>dealloc1</i>		
Diagnostic data to be used by IBM in evaluating structure deallocation processing.		
<i>dealloc2</i>		
Diagnostic data to be used by IBM in evaluating structure deallocation processing.		
<i>dealloc3</i>		
Diagnostic data to be used by IBM in evaluating structure deallocation processing.		
<i>thread</i>		
Used to tie together messages and XCF component trace records for structure deallocation processing.		
System action:		The system continues.
Operator response:		Not applicable.
System programmer response:		Not applicable.
Source:		Cross System Coupling Facility (SCXCF)
Detecting Module:		IXCL2BLD, IXCL2RHT
Routing Code:		2
Descriptor Code:		-
		Explanation: A system-managed process that may have resulted in changes to structure attributes has finished. This message reports the resulting structure size and counts.
		In the message text:
	<i>process</i>	One of the following:
		REBUILD
		The process that resulted in the reported structure attributes was a system-managed rebuild.
	<i>strname</i>	The name of the structure.
		AUTO VERSION:
		A unique value identifying the system-managed process in progress. It can be used to correlate messages and XCF component trace records associated with the current system-managed process.
	<i>procid1</i>	First half of the auto version.
	<i>procid2</i>	Second half of the auto version.
	<i>physicalver1</i>	First half of the physical structure version number.
	<i>physicalver2</i>	Second half of the physical structure version number.
	<i>logicalver1</i>	First half of the logical structure version number.
	<i>logicalver2</i>	Second half of the logical structure version number.
	<i>currentsize</i>	The current size of the structure in 1K blocks
	<i>currententrycnt</i>	The current number of entries. This number is only substantially accurate.
	<i>currentelemcount</i>	The current number of elements. This number is only substantially accurate.

currentemccount

The current number of event monitoring controls (list structures only). This number is only substantially accurate.

System action: System processing continues.

Operator response: Not applicable.

System programmer response: Not applicable.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2BLD

Routing Code: 2

Descriptor Code: -

IXC581I THERE ARE NO SYSTEMS CAPABLE OF PARTICIPATING IN THE *phase* PHASE OF SYSTEM-MANAGED *process* OF STRUCTURE *strname* REQUIRED PROCESS LEVEL: *reqproclevel* AUTO VERSION: *procid1 procid2*

text

Explanation: A system-managed process is in progress for the specified structure. The process could not complete because none of the systems in the sysplex are capable of participating in the specified phase.

The ALLOCATE and COPY phases can only occur on systems that support a system-managed process level greater than or equal to the level specified by the REQUIRED PROCESS LEVEL line.

The ALLOCATE phase requires that at least one system have simultaneous connectivity both to the coupling facility containing the old structure instance and to a coupling facility suitable for allocating the new structure instance.

The COPY phase requires that at least one system have simultaneous connectivity to the coupling facilities containing the old and the new structure instances.

In the message text:

*phase***ALLOCATE**

This system was attempting to allocate the new instance of the structure.

COPY

This system was attempting to identify systems capable of copying data from the old instance of the structure to the new.

*process***REBUILD**

A system-managed rebuild is in progress for the specified structure.

DUPLEXING REBUILD

A system-managed duplexing rebuild is in progress for the specified structure.

strname

The name of the structure.

reqproclevel

The level of support required by this structure in order to participate in a system-managed process (for example, rebuild).

AUTO VERSION

A unique value identifying the system-managed process in progress. It can be used to correlate messages and XCF component trace records associated with the current system-managed processes.

procid1

First half of the auto version.

procid2

Second half of the auto version.

text

SYSTEM NAME <i>sysname</i>	SUPPORTED LEVEL <i>maxproclevel</i>	CONNECTIVITY TO OLD STRUCTURE <i>oldconn</i>	CONNECTIVITY TO NEW STRUCTURE <i>newconnb</i>
----------------------------------	---	---	--

sysname

The name of the system.

maxproclevel

The maximum level of system-managed process supported by the system. A process level of UNK indicates that the system issuing the message cannot determine the process level understood by the named system. For a system at or above OS/390 Release 8, you can issue the DISPLAY XCF,COUPLE command on that system to determine its maximum process level. Note that for systems below OS/390 Release 8, the process level will be displayed as UNK because these systems cannot participate in system-managed processes.

*oldconn***YES**

The named system has connectivity to the coupling facility containing the old structure instance.

NO

The named system does not have connectivity to the coupling facility containing the old structure instance.

*newconn***YES**

The named system has connectivity to the coupling facility containing the new structure instance, or, in the case of the ALLOCATE

phase, to a coupling facility suitable for the allocation of the new structure instance.

NO

The named system does not have connectivity to the coupling facility containing the new structure instance, or, in the case of the ALLOCATE phase, to a coupling facility suitable for the allocation of the new structure instance.

System action: The system-managed process stops. Message IXC573I may be issued to provide additional diagnostic information. If the failing phase is ALLOCATE, the system may write a symptom record to the LOGREC data set.

System programmer response: If the table of systems indicates that no system supports the required process level, IPL a system at a release or service level that provides the necessary support. If the table of systems indicates that no system has the required connectivity, bring coupling facilities online, establish connectivity between coupling facilities and systems, and/or define coupling facilities in the active CFRM policy, as necessary. When a system capable of completing the failing phase is available, restart the system-managed process.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2ATH, IXCL2BAP

Routing Code: 2

Descriptor Code: 5

IXC582I **STRUCTURE** *strname* **ALLOCATED BY**
alloctype. **PHYSICAL STRUCTURE**
VERSION: *physver1 physver2*
STRUCTURE TYPE: *strtype* **Cfname:**
cfname **ALLOCATION SIZE:** *allocsize K*
POLICY SIZE: *policysize K* **POLICY**
INITSIZE: *policyinitsize K* **POLICY**
MINSIZE: *policyminsize K* **IXLCONN**
STRSIZE: *ixlconnstrsizeK* **ENTRY**
COUNT: *entrycnt* **[ELEMENT COUNT:**
elementcnt] **[EMC COUNT:** *emccnt*]
[LOCKS: *lockentries*] **[ENTRY:ELEMENT**
RATIO: *entratio : elemratio*] **[EMC**
STORAGE PERCENTAGE: *emcstgpcf*]
text

Explanation: A structure was allocated in a coupling facility with an actual allocation size that may exceed the size specifications requested by the CFRM active policy definitions at the time of structure allocation. The actual allocation size is compared to the policy INITSIZE if specified or the policy size if INITSIZE is not specified. The size discrepancy may result from structure allocation "by counts" which allocates the structure with the desired counts of structure objects (entries, data elements, EMCs), regardless of the resulting structure size. Another example of a size

discrepancy results when the IXLCONN STRSIZE specified is greater than the specified policy INITSIZE.

In the message text:

strname

The name of the allocated structure.

alloctype

Method of structure allocation

counts

The structure was allocated by target counts.

size/ratio

The structure was allocated by target structure size and ratios.

physver1

First half of the physical version number of the allocated instance of the structure.

physver2

Second half of the physical version number of the allocated instance of the structure.

strtype

One of the following:

list The structure is an unserialized list structure.

cache The structure is a cache structure.

serialized list

The structure is a serialized list structure.

lock The structure is a lock structure.

cfname

The name of the coupling facility in which the structure has been allocated.

allocsize

The allocated size of the structure in 1K blocks.

policysize

The CFRM active policy defined SIZE of the structure in 1K blocks.

policyinitsize

The CFRM active policy defined INITSIZE of the structure in 1K blocks. If INITSIZE is not specified, this value will be zero.

policyminsize

The CFRM active policy defined MINSIZE of the structure in 1K blocks. If not specified, the default value will be displayed. When ALLOWAUTOALT(YES) is specified, MINSIZE defaults to 75% of the INITSIZE value (or the SIZE value if INITSIZE is not specified). Otherwise, MINSIZE defaults to zero.

ixlconnstrsize

The STRSIZE requested by the CF structure exploiter on the IXLCONN macro, in 1K blocks. If not specified by the exploiter, this value will be zero. This value will also be zero when the

structure is being allocated by a system-managed process rather than directly by an exploiter using the IXLCONN macro.

entrycnt

The total count of entries allocated for the structure.

elementcnt

The total count of data elements allocated for the structure. Not displayed when the count is zero.

emccnt

The total count of event monitor controls (EMCs) allocated for the structure. Event monitor controls are only present in list structures that support certain types of monitoring. Not displayed when the count is zero.

lockentries

The total number of lock entries. Only displayed for lock or serialized list structures.

entratio

The entry portion of the entry-to-element ratio. Zero for a structure without entries.

elemratio

The element portion of the entry-to-element ratio. Zero for a structure without data.

emcstgpct

The percentage of structure storage being used for Event Monitor Controls (EMC) objects. Event monitor controls are only present in list structures that support certain types of monitoring. Not displayed when the percentage is zero.

text

One of the following:

ALLOCATION SIZE EXCEEDS CFRM POLICY DEFINITIONS

The structure allocation size exceeds the size indicated by CFRM active policy definitions allowing for rounding up to a multiple of the CF storage increment size. The allocation size is compared to the policy INITSIZE if specified or the policy size if INITSIZE is not specified.

ALLOCATION SIZE IS WITHIN CFRM POLICY DEFINITIONS

The structure allocation size is within the size indicated by CFRM active policy definitions allowing for rounding up to a multiple of the CF storage increment size. The allocation size is compared to the policy INITSIZE if specified or the policy size if INITSIZE is not specified.

System action: System processing continues. The system writes the message to the hardcopy log.

System programmer response: If the allocation size exceeds the CRM policy definitions, consider making updates to the CFRM policy to bring the requested structure size specifications in line with the actual allocated structure size. Failure to do so may result in the structure being allocated with an inadequate

structure size, or not being allocated at all, when the structure is initially allocated in the future. This may result in subsystem or application outages. Also, ensure that the increased CF storage allocation for the structure can be accommodated not only within the current CF, but also in other CF images in which the structure is eligible to be allocated.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2ASR, IXCL2ATH

Routing Code: 10

IXC585E **STRUCTURE *strname* IN COUPLING FACILITY *cfname*, PHYSICAL STRUCTURE VERSION *physver1* *physver2*, IS AT OR ABOVE STRUCTURE FULL MONITORING THRESHOLD OF *thresh%*. ENTRIES: IN-USE: *nnnnnnnn*, TOTAL: *pppppppp*, *pct%* FULL [ELEMENTS: IN-USE: *nnnnnnnn*, TOTAL: *pppppppp*, *pct%* FULL] [EMCS: IN-USE: *nnnnnnnn*, TOTAL: *pppppppp*, *pct%* FULL]**

Explanation: XCF has detected that a structure is at or above its structure full monitoring threshold in terms of one or more of the structure objects that the structure contains. The current in-use and total counts for entries will always be presented when IXC585E is issued. The counts for elements and EMCs will only be presented for a structure that contains those types of objects. Note that the counts for all applicable structure objects that the structure contains will be presented, not just those structure objects which are over the threshold.

In the message text:

strname

The structure name of the structure that is over the threshold.

cfname

The coupling facility name of the facility in which the structure instance is allocated.

physver1*, *physver2

The physical structure version number of the structure that is at or above the threshold.

thresh

The structure full monitoring threshold percentage for the structure.

nnnnnnnn

The current in-use structure object count for the indicated type of structure object (entries, elements or EMCs). For a cache structure, only changed or locked-for-castout objects are included in the count.

pppppppp

The current structure total object count for the indicated type of structure object (entries, elements or EMCs).

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pct

The current structure percent full for the indicated type of structure object (entries, elements or EMCs).

System action: None.

Operator response: Notify the systems programmer.

System programmer response: Check on the status of the indicated structure instance and take the appropriate actions to determine the cause of the threshold structure full condition and relieve it, if possible, by either modifying the size of the allocated structure instance or taking steps to reduce the load being placed on the structure. The size of the structure may be modified either dynamically by altering the structure, or by modifying the CFRM policy size definitions for the structure and then rebuilding or deallocating/reallocating the structure. These actions may also be taken by message-based automation.

If allowed, the system may also attempt to take corrective action by automatically altering the structure.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2MON

Routing Code: 2,10M

Descriptor Code: 11

IXC586I STRUCTURE *strname* IN COUPLING FACILITY *cfname*, PHYSICAL STRUCTURE VERSION *physver1 physver2*, IS NOW BELOW STRUCTURE FULL MONITORING THRESHOLD.

Explanation: XCF has detected that a structure that was previously at or above its structure full monitoring threshold in terms or one of more of the structure objects is now below threshold for all structure objects that it contains. The threshold structure full condition has been relieved for the structure.

In the message text:

strname

The structure name of the structure that was over the threshold.

cfname

The coupling facility name of the facility in which the structure instance is allocated.

physver1, physver2

The physical structure version number of the structure that was at or above the threshold.

System action: Using the DOM macro, the system deletes the IXC585E message that was previously issued for this structure instance.

Operator response: Notify the systems programmer.

System programmer response: Check on the status of the indicated structure instance, particularly its

current size and workload. Make any necessary modifications to CFRM policy size definitions to "harden" structure size changes that may have been made dynamically by altering the structure.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2MON

Routing Code: 2,10

Descriptor Code: 12

IXC587I STRUCTURE FULL MONITORING DISCONTINUED FOR STRUCTURE *strname* IN COUPLING FACILITY *cfname*, PHYSICAL STRUCTURE VERSION *physver1 physver2*.

Explanation: XCF has discontinued structure full monitoring for the indicated structure instance, which was previously in active use and which was at or above the structure full monitoring threshold in terms or one of more of the structure objects it contains, for one of the following reasons:

- The structure instance has become inactive. Examples of the structure becoming inactive include the structure being deallocated or "in transition" pending deallocation, or a structure which is being kept because of an associated structure dump which has not yet been written out to a dump data set.
- The system responsible for monitoring the coupling facility in which the structure instance is allocated has failed. In this case, another active system in the sysplex may take over monitoring responsibility for the coupling facility.
- The system responsible for monitoring the structure instance has lost connectivity to the coupling facility in which the structure instance is allocated. In this case, another active system in the sysplex may take over monitoring responsibility for the coupling facility.
- The structure instance is the rebuild-old structure instance in a system-managed duplexing rebuild, and the duplexing rebuild is stopping to switch to the rebuild-new structure instance.

In the message text:

strname

The name of the structure.

cfname

The name of the coupling facility.

physver1

First half of the physical version number of the instance of the structure.

physver2

Second half of the physical version number of the instance of the structure.

System action: Using the DOM macro, the system deletes the IXC585E message that was previously

issued for this structure instance.

Operator response: Notify the systems programmer.

System programmer response: None.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2BLD, IXCL2CST, IXCL2FOR, IXCL2MON, IXCL2POL, IXCL2RC, IXCL2RSR, IXCL2SRF

Routing Code: 2,10

Descriptor Code: 12

IXC588I AUTOMATIC ALTER PROCESSING INITIATED FOR STRUCTURE *strname*. CURRENT SIZE: *cursize K* TARGET SIZE: *size K* TARGET ENTRY TO ELEMENT RATIO: *entries : elements* TARGET EMC STORAGE PERCENTAGE: *emcs*

Explanation: The system has initiated an alter request to correct a resource shortage for one or more of the structure objects that the structure contains. When XCF has detected that a structure is at or above its structure full threshold value in terms of one or more of the structure objects that the structure contains, XCF will start an alter request to correct the situation, when allowed. The current in-use and total counts for the objects will be displayed by message IXC585E.

In the message text:

strname

Structure name of the structure that is being altered.

cursize

The current size of the structure in units of K bytes.

size

The target size of the structure in units of K bytes.

entries

The entry portion of the “entry to element” ratio and is issued only when the alter process is requesting an entry to element ratio change.

elements

The element portion of the “entry to element” ratio.

emcs

The target EMC storage percentage and is issued only when the alter process is requesting an EMC storage percentage change.

System action: If the system-initiated alter successfully relieved the threshold structure full condition for the indicated structure, the system DOMs (deletes) the IXC585E message that was previously issued for this structure instance and message IXC586I will be issued.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2MON

Routing Code: 2

Descriptor Code: -

IXC589I AUTOMATIC ALTER PROCESSING FOR STRUCTURE *strname* *text1* *text2*

Explanation: The system initiated structure alter processing has ended.

In the message text:

strname

The name of the structure.

text1

One of the following:

ENDED. STRUCTURE FAILED.

The structure alter request ended due to structure failure.

ENDED. NO CONNECTIVITY TO STRUCTURE.

The structure alter processing ended due to all systems which are capable of performing structure alter processing having lost connectivity to the coupling facility containing the structure.

ENDED. REBUILD STARTED.

The structure alter request ended due to a rebuild request for the same structure.

ENDED. STRUCTURE HAS BEEN DEALLOCATED.

The structure alter request ended due to the deallocation of the structure.

ENDED. ALTER STOPPED BEFORE ANY CHANGES TO THE STRUCTURE OCCURRED.

The structure alter processing ended because of a request to stop alter processing. This request was processed before any coupling facility operations with respect to the alter request could be performed. The structure was not changed by the initial alter request.

ENDED. COMPONENT ERROR.

An unknown XES component error has occurred.

text2

One of the following:

A duplexing rebuild is not in progress so no further information is given.

ALTER OF REBUILD-OLD STRUCTURE INSTANCE WAS ATTEMPTED.

The structure alter request that ended was processing the Rebuild-Old structure instance during a duplexing rebuild.

ALTER OF REBUILD-NEW STRUCTURE**INSTANCE WAS ATTEMPTED.**

The structure alter request that ended was processing the Rebuild-New structure instance during a duplexing rebuild.

System action: System processing continues.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2ALT

Routing Code: 2

Descriptor Code: -

IXC590I AUTOMATIC ALTER PROCESSING FOR STRUCTURE *strname* *text1*

CURRENT SIZE: *currentsize* K **TARGET:** *targetsize* K

CURRENT ENTRY COUNT: *currententrycnt* **TARGET:** *targetentrycount*

CURRENT ELEMENT COUNT: *currentelemcount* **TARGET:** *targetelemcount*

CURRENT EMC COUNT: *currentemccount* **TARGET:** *targetemccount*

[*text2*]

Explanation: The system initiated structure alter processing has finished.

In the message text:

strname

The name of the structure.

text1

One of the following:

COMPLETED. TARGET ATTAINED.

The structure alter processing completed and the requested target was attained.

COMPLETED. TARGET NOT ATTAINED.

The structure alter processing completed and the requested target was not attained.

currentsize

The current size of the structure in 1K blocks.

targetsize

The target size of the structure in 1K blocks.

currententrycnt

The current number of entries. This number is only substantially accurate.

targetentrycount

The target number of entries.

currentelemcount

The current number of elements. This number is only substantially accurate.

targetelemcount

The target number of elements.

currentemccount

The current number of EMCs. This number is only substantially accurate.

targetemccount

The target number of EMCs.

text2

One of the following:

A duplexing rebuild is not in progress so no further information is given.

ALTER OF REBUILD-OLD STRUCTURE**INSTANCE WAS COMPLETED.**

The structure alter request that ended was processing the Rebuild-Old structure instance during a duplexing rebuild.

ALTER OF REBUILD-NEW STRUCTURE**INSTANCE WAS COMPLETED.**

The structure alter request that ended was processing the Rebuild-New structure instance during a duplexing rebuild.

System action: System processing continues.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2ALT

Routing Code: 2

Descriptor Code: -

IXC591I AUTOMATIC ALTER REQUEST FOR STRUCTURE *strname* REJECTED.

REASON: *text*

Explanation: The system initiated structure alter processing to start or stop a structure alter was rejected.

In the message text:

strname

The name of the structure.

text

One of the following:

STRUCTURE NOT IN THE CFRM ACTIVE POLICY

The structure is not defined in the CFRM active policy.

STRUCTURE NOT ALLOCATED

The specified structure is not allocated.

REBUILD IN PROGRESS

The specified structure is in the rebuild process. Structure alter is not allowed while rebuild is in progress.

REBUILD STOP IN PROGRESS

The specified structure is in the rebuild stop process. Structure alter is not allowed while rebuild stop is in progress. The request must be issued after the rebuild stop is complete.

COUPLING FACILITY DOES NOT SUPPORT ALTER

The specified structure is allocated in a coupling facility that does not support structure alter. The structure should be rebuilt or reallocated in a coupling facility that supports structure alter. Redefine the structure as ALLOWAUTOALT(NO) in the CFRM policy until such time as the structure can be rebuilt or reallocated in a coupling facility that is capable of alter processing.

ALTER ALREADY IN PROGRESS

The structure alter start request cannot be performed because structure alter is in progress.

AT LEAST ONE CONNECTION INDICATED THAT ALTER IS NOT ALLOWED.

The structure alter start request cannot be performed because at least one active, failing, or failed-persistent connection indicated that it does not support structure alter. Redefine the structure as ALLOWAUTOALT(NO) in the CFRM policy until such time as the connector supports alter processing.

AN UNEXPECTED ERROR OCCURRED.

The structure alter request cannot be performed because an unexpected error occurred.

STRUCTURE FAILED

The structure alter request cannot be performed because the structure has failed.

System action: System processing continues.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2ALT

Routing Code: 2

Descriptor Code: -

IXC601I SFM POLICY *polname* HAS BEEN {STARTED BY|MADE CURRENT ON} SYSTEM *sysname*

Explanation: The SFM policy *polname* is started and/or made current on this system.

In the message text:

polname

The name of the policy.

STARTED BY

This system completed the SETXCF,START command for TYPE=SFM. The started policy is also made current on this system.

MADE CURRENT ON

The already started SFM policy has been made current on this system.

sysname
System name.

System action: If the policy was started then an administrative policy has been made the started policy on the SFM couple data set. In either case, the started SFM policy has been made current on this system. When a policy is made current any information that pertains to this system is read in and stored.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA2SIN

Routing Code: 1,2,10

Descriptor Code: 4

IXC602I SFM POLICY *polname* INDICATES FOR SYSTEM *sysname* A STATUS UPDATE MISSING ACTION OF {PROMPT ISOLATE | RESET | DEACTIVATE} AND AN INTERVAL OF *interval* SECONDS. THE ACTION {WAS SPECIFIED FOR THIS SYSTEM | IS THE POLICY DEFAULT | IS THE SYSTEM DEFAULT}.

Explanation: SFM will take the specified action when a system fails to update its status.

In the message text:

polname

Name of the policy just made current on this system.

sysname

System name.

PROMPT

The operator will be prompted.

ISOLATE

The system isolation will be attempted.

RESET

A PR/SM reset will be attempted.

DEACTIVATE

A PR/SM deactivate will be attempted.

interval

The length of time after a system is status update missing before SFM takes action. For PROMPT, the interval used is the XCF OPNOTIFY value.

WAS SPECIFIED FOR THIS SYSTEM

The policy explicitly specified the action for this system.

IS THE POLICY DEFAULT

The policy did not explicitly specify an action for this system. The policy default action will be used.

IS THE SYSTEM DEFAULT

No explicit action was specified for this system in the policy, nor was a default specified in the policy. The system default is used.

System action: None.

Operator response: Make sure that the action to be taken is the desired action. Notify the system programmer if it is not.

System programmer response: Correct and start the policy if changes are necessary.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA2SIN

Routing Code: #M

Descriptor Code: 4

IXC603I THE SFM POLICY *polname* SPECIFIED A {RESETTIME KEYWORD FOR SYSTEM|DEACTTIME KEYWORD FOR SYSTEM| RECONFIG STATEMENT INVOLVING SYSTEM} *sysname* BUT THE REQUESTED FUNCTION IS AVAILABLE ONLY UNDER PR/SM WITH THE CROSS LPAR FUNCTION INSTALLED. {THE ACTION WILL BE CHANGED TO PROMPT! RECONFIGURATION WILL NOT BE POSSIBLE}.

Explanation: Either RESETTIME or DEACTTIME was specified in the SYSTEM information for this system, or this system was specified as the ACTSYS or TARGETSYS on a RECONFIG statement. Reset, deactivate, and reconfiguration actions can be performed only under PR/SM with the cross LPAR function installed.

In the message text:

polname

Name of the active policy.

RESETTIME KEYWORD FOR SYSTEM

A RESETTIME keyword was specified for this system.

DEACTTIME KEYWORD FOR SYSTEM

A DEACTTIME keyword was specified for this system.

RECONFIG STATEMENT INVOLVING SYSTEM

A RECONFIG statement was specified, naming this system as the acting system (ACTSYS) or target system (TARGETSYS).

sysname

System name detecting error.

THE ACTION WILL BE CHANGED TO PROMPT

Since a RESET or DEACTIVATE cannot be done, the operator will be prompted, just as if PROMPT had been specified instead of RESETTIME or DEACTTIME.

RECONFIGURATION WILL NOT BE POSSIBLE

If the system issuing this message is the acting

system (ACTSYS), the reconfiguration action will be ignored. If it is the target system (TARGETSYS), then the acting system may attempt the reconfiguration, but it will not be successful.

System action: The SFM action will be changed to PROMPT, or the RECONFIG statement will have no effect. If a reconfiguration is attempted later, it will fail.

Operator response: Notify the system programmer

System programmer response: Determine why a PR/SM-related function was specified for a system that was not capable of that action.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA2SIN

Routing Code: 1,2,10

Descriptor Code: 12

IXC604I XCF PR/SM POLICY HAS BEEN DEACTIVATED ON SYSTEM *sysname* DUE TO THE START OF A SFM POLICY

Explanation: The XCF PR/SM policy has been deactivated because a SFM policy has been started on this system.

In the message text:

sysname

System name.

System action: The XCF PR/SM policy is deactivated.

Operator response: Notify the system programmer

System programmer response: Make sure that any needed PR/SM Policy has been integrated into the SFM policy.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA2SIN

Routing Code: #

Descriptor Code: 4

IXC605I SFM HAS EXPERIENCED A SOFTWARE FAILURE ON SYSTEM *sysname*. SFM IS NOT AVAILABLE ON THIS SYSTEM.

Explanation: SFM has encountered an unrecoverable error.

In the message text:

sysname

System name.

System action: SFM has been disabled on this system. A dump will be taken.

Operator response: Notify the system programmer.

System programmer response: Capture dump.
Contact IBM Support Center.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA2SIN

Routing Code: 1,2,10

Descriptor Code: 4

**IXC606I SFM IS RECONFIGURING THE
SYSPLEX DUE TO A SIGNALLING
CONNECTIVITY FAILURE**

Explanation: A signalling connectivity failure occurred in the sysplex. This system has initiated a reconfiguration of the sysplex based on the SFM policy.

System action: The systems in the sysplex are partitioned so that the remaining systems are fully connected. SYS1.LOGREC contains symptom records containing information that was used to determine which systems to remove. The records also contain the system weights and connectivity maps for each system that remains in the sysplex.

Operator response: Repair the failed connectivity and re-IPL the partitioned system(s).

System programmer response: Investigate the signalling configuration to determine if proper redundancy exists.

Source: Cross System Coupling Facility (SCXCF)

Routing Code: 1,2,10

Descriptor Code: 4

IXC607I SFM POLICY *text*

Explanation: SFM has processed a SETXCF STOP,POLICY command.

In the message text:

sysname
System name.

HAS BEEN STOPPED BY SYSTEM *sysname*

This system has processed the SETXCF STOP,POLICY for SFM.

IS NO LONGER CURRENT ON SYSTEM *sysname*

This system has reacted to another system processing the SETXCF STOP,POLICY command for SFM.

System action: The SFM policy is stopped.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA2SIN

Routing Code: #

Descriptor Code: 4

**IXC608I SETXCF START,POLICY FOR SFM IS
CANCELED. NO SFM COUPLE DATA
SET IS IN USE BY THIS SYSTEM.**

Explanation: The SFM policy cannot be started because there is no Sysplex Failure Management couple dataset in use by this system.

System action: The command to start a Sysplex Failure Management policy is canceled.

Operator response: Notify the system programmer that no Sysplex Failure Management couple dataset is available, or issue a SETXCF command to make one available.

System programmer response: Determine why no couple dataset for Sysplex Failure Management is available. Make sure that the system has access to a Sysplex Failure Management couple data set.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA2TSK

Routing Code: 1,2,10

Descriptor Code: 4

**IXC609I SFM POLICY *polname* INDICATES FOR
SYSTEM *sysname* A SYSTEM WEIGHT
OF *sysweight* SPECIFIED BY *text***

Explanation: This value will be used for SFM connectivity failure processing.

In the message text:

polname
Name of the current policy.

sysname
System name.

sysweight
The system weight value for this system.

SPECIFIC POLICY ENTRY

This value was specified in the policy explicitly for this system.

POLICY DEFAULT

An explicit value was not specified for this system.
The policy default will be used.

SYSTEM DEFAULT

An explicit value was not specified for this system, and no policy default was specified. The system default will be used.

Operator response: Make sure values specified are the ones expected. Notify the system programmer if values are unexpected.

System programmer response: Correct and start policy if mistakes are found.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA2SIN

Routing Code: #

Descriptor Code: 4

IXC610I THE NUMBER OF {POLICY|RECONFIG|SYSTEM} DEFINITIONS IN THE ALTERNATE SFM COUPLE DATA SET WAS NOT GREATER THAN OR EQUAL TO THE NUMBER OF {POLICY|RECONFIG|SYSTEM} DEFINITIONS IN THE PRIMARY SFM COUPLE DATA SET.

Explanation: The specified alternate SFM couple data set cannot be used with the primary SFM couple data set. The number of POLICY, SYSTEM, or RECONFIG definitions in the alternate SFM couple must be greater than or equal to those in the primary SFM couple data set.

In the message text:

POLICY

Format item that specifies the number of POLICYs the couple data set is formatted to contain.

RECONFIG

Format item that specifies the number of RECONFIGs that the couple data set is formatted to contain in each policy.

SYSTEM

Format item that specifies the number of SYSTEMs that the couple data set is formatted to contain in each policy.

System action: SFM rejects the use of the alternate couple data set.

System programmer response: Format an alternate SFM couple data set in which each definition is greater than or equal to the primary SFM couple data set.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA2FDF

Routing Code: 1,2

Descriptor Code: 4

IXC611I ERROR DETECTED IN LINE *linenum.* *text*

Explanation: The XCF administrative data utility found an error in a policy definition.

In the message text:

linenum

Line number of error.

ACTSYS AND TARGETSYS CANNOT BE THE SAME.

A system cannot take action against itself.

FAILSYS AND ACTSYS CANNOT BE THE SAME.

A system cannot take action when it is the failed system.

A DUPLICATE RECONFIG STATEMENT HAS BEEN ISSUED FOR THE SAME FAILSYS AND ACTSYS.

A reconfig definition was already specified for this combination of failing system and acting system.

POLICY DEFAULTS HAVE ALREADY BEEN SPECIFIED FOR THIS POLICY.

SYSTEM NAME(*) can only be specified once for each policy.

A SYSTEM KEYWORD WAS ALREADY SPECIFIED FOR THIS SYSTEM.

SYSTEM NAME(sysname) can only be specified once for each system.

System action: The system continues processing the control statements however, the administrative data will not be changed.

Source: Cross System Coupling Facility (SCXCF)

Routing Code: 1,2

Descriptor Code: 5

IXC612I POLICY *polname* ON LINE NUMBER *linenum* SPECIFIED CONNFAIL(NO) BUT A WEIGHT WAS SPECIFIED FOR AT LEAST ONE SYSTEM DEFINITION

Explanation: The XCF administrative data utility found an apparent conflict. A weight was specified for a system definition in a policy that will not take action for connectivity failures.

In the message text:

polname

The name of the policy for which the conflict was detected.

linenum

The line number where the conflict was detected.

System action: The system continues processing the control statements. The policy will not take action for connectivity failures. The weights for any system definitions in the policy are ignored.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA2FDX

Routing Code: 1,2

Descriptor Code: 5

IXC700E SYSPLEX COUPLE DATA SET LIMIT REACHED, FUTURE REQUESTS MAY BE REJECTED. *text*

Explanation: While processing a JOIN or CREATE request, cross-system coupling facility (XCF) detected that either the sysplex contains the maximum number of

groups or that group *groupname* contains the maximum number of members.

In the message text:

groupname

The name of the group which is of maximum size.

NO MORE GROUPS ALLOWED.

The sysplex contains the maximum number of groups specified in the couple data set.

NO MORE MEMBERS ALLOWED IN GROUP

groupname.

The sysplex contains the maximum number of members specified for group *groupname* in the sysplex couple data set.

System action: The system continues processing this JOIN request, but depending on the message text, the system cannot process subsequent JOIN or CREATE requests.

NO MORE GROUPS ALLOWED

XCF will not process subsequent requests for a new group to join the sysplex.

NO MORE MEMBERS ALLOWED IN GROUP

groupname

XCF will not process subsequent requests for new members to be created or join group *groupname*.

Operator response: Notify the system programmer.

System programmer response: Issue the DISPLAY XCF,COUPLE command to display:

- The maximum groups and members defined in the sysplex couple data set
- The numbers of groups and members currently contained in the sysplex

Use this information to determine whether the couple data set allows enough groups and members for sysplex activity.

If you decide that the couple data set should allow more groups and members, choose one of the following:

- Switch the primary and alternate couple data sets by entering the SETXCF COUPLE,PSWITCH command if the alternate couple data set allows more groups and members than the primary one.

Then format a new alternate data set and issue SETXCF COUPLE,ACOUPLE=*dsname*. Make sure the data set is catalogued in the master catalog before issuing the command.

- Format an alternate couple data set allowing more groups and members if one of the following is true:
 - There is no alternate couple data set defined
 - The alternate couple data set does not allow any more groups or members than the primary couple data set.

After formatting a new alternate couple data set, do the following:

- Enter a SETXCF COUPLE,ACOUPLE command to define the new alternate couple data set to XCF
- Enter a SETXCF COUPLE,PSWITCH command to switch the primary couple data set with the new alternate one.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCG1CRE, IXCG1JON

Routing Code: 2,10

Descriptor Code: 11

IXC701I [IXCCREAT | IXCJOIN] REQUEST FOR GROUP *groupname* MEMBER *memname* FAILED. JOBNAME *jobname* ASID: *asid* RETURN CODE: *retcode* REASON CODE: *rsrcode*

Explanation: An attempt to use cross-system coupling facility (XCF) group services via either the IXCCREAT or IXCJOIN macro has failed.

In the message text:

groupname

Name of the group for which information is recorded.

memname

Name of the member for which information is recorded. If the member name was not specified, and the failure occurred before the member name could be generated, then N/A will be used. If the member name was not specified, and the failure occurred after the member name was generated, then the generated name will be used.

jobname

Jobname of application issuing the macro service that was unsuccessful.

asid

ASID of application issuing the macro service.

retcode

Macro service return code.

rsrcode

Macro service reason code.

System action: The system continues. The program which issued the IXCCREAT or IXCJOIN macro has failed.

System programmer response: Determine the reason why the request could not be satisfied. Make the appropriate corrections. If needed, restart or reinitialize the program so that the request is attempted again. For return code and reason code indicating either the sysplex contains the maximum number of groups or that group *groupname* contains the maximum number of members, issue the DISPLAY XCF,COUPLE command to display:

IXC725I • IXC727I

- The maximum groups and members defined in the sysplex couple data set.
- The number of groups and members currently contained in the sysplex.

Use this information to determine whether the couple data set allows enough groups and members for sysplex activity.

If you decide that the couple data set should allow more groups and members, choose one of the following:

1. Switch the primary and alternate couple data sets by entering the SETXCF COUPLE,PSWITCH command if the alternate couple data set allows more groups and members than the primary one.
Then format a new alternate data set and issue SETXCF COUPLE,ACOUPLE=*dsname*.
2. Format an alternate couple data set allowing more groups and members if one of the following is true:
 - There is no alternate couple data set defined.
 - The alternate couple data set does not allow any more groups or members than the primary couple data set.

After formatting a new alternate couple data set, do the following:

- Enter a SETXCF COUPLE,ACOUPLE command to define the new alternate couple data set to XCF.
- Enter a SETXCF COUPLE,PSWITCH command to switch the primary couple data set with the new alternate one.

To avoid a single point of failure in the sysplex, IBM recommends using an alternate couple data set.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCG1CRE, IXCG1JON

Routing Code: 10

Descriptor Code: -

IXC725I SYNTAX ERROR DETECTED IN LINE
linenum. **THE FOLLOWING WAS**
EXPECTED: *expected_string* **BEFORE:**
position_string.

Explanation: The XCF Administrative Data Utility detected a syntax error. The *expected_string* was missing from a control statement.

In the message text:

linenum
The line number where the error was detected.

expected_string
The expected string.

position_string

This string identifies the position in the control statement prior to which the *expected_string* should be inserted.

System action: The system ignores the control statement and will continue to process subsequent statements.

Operator response: Notify the system programmer.

System programmer response: Correct the syntax error and rerun the utility.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCM2LEX

Routing Code: 1,2

Descriptor Code: 5

IXC726I SYNTAX ERROR DETECTED IN LINE
linenum. **THE FOLLOWING WAS NOT**
RECOGNIZED: *symbol*. **EXPECTED ONE**
OF THE FOLLOWING AT THAT POINT: [
yyy yyy...yyy]

Explanation: The XCF Administrative Data Utility detected a syntax error. The *symbol* was detected where one of the *yyy ... yyy* text strings would have been appropriate.

In the message text:

linenum
The line number where the error was detected.

symbol

The unrecognized string. The string may be truncated after the first 16 characters.

yyy
One or more correct symbols or characters that should replace *symbol* in the control statement text.

System action: The system ignores the control statement and will continue to process subsequent statements.

Operator response: Notify the system programmer.

System programmer response: Correct the syntax error and rerun the utility.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCM2LEX

Routing Code: 1,2

Descriptor Code: 5

IXC727I INPUT IS SKIPPED UP TO:
continue_string, **WHICH WAS FOUND IN**
LINE *linenum*

Explanation: The XCF Administrative Data Utility had previously detected a syntax error. The system ignores

the portion of input which contains the syntax error, but continues processing at the point indicated in the message text.

In the message text:

continue_string

The point at which the system will continue to process control statements.

linenum

The line number where the system will continue to process control statements.

System action: The system continues to process control statements at the specified point.

Operator response: Notify the system programmer.

System programmer response: Correct the syntax error and rerun the utility.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCM2LEX

Routing Code: 1,2

Descriptor Code: 5

IXC728I *error_string SHOULD BE DELETED IN LINE* *linenum*

Explanation: The XCF Administrative Data Utility has detected a syntax error and has identified a portion of a control statement which should be deleted.

In the message text:

error_string

A string which should be deleted from the control statement.

linenum

The line number where the error was detected.

System action: The *error_string* is ignored and the remaining control statements will be processed.

Operator response: Notify the system programmer.

System programmer response: Correct the syntax error and rerun the utility.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCM2LEX

Routing Code: 1,2

Descriptor Code: 5

IXC729I *insert_string WAS ASSUMED BEFORE THE ERROR POINT IN LINE* *linenum*

Explanation: The XCF Administrative Data Utility has detected a syntax error and has identified a portion of a control statement which should be inserted.

In the message text:

insert_string

The string which was assumed at the error point when the system continued processing the control statements.

linenum

The line number where the *insert_string* should be inserted.

System action: The *insert_text* is assumed and the utility will continue to process remaining control statements.

Operator response: Notify the system programmer.

System programmer response: Correct the syntax error and rerun the utility.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCM2LEX

Routing Code: 1,2

Descriptor Code: 5

**IXC730I *ERROR DETECTED IN LINE* *linenum*.
THE VALUE '*value_string*' FOR
KEYWORD '*keyword*' *error_text***

Explanation: The XCF administrative data utility has detected an error in the specified keyword value.

In the message text:

linenum

The line number where the error was detected.

value_string

The string which was found to be in error. The string, enclosed in quotes, may be truncated to 16 characters.

keyword

The keyword for which the *value_string* was found to be in error.

error_text

Describes the reason why the value was in error. *error_text* is one of the following:

IS TOO LONG.

The keyword value was too long.

IS TOO SHORT.

The keyword value was too short.

CONTAINS CHARACTERS WHICH ARE NOT VALID.

The *value_string* contained one or more characters which are not valid for this keyword value.

IS OUT OF RANGE.

The number specified was not within the allowable range for this keyword value.

IS NOT ONE OF THE ALLOWABLE VALUES.

The *value_string* is not one of the allowable values for this keyword.

CONTAINS AN INVALID USAGE OF WILDCARD CHARACTERS.

The *value_string* violates the rules for wildcard character usage.

IS NOT 'SITE1' OR 'SITE2'.

The *value_string* is not one of the allowable values for this keyword. Only 'SITE1' or 'SITE2' is allowed.

System action: The keyword value is ignored and the data is not changed.

Operator response: Notify the system programmer.

System programmer response: Correct the syntax error and rerun the utility.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA2FDX, IXCA3FDM,
IXCL2PPI, IXCM2PPI

Routing Code: 1,2

Descriptor Code: 5

**IXC734I XCF ADMINISTRATIVE DATA UTILITY
ENCOUNTERED AN UNEXPECTED
ERROR. DIAGNOSIS INFORMATION:
*diag_info***

Explanation: The XCF Administrative Data Utility ended because of unexpected errors.

In the message text:

diag_info

If the diagnosis information is presented it should be saved for use by your support personnel.

The format of *diag_info* is:

X'xx aaaaaaaaaa bbbbbbbb cccccccc'

where:

xx Code indicating the service that caused the error

01 ALESERV

02 DSPSERV

03 RACROUTE

04 Internal error

05 Internal error

06 LOAD

07 ESTAEX

08 Internal error

09 Internal error

10 SYSEVENT

aaaaaaaa

Return code from the service

bbbbbbbb

Reason code from the service

cccccccc

Internal information

System action: The Administrative Data Utility program ends.

Operator response: Notify the system programmer.

System programmer response: The diagnosis information presented with this message should be saved. If this error persists report the problem to the IBM Support Center.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA2FDX, IXCL2PPI,
IXCM2APU, IXCM2PPI, IXCA3FDM

Routing Code: 1,2

Descriptor Code: 5

**IXC735I XCF ADMINISTRATIVE DATA UTILITY
ENCOUNTERED AN ERROR: *error_text***

Explanation: The XCF administrative data utility program ended because of JCL errors.

In the message text:

error_text

A description of the error which occurred. *error_text* is one of the following:

VOLSER SPECIFIED WITHOUT DSN

The VOLSER keyword was specified on the TYPE control statement but the DSN keyword was missing.

UNABLE TO OPEN SYSIN

An error occurred when the system tried to open the SYSIN file. The SYSIN DD control statement may be missing.

I/O ERROR ON SYSIN

An I/O error occurred when the system attempted to read the SYSIN data set.

NO SYSIN CONTROL STATEMENTS

No control statements were provided in the SYSIN data set.

DATA TYPE CONTROL STATEMENT ERROR

One or more errors were encountered while processing the TYPE control statement.

DSN REQUIRED FOR THIS LEVEL OF MVS

Only offline couple data sets can be updated on the current system level of MVS. The DSN keyword is required at this system level or

rerun the utility on the level of MVS that supports ONLINE couple data sets.

System action: The administrative data utility program ends.

Operator response: Notify the system programmer.

System programmer response: Correct the JCL and rerun the program.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCM2APU, IXCM2PPI

Routing Code: 1,2

Descriptor Code: 5

IXC736I THE LIMIT OF *maxnum*
{POLICIES|STRUCTURES|COUPLING
FACILITIES|SYSTEM ELEMENTS|
RECONFIG ELEMENTS|RESTART
ORDER ENTRIES|RESTART
GROUPS|ELEMENTS| RESTART
METHODS|TARGET SYSTEMS} PER
policy_object_group **HAS BEEN**
EXCEEDED IN LINE *linenum*. *data_type*
IS THE COUPLE DATA SET DATA TYPE
TO WHICH THIS LIMIT APPLIES.

Explanation: The specified limit was reached and the system could not complete processing of the control statement on line *linenum*. In most cases, the limit is set when the couple data set containing the administrative data is formatted.

In the message text:

maxnum

The maximum number of items per unit. This number is defined within the context of the specific item.

POLICIES

The specified limit of policies has been reached.

STRUCTURES

The specified limit of structures has been reached.

COUPLING FACILITIES

The specified limit of coupling facilities has been reached.

SYSTEM ELEMENTS

The specified limit of system elements has been reached.

RECONFIG ELEMENTS

The specified limit of reconfig elements has been reached.

RESTART ORDER ENTRIES

The specified limit of restart order entries has been reached.

RESTART GROUPS

The specified limit of restart group entries has been reached.

ELEMENTS

The specified limit of element entries has been reached.

RESTART METHODS

The specified limit of restart method entries has been reached.

TARGET SYSTEMS

The specified limit of target system entries has been reached.

policy_object_group

One of the following:

COPULE DATA SET DATA TYPE

Refers to the entire set of administrative data within the scope of an XCF couple data set *data_type*.

PREFERENCE LIST

The limit of coupling facilities that can be specified in a preference list is fixed at 8.

EXCLUSION LIST

The limit of structures that can be specified in an exclusion list is fixed at 8.

POLICY

The limit of the specified *policy_object* that can be defined within a policy, established by the installation when the couple data set containing the policy data was formatted

ELEMENT

The limit of restart methods that can be defined within an element definition is fixed at 2.

linenum

The line number where the error was detected.

data_type

Couple data set data type to which this limit applies.

System action: The system ignores the control statement and continues processing remaining control statements.

Operator response: Notify the system programmer.

System programmer response: The limit could possibly be increased. Refer to SETTING UP A SYSPLEX for instructions on how to increase the size of the couple data set.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA2FDX, IXCL2PPI

IXCA3FDM

Routing Code: 1,2

Descriptor Code: 5

IXC737I AN ERROR WAS DETECTED AT LINE
linenum. object_name IS A DUPLICATE {
POLICY| COUPLING FACILITY|
STRUCTURE| SYSTEM ELEMENT|
ELEMENT NAME| ELEMENT TYPE|
RESTART GROUP| ELEMENT TARGET
SYSTEM} WITHIN *policy_scope*

Explanation: The XCF Administrative Data Utility found the name of a policy object that has been duplicated within the specified *policy_scope*.

In the message text:

linenum
 The line number where the error was detected.

object_name
 The policy object that was duplicated.

POLICY
 Policy object type.

COUPLING FACILITY
 Coupling facility object type.

STRUCTURE
 Structure object type.

SYSTEM ELEMENT
 System object type.

ELEMENT NAME
 Element name object type.

ELEMENT TYPE
 Element type object type.

RESTART GROUP
 Restart group object type.

ELEMENT
 Element object type.

TARGET SYSTEM
 Target system object type.

policy_scope
 Defines the scope in which the *object_name* was duplicated. *policy_scope* is one of the following:

A SET OF DEFINE POLICY CONTROL STATEMENTS.

The policy name was duplicated on more than one DEFINE POLICY statement.

A PREFERENCE LIST.

The coupling facility was specified more than once in a structure preference list.

AN EXCLUSION LIST.

The structure name was specified more than once in a structure exclusion list.

A LIST OF STRUCTURES IN A POLICY.

The structure name was specified more than once within a policy.

A LIST OF COUPLING FACILITIES IN A POLICY.

The coupling facility name was specified more than once within a policy.

A LIST OF SYSTEM ELEMENTS IN A POLICY.

The system element name was defined more than once within a policy.

A POLICY.

The *object_name* was defined more than once within a policy.

A LIST OF TARGET SYSTEMS IN A RESTART GROUP.

The *object_name* was defined more than once within a target system list.

System action: The system continues processing the control statements; however, the administrative data will not be changed.

Operator response: None.

System programmer response: None.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA2FDX, IXCA3FDM, IXCL2PPI

Routing Code: 1,2

Descriptor Code: 5

IXC738I {DEFINE|DELETE} POLICY (*polname*)
STATEMENT AT LINE *linenum*
{PASSED|FAILED} VERIFICATION.
explanation

Explanation: This is a status message issued after all control statements associated with a DEFINE POLICY or DELETE POLICY control statement have been processed.

In the message text:

DEFINE
 The statement is a DEFINE control statement.

DELETE
 The statement is a DELETE control statement.

polname
 The name of a policy.

linenum
 The line number of the statement.

PASSED
 The processing for the control statement was successful.

FAILED
 The processing for the control statement had one or more associated errors.

explanation
 Further describes the processing for the specified control statement. *explanation* is one of the following:

THE POLICY WAS NOT PREVIOUSLY DEFINED.

The policy name did not exist at the time this statement was processed.

THE POLICY WAS PREVIOUSLY DEFINED.

The policy name existed at the time this statement was processed and this new policy data will overlay the previous policy data for the same named policy.

THE POLICY CAN BE DELETED.

The policy name existed at the time this statement was processed. The DELETE statement was successful.

THE DELETE STATEMENT CONFLICTS WITH A PREVIOUS DEFINE.

A previous DEFINE POLICY statement for the same named policy was processed.

THE POLICY WAS NOT FOUND.

The specified policy was not found and was not deleted.

ONE OR MORE ERRORS OCCURRED.

One or more errors occurred during the processing of the statements for this policy.

THE POLICY WAS PREVIOUSLY DEFINED, USE REPLACE(YES).

The policy name was previously defined. REPLACE(YES) is required to overlay policy.

System action: The system continues processing.

Operator response: Not Applicable.

System programmer response: Not Applicable.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA2FDX, IXCA3FDM, IXCL2PPI

Routing Code: 1,2

Descriptor Code: 5

IXC739I DATA WAS *action* FOR COUPLE DATA TYPE *data_type*

Explanation: This is a final disposition message in regard to the administrative data.

In the message text:

action

The action that was taken in regard to the policy data. *action* is one of the following:

CHANGED

The policy data was changed in the couple data set that contains data of type *data_type*.

NOT CHANGED

No data was changed for the specified *data_type*. Other messages may have been previously issued to describe errors encountered while processing utility control statements.

data_type

The couple data type which is associated with this administrative policy data.

System action: If a report was requested, then the utility will continue to the report phase of processing. Otherwise, the utility processing is complete.

Operator response: Not Applicable.

System programmer response: Not Applicable.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA2FDX, IXCA3FDM, IXCL2PPI

Routing Code: 1,2

Descriptor Code: 5

IXC740I THE XCF ADMINISTRATIVE DATA UTILITY ENCOUNTERED AN ERROR WHILE USING COUPLE DATA TYPE *data_type*. *error_text*

Explanation: The XCF administrative data utility ended because of problems accessing an online couple data set.

In the message text:

data_type

The type of data specified as input to the Utility.

error_text

A description of the error that occurred. *error_text* is one of the following:

THE COUPLE DATA TYPE WAS NOT AVAILABLE.

The couple data set data type was not available on the system where the utility was running.

A DATA RECORD WAS NOT AVAILABLE.

There is a possible formatting error with the couple data set that contains the specified data type.

THE SERIALIZATION CONTENTION LIMIT WAS EXCEEDED.

There was contention for the couple data set. Retry the utility at a later time.

THE COUPLE DATA SET RESOURCE WAS NOT DEFINED TO THE SYSTEM AUTHORIZATION FACILITY.

A facility class resource profile must be defined for the specific couple data set type. The resource name is as follows:
MVSADMIN.XCFxxxxxxxx, where xxxxxxxx is the required data type.

THE USER WAS NOT AUTHORIZED TO UPDATE THE COUPLE DATA TYPE RESOURCE.

The user of the utility was not authorized to

update the couple data set for data type. Authorization is defined through the System Authorization Facility.

THE USER WAS NOT AUTHORIZED TO READ THE COUPLE DATA TYPE RESOURCE.

The user of the utility was not authorized to read the couple data set data type. Authorization is defined through the System Authorization Facility.

System action: The XCF administrative data utility program ends.

Operator response: Notify the system programmer.

System programmer response: Correct the error and rerun the utility.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA2FDX, IXCA3FDM, IXCL2PPI, IXCM2APU

Routing Code: 1,2

Descriptor Code: 5

**IXC741I XCF ADMINISTRATIVE DATA UTILITY
ENCOUNTERED AN ERROR WHILE
USING COUPLE DATA SET *dsname*
FOR DATA TYPE *data_type* BECAUSE
*error_text***

Explanation: The XCF administrative data utility ended because of errors accessing an offline couple data set.

In the message text:

dsname

The name of the couple data set that was specified on the TYPE Control Statement.

data_type

The type of data contained in a couple data set.

error_text

Description of the error that occurred. *error_text* is one of the following:

THE DATA WAS NOT AVAILABLE.

The data set specified did not contain the data type.

A DATA RECORD WAS NOT AVAILABLE.

The data set specified did not contain one or more required data records. This would indicate that the data set was not properly formatted.

System action: The XCF administrative data utility program ends.

Operator response: Notify the system programmer.

System programmer response: Reformat the data set or correct the data set name.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCM2APU

Routing Code: 1,2

Descriptor Code: 5

**IXC742I ERROR DETECTED IN *list_keyword* FOR
STRUCTURE *strname* IN POLICY
polname.*entry* *error_text***

Explanation: The *list_item* had an error for the context in which it was specified.

In the message text:

list_keyword

Either PRELIST or EXCLLIST.

strname

The structure name for which the preference list had an error.

polname

The name of the policy being processed.

entry

The entry in the list which is in error.

error_text

A description of the error which occurred. *error_text* is one of the following:

WAS NOT DEFINED IN THE POLICY.

The entry was not a defined structure or coupling facility for the specified policy.

CANNOT BE IN THE EXCLUSION LIST FOR ITSELF.

An exclusion list entry cannot be in the exclusion list for itself.

System action: The system continues processing any remaining control statements, however, the administrative data will not be changed.

Operator response: Notify the system programmer.

System programmer response: Correct the error in the JCL and rerun the utility.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2PPI

Routing Code: 1,2

Descriptor Code: 5

**IXC743I COUPLING FACILITY *cf_name1* WAS
PREVIOUSLY DEFINED HAVING THE
SAME IDENTIFICATION INFORMATION
AS *cf_name2* WHICH WAS DEFINED AT
LINE *linenum***

Explanation: The administrative data utility detected duplicate coupling facility identification information within the policy.

In the message text:

cf_name1

The name of a coupling facility with duplicate identification information.

cf_name2

The name of a coupling facility with duplicate identification information.

linenum

The line number where the second coupling facility was defined.

System action: The system continues processing any remaining control statements, however, the administrative data will not be changed.

Operator response: Notify the system programmer.

System programmer response: Correct the error in the JCL and rerun the utility.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2PPI

Routing Code: 1,2

Descriptor Code: 5

**IXC744I ERROR DETECTED IN POLICY
(*polname*). COUPLING FACILITY
(*cfname*) *error_text***

Explanation: The administrative data utility detected the specified error while processing control statements.

In the message text:

polname

The name of the policy being processed.

cfname

The name of the coupling facility in error.

error_text

A description of the error which occurred. *error_text* is one of the following:

**WAS NOT REFERENCED BY ANY STRUCTURE
PRELIST ENTRIES.**

The coupling facility was not referenced by at least one preference list for structures defined in the policy.

**IS DEFINED WITH A SITE DIFFERENT FROM
ANOTHER CF ON THE SAME CEC.**

A CF with a different SITE is defined in the policy with the same TYPE, MFG, PLANT, and SEQUENCE. CFs that have the same TYPE, MFG, PLANT, and SEQUENCE cannot be at different SITEs because they are co-resident on the same physical machine. If all CFs that have a SITE specified are on the same CEC, the administrative data will be changed to allow

this configuration for a test environment. Otherwise, the administrative data will not be changed.

System action: The system continues processing any remaining control statements, however, the administrative data will not be changed (unless specifically noted otherwise).

Operator response: Notify the system programmer.

System programmer response: Correct the error in the JCL and rerun the utility.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2PPI

Routing Code: 1,2

Descriptor Code: 5

**IXC745I ERROR DETECTED IN *initsize_keyword*
FOR STRUCTURE *strname* IN POLICY
polname. *error_text***

Explanation: The *initsize_keyword* was not valid for the context in which it was specified.

In the message text:

initsize_keyword

INITSIZE keyword.

strname

The name of the structure.

polname

The name of the policy being processed.

error_text

A description of the error that occurred. *error_text* is the following:

**VALUE SPECIFIED IS GREATER THAN VALUE
SPECIFIED FOR SIZE.**

The number specified for the initial structure size is larger than the value specified for the maximum structure size.

System action: The system continues processing any remaining utility control statements; however, the administrative data will not be changed.

Operator response: Notify the system programmer.

System programmer response: Correct the error in the JCL and rerun the utility.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2PPI

Routing Code: 1,2

Descriptor Code: 5

**IXC760I ERROR DETECTED AT LINE *linenum*.
TARGET SYSTEM '*' IS NOT ALLOWED
WITHIN A LIST OF TARGET SYSTEMS.**

Explanation: The administrative data utility has detected an error in the specification of the TARGET_SYSTEM keyword value. A target system of '*' may not appear in a list of target system names.

In the message text:

linenum
The line number where the error was detected.

System action: The system continues processing the control statements. The administrative data will not be changed.

Operator response: Notify the system programmer.

System programmer response: Correct the syntax error and rerun the utility.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA3FDM

Routing Code: 1,2

Descriptor Code: 5

**IXC761I ELEMENT MISSING FOR RESTART
GROUP ON LINE *linenum*.**

Explanation: The administrative data utility has detected an error. An element definition is required for the specified restart group.

In the message text:

linenum
The line number where the restart group is specified.

System action: The restart group definition is ignored. The system continues processing the control statements. The administrative data will not be changed.

Operator response: Notify the system programmer.

System programmer response: Add an element definition for the restart group and rerun the utility.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA3FDM

Routing Code: 1,2

Descriptor Code: 5

**IXC762I ERROR DETECTED AT LINE *linenum*.
ELEMENT *elementname* IS NOT VALID
WITHIN RESTART GROUP *restartgroup*.**

Explanation: The administrative data utility found an element that is not valid within the specified restart group.

In the message text:

linenum

The line number where the error was detected.

elementname

The name of the element that is not valid within the specified restart group.

restartgroup

The name of the restart group that may not contain the specified element.

System action: The restart group definition is ignored. The system continues processing the control statements. The administrative data will not be changed.

Operator response: None.

System programmer response: None.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA3FDM

Routing Code: 1,2

Descriptor Code: 5

**IXC763I INVALID COMBINATION OF RESTART
METHODS DETECTED AT LINE *linenum*.
*error_text***

Explanation: The administrative data utility has detected an error in a set of restart method definitions for an element.

In the message text:

linenum
The line number where the error was detected.

error_text

Describes the particular combination of restart methods that caused the error. *error_text* is one of the following:

'BOTH' AND 'SYSTEM' ARE MUTUALLY EXCLUSIVE.

Restart methods for event types BOTH and SYSTEM cannot be defined for a single element.

'BOTH' AND 'ELEMTERM' ARE MUTUALLY EXCLUSIVE.

Restart methods for event types BOTH and ELEMTERM cannot be defined for a single element.

'SYSTEM' MAY ONLY BE SPECIFIED ONCE PER ELEMENT.

Only one restart method for event type SYSTEM is allowed per element definition.

'ELEMTERM' MAY ONLY BE SPECIFIED ONCE PER ELEMENT.

Only one restart method for event type ELEMTERM is allowed per element definition.

'BOTH' MAY ONLY BE SPECIFIED ONCE PER ELEMENT.

Only one restart method for event type BOTH is allowed per element definition.

System action: The system continues processing the control statements. The administrative data will not be changed.

Operator response: Notify the system programmer.

System programmer response: Correct the syntax error and rerun the utility.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA3FDM

Routing Code: 1,2

Descriptor Code: 5

IXC764I ERROR DETECTED IN QUOTED STRING AT LINE *linenum*. *error_text*

Explanation: The administrative data utility has detected an error in the specified quoted string.

In the message text:

linenum

The line number where the quoted string is specified.

error_text

Describes the reason why the string was in error.
error_text is one of the following:

THE STRING IS TOO SHORT.

The specified string is too short.

THE STRING IS TOO LONG.

The specified string is too long.

A DATASET NAME CONTAINS AN INVALID MEMBER SPECIFICATION.

The partitioned data set name contains an incomplete or incorrect member specification.

System action: The string is ignored. The system continues processing the control statements. The administrative data will not be changed.

Operator response: Notify the system programmer.

System programmer response: Correct the syntax error and rerun the utility.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA3FDM

Routing Code: 1,2

Descriptor Code: 5

IXC765I XCF ADMINISTRATIVE DATA UTILITY ENCOUNTERED AN UNEXPECTED ERROR WHILE PROCESSING ARM POLICY. DIAGNOSIS INFORMATION: *diag_info*

Explanation: The administrative data utility ended because of unexpected errors.

In the message text:

diag_info

An internal diagnostic code that IBM might request.

System action: The administrative data utility program ends.

Operator response: Notify the system programmer.

System programmer response: Rerun the utility. If this error persists, save the diagnostic information presented with this message and report the problem to the IBM Support Center.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA3FDM

Routing Code: 1,2

Descriptor Code: 5

IXC766I ERROR DETECTED FOR STRUCTURE *strname* IN POLICY *polname*. EXCLLIST CANNOT BE SPECIFIED WITH ENFORCEORDER(YES).

Explanation: EXCLLIST is mutually exclusive with ENFORCEORDER(YES).

In the message text:

strname

The structure name for which the error was detected.

polname

The name of the policy being processed.

System action: The system continues processing any remaining control statements; however, the administrative data will not be changed.

Operator response: Notify the system programmer.

System programmer response: Correct the error in the JCL and rerun the utility.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCL2PPI

Routing Code: 1,2

Descriptor Code: 5

IXC800I	ELEMENTS FROM TERMINATED SYSTEM <i>sysname</i> NOT RESTARTED. <i>text</i>
----------------	---

Explanation: The designated system has been removed from the sysplex. MVS is unable to initiate restarts of the elements from the designated system on another system for the reason indicated by *text*.

In the message text:

sysname

The name of the system that has been removed from the sysplex.

ARM RESTARTS ARE NOT ENABLED.

Restarts of registered elements either have never been enabled (through a SETXCF START command) or have been disabled (through a SETXCF STOP command).

THRESHOLD FOR SYSTEM TERMINATIONS REACHED.

The number of systems that have left the sysplex within the system designated interval has reached the threshold where MVS no longer restarts elements from a terminated system.

SYSTEM *sysname* LOST ACCESS TO THE ARM COUPLE DATA SET DURING RESTART PROCESSING.

The system has lost access to the ARM couple data set while initiating restarts of the elements from the designated system.

sysname

The name of the system that incurred the error that prevented the elements from being restarted.

INTERNAL ERROR DURING ARM RESTART PROCESSING ON SYSTEM *currsys*. DIAG106: *diag106*

An internal processing error occurred during cross-system restart processing. MVS will not restart this element.

currsys

The name of the current system.

diag106

An internal diagnostic code that the IBM Support Center might request.

System action: MVS deregisters elements that had been running on the terminated system.

Operator response: If restarts are not enabled, then determine if you should enable them (through a SETXCF START command). You may also want to determine if you should manually restart the elements from the terminated system on another system in the sysplex.

System programmer response: If the threshold for system terminations has been reached then determine the reason for the system terminations.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA3SG0

Routing Code: 2

Descriptor Code: 4

IXC801I	RESTART OF RESTART GROUP <i>restartgroup</i> FROM SYSTEM <i>sysname</i> WAS TERMINATED. <i>text</i>
----------------	---

Explanation: The designated system has been removed from the sysplex. MVS is unable to initiate restarts of the elements defined in the designated restart group on another system for the indicated reason. The individual elements are identified in occurrences of message IXC802I which follow this message.

In the message text:

restartgroup

The name of the restart group for which a restart attempt has been made.

sysname

The name of the system that has been removed from the sysplex.

ARM COUPLE DATA SET COULD NOT BE UPDATED.

An error has occurred during an attempt to update the ARM couple data set.

THERE ARE NO ELIGIBLE TARGET SYSTEMS.

There are no systems available to be used as the target of a restart.

System action: MVS deregisters the elements in the specified restart group that were running on the terminated system.

Operator response: Notify the system programmer.

System programmer response: If the message text indicates a data set error, initiate appropriate problem analysis. If there are no eligible target systems, then determine if the restrictions imposed by the JES XCF group or the current automatic restart management policy are eliminating all SP5.2.0 systems as eligible target systems. Determine which systems are in the same JES XCF group as the system that terminated, or check the target system list specified in the automatic restart management policy. Check SYS1.LOGREC for a symptom record for this problem.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA3SG0

Routing Code: 2

Descriptor Code: 4

**IXC802I JOBNAME *jobname*, ELEMENT
 elementname FROM SYSTEM *sysname*
 WAS Deregistered**

Explanation: Either the designated system has been removed from the sysplex or the designated system lost access to the ARM couple data set. The specified element will not be restarted by the automatic restart manager. The automatic restart manager has deregistered the element. This message may appear after and provide additional information for message IXC801I.

In the message text:

jobname

The name of the job or started task that was current when the element last registered by issuing the IXCARM macro.

elementname

The name of the element specified when the element registered by issuing the IXCARM macro.

sysname

The name of the system that the element was last considered to be running on.

System action: The automatic restart manager will no longer restart this element.

Operator response: Ensure that a primary couple data set is available. Determine if the job needs to be restarted manually.

System programmer response: One of the following messages should have been received prior to this one: IXC800I, IXC801I, or IXC809I. Perform the appropriate action for that message.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA3ARP

Routing Code: 2

Descriptor Code: 4

**IXC803I JOBNAME *jobname*, ELEMENT
 elementname WAS Deregistered.
 THE RESTART TIMEOUT THRESHOLD
 HAS BEEN REACHED.**

Explanation: MVS restarted the designated element but it has not subsequently reregistered with the automatic restart manager within the defined restart-timeout interval.

In the message text:

jobname

The name of the job or started task that was current when the element last registered by issuing the IXCARM macro.

elementname

The name of the element specified when the element registered by issuing the IXCARM macro.

System action: The system continues processing. The deregistered element is no longer a candidate for automatic restart manager restarts.

Operator response: Determine the state of the job and if a manual restart is required.

System programmer response: Determine the cause of the restart not resulting in the element re-registering within the restart-timeout interval. Items that should be checked are:

- That the job was successfully restarted. Incorrect policy specifications for the restart method could have caused the restart to fail.
- That the restart timeout interval is appropriate.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA3TOP

Routing Code: 2

Descriptor Code: 4

**IXC804I JOBNAME *jobname*, ELEMENT
 elementname WAS NOT RESTARTED.
 *text***

Explanation: The designated element has terminated and the automatic restart manager is not restarting it for the specified reason.

In the message text:

jobname

The name of the job or started task that was current when the element last registered by issuing the IXCARM macro.

elementname

The name of the element specified when the element was registered by issuing the IXCARM macro.

exitname

The name of the event exit specified when the element was registered by issuing the IXCARM macro.

dsname

The name of the data set containing the JCL to restart the element.

memname

Name of the member in the partitioned data set.

safrc

The SAF return code from the RACROUTE request.

racfrc

The RACF or security product return code from the RACROUTE request passed back in the SAF parameter list.

racfrsn

The RACF or security product reason code from the RACROUTE request passed back in the SAF parameter list.

diag092

An internal diagnostic code that IBM might request.

THE RESTART ATTEMPTS THRESHOLD HAS BEEN REACHED.

The number of restarts that MVS has initiated for the designated element has exceeded the policy defined maximum number of restarts within a given period of time.

TERMTYPE IS ELEMTERM, CROSS-SYSTEM RESTARTS PROHIBITED.

The system the element was running on has left the sysplex. The element's restart failure type indicates that it should not be restarted for system failures. The element failure type is defined either by the installation's automatic restart manager policy or by the TERMTYPE keyword when the element registered by issuing the IXCARM macro. The policy specification, if it is not the default, overrides the IXCARM macro TERMTYPE keyword.

ELEMENT IS THE TARGET OF AN ASSOCIATE REQUEST.

Another element has identified itself as being the backup for the designated element. Doing so indicates that MVS should not perform restarts for the designated element. An element indicates that it is the backup for another element by issuing the IXCARM macro with the keywords REQUEST=ASSOCIATE and TELEMENT.

ARM RESTARTS ARE NOT ENABLED.

MVS is not performing restarts of any elements because either restarts were not enabled using the SETXCF START command, or restarts were disabled using a SETXCF STOP command.

ELEMENT RESTART EXIT PROHIBITED AN ARM RESTART.

An element restart exit routine has indicated that MVS should not restart this element.

COULD NOT OPEN THE INTERNAL READER FOR OUTPUT.

Because the internal reader could not be opened for output, MVS could not submit the override JCL. Therefore, the element could not be restarted.

EVENT EXIT *exitname* COULD NOT BE LOADED.

MVS could not load the element's event exit.

EVENT EXIT *exitname* FAILED DURING EXECUTION.

The element's event exit has failed.

EVENT EXIT *exitname* PROHIBITED AN ARM RESTART.

The element's event exit routine has indicated that the element should not be restarted.

OVERRIDE DATA SET *dsname* COULD NOT BE ALLOCATED.[RC=]allocrc[RSN=]allocrsn

MVS could not allocate the override data set needed to restart the element.

OVERRIDE DATA SET *dsname* COULD NOT BE OPENED.[RC=]allocrc[RSN=]allocrsn

MVS could not open the override data set needed to restart the element.

OVERRIDE DATA SET *dsname* MEMBER *memname* COULD NOT BE ALLOCATED.[RC=]allocrc[RSN=]allocrsnn

MVS could not allocate the override data set containing the member needed to restart the element.

OVERRIDE DATA SET *dsname* MEMBER *memname* COULD NOT BE OPENED.[RC=]allocrc[RSN=]allocrsnn

MVS could not open the override data set containing the member needed to restart the element.

SAF ENVIRONMENT COULD NOT BE REESTABLISHED. RACROUTE SAF RC=*safrc* RACF RC=*racfrc* RACF RSN=*racfrsn*

The SAF environment that was current at the time the element was originally registered could not be reestablished when MVS attempted to restart the element.

RESTART PROHIBITED BY JES. THE JOB IS BEING CANCELED, PURGED, OR REROUTED

MVS could not restart this element because the element is being canceled, purged, or rerouted.

RESTART PROHIBITED BY JES. THE JOB HAS BEEN CANCELED OR REROUTED

MVS could not restart this element because the element has been canceled or rerouted.

RESTART PROHIBITED BY JES. THE JOB HAS BEEN PURGED.

MVS could not restart this element because the element has been purged.

RESTART PROHIBITED DUE TO JES BEING DOWN

MVS could not restart this element because the JES address space is down.

RESTART PROHIBITED BY JES. THE JOB IS ALREADY ACTIVE.

MVS could not restart this element because the element is already active.

START COMMAND ABORTED DUE TO LACK OF SYSTEM STORAGE.

MVS could not restart this element because of the lack of available system storage.

INTERNAL ERROR DURING ARM RESTART PROCESSING. DIAG092: *diag092 diag092a diag092b*
 An internal processing error occurred during element restart processing. MVS will not restart this element.

System action: The system continues processing. The automatic restart manager deregisters the element.

Operator response: Notify the system programmer.

System programmer response: Depending on the message text, do one of the following:

THE RESTART ATTEMPTS THRESHOLD HAS BEEN REACHED.

Determine why the element required enough restarts to exceed the maximum number of allowed restarts within the defined time interval. Determine if the policy defined maximum number of restarts within a given period of time is appropriate for the element.

TERMTYPE IS ELEMTERM, CROSS-SYSTEM RESTARTS PROHIBITED.

Determine if the cross-system restart restriction is appropriate for the element. If not, update the policy to indicate the element should be restarted for system failures.

ARM RESTARTS ARE NOT ENABLED.

To enable automatic restart manager restarts, enter the SETXCF START command, if appropriate. To run the specified job or started task, resubmit it.

ELEMENT RESTART EXIT PROHIBITED AN ARM RESTART.

If the installation needs the job or started task restarted, resubmit it. Determine whether the element restart exit needs to be updated.

COULD NOT OPEN THE INTERNAL READER FOR OUTPUT.

Using related system messages, determine why the internal reader could not be opened. If no determination can be made, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center.

EVENT EXIT *exitname* COULD NOT BE LOADED.

Ensure that the:

1. event exit is a loadable module and that the data set that it resides in is in the linklist concatenation
2. linklist library is APF-authorized.

EVENT EXIT *exitname* FAILED DURING EXECUTION.

Correct the error in the event exit.

EVENT EXIT *exitname* PROHIBITED AN ARM RESTART.

If the installation needs the job or started task restarted, resubmit it. Determine whether the event exit needs to be updated.

OVERRIDE DATA SET *dname* COULD NOT BE ALLOCATED.[RC=]allocrc[RSN=]allocrsn

Insure that the data set is in the linklist. See z/OS MVS Programming: Authorized Assembler Services Guide for information about the DYNALLOC return and reason codes.

OVERRIDE DATA SET *dname* COULD NOT BE OPENED.[RC=]allocrc[RSN=]allocrsn

Insure that the data set is in the linklist. See related system messages to determine the open error.

OVERRIDE DATA SET *dname MEMBER memname* COULD NOT BE ALLOCATED.[RC=]allocrc[RSN=]allocrsnn

Insure that the data set is in the linklist. Insure that the member is in the data set. See z/OS MVS Programming: Authorized Assembler Services Guide for information about the DYNALLOC return and reason codes.

OVERRIDE DATA SET *dname MEMBER memname* COULD NOT BE OPENED.[RC=]allocrc[RSN=]allocrsnn

Insure that the data set is in the linklist. See related system messages to determine the open error.

SAF ENVIRONMENT COULD NOT BE REESTABLISHED. RACROUTE SAF RC=safrc RACF RC=racfrc RACF RSN=racfrsn

Determine if the SAF authorization should be updated. If the installation needs the job or started task restarted, resubmit it.

RESTART PROHIBITED BY JES. THE JOB IS BEING CANCELED, PURGED, OR REROUTED

If the restart was expected to occur, determine the reason for the cancellation, purge, or reroute. If the installation needs the job or started task restarted, resubmit it.

RESTART PROHIBITED BY JES. THE JOB HAS BEEN CANCELED OR REROUTED

If the restart was expected to occur, determine the reason for the cancellation or reroute. If the installation needs the job or started task restarted, resubmit it.

RESTART PROHIBITED BY JES. THE JOB HAS BEEN PURGED.

If the restart was expected to occur, determine the reason for the purge. If the installation needs the job or started task restarted, resubmit it.

RESTART PROHIBITED DUE TO JES BEING DOWN

Restart the JES address space.

RESTART PROHIBITED BY JES. THE JOB IS ALREADY ACTIVE.

If the element was restarted under an automation product, make the appropriate update to prevent duplicate restarts.

START COMMAND ABORTED DUE TO LACK OF SYSTEM STORAGE.

Relieve the storage shortage constraint and enter the START command to restart the element.

Search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the diagnostic code.

Source: Cross System Coupling Facility (SCXCF)

| **Detecting Module:** IXCA3EEP, IXCA3ERS, IXCA3RIP, IXCA3RPR, IXCA3SG0, IXCA3SJT, IXCA3XRP

Routing Code: 2

Descriptor Code: 4

IXC805I *typename POLICY HAS BEEN STARTED BY SYSTEM sysname. POLICY DEFAULTS ARE NOW IN EFFECT.*

Explanation: If *typename* is ARM, the operator issued a SETXCF START,POLICY,TYPE=ARM,POLNAME=*polname* command. If ARM restarts had been disabled, they are now enabled, and the indicated policy is now the active policy for ARM. If no policy was specified then ARM defaults are in effect.

In the message text:

typename

The name of the type whose policy is to change.

sysname

The name of the system on which the SETXCF command was processed.

polname

The name of the administrative policy that has become the active policy.

IS NOW IN EFFECT.

The policy specified in the SETXCF command is now the active policy.

POLICY DEFAULTS ARE NOW IN EFFECT.

Because no policy name was specified on the SETXCF command, the policy defaults are now active.

POLICY NAMED *polname* IS NOW IN EFFECT.

System action: The system continues processing.

Operator response: None None

System programmer response: None None

Source: Cross System Coupling Facility (SCXCF)

| **Detecting Module:** IXCA3SAP

Routing Code: #

Descriptor Code: 5

IXC806I *typename POLICY HAS BEEN STOPPED BY SYSTEM sysname*

Explanation: The operator issued a SETXCF STOP,POLICY,TYPE=*typename* command. The default policy is now active.

In the message text:

typename

The name of the type whose policy is stopped.

sysname

The name of the system on which the SETXCF command was processed.

System action: The system continues processing.

Operator response: None

System programmer response: None

Source: Cross System Coupling Facility (SCXCF)

| **Detecting Module:** IXCA3SAP

Routing Code: #

Descriptor Code: 5

IXC807I THE NUMBER OF {POLICYIMAXELEM|TOTELEM} DEFINITIONS IN THE ALTERNATE ARM COUPLE DATA SET WAS NOT GREATER THAN OR EQUAL TO THE NUMBER OF {POLICYIMAXELEM|TOTELEM} DEFINITIONS IN THE PRIMARY ARM COUPLE DATA SET.

Explanation: The specified alternate ARM couple data set cannot be used with the primary ARM couple data set. The number of POLICY, MAXELEM, or TOTELEM definitions in the alternate ARM couple data set must be greater than or equal to those in the primary ARM couple data set.

In the message text:

POLICY

Data name that specifies the number of policies the couple data set is formatted to contain.

MAXELEM

Data name that specifies the maximum number of elements that the couple data set is formatted to contain in each policy.

TOTELEM

Data name that specifies the total number of elements that the couple data set has formatted to contain status records.

System action: The system rejects the use of the alternate couple data set.

Operator response: Notify the system programmer

System programmer response: Correct the code for

the couple data set format utility or specify another data set as the ARM couple data set.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA3FDF

Routing Code: 1,2

Descriptor Code: 4

IXC808I ELEMENTS FROM TERMINATED SYSTEM *sysname* WERE NOT PROCESSED BY THIS SYSTEM. ARM COUPLE DATA SET IS NOT AVAILABLE TO THIS SYSTEM.

Explanation: The system that issued this message does not have access to the ARM couple data set; therefore, it cannot initiate restarts of automatic restart manager elements, if any, from the failed system. The other remaining systems in the sysplex can restart elements from the failed system.

In the message text:

sysname

The name of the system that has been removed from the sysplex.

System action: The system continues processing, but can not provide any automatic restart manager functions.

Operator response: None

System programmer response: None

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA3SG0

Routing Code: 2

Descriptor Code: 4

IXC809I ELEMENTS REGISTERED OR RESTARTING ON SYSTEM *sysname* WERE Deregistered DUE TO LOSS OF ACCESS TO THE ARM COUPLE DATA SET

Explanation: The identified system has lost access to the ARM couple data set. All elements running on this system will be deregistered by other systems in the sysplex that have access to the ARM couple data set. The deregistered programs that were not in a FAILED or RESTARTING state will continue to run. Programs that were in a RESTARTING state may continue to run if the automatic restart manager had issued an IXC812I message indicating that they were restarted.

In the message text:

sysname

The name of the system that has lost access to the ARM couple data set.

System action: The system continues processing, but can not provide any automatic restart manager functions.

Operator response: Notify the system programmer.

System programmer response: Make another ARM couple data set available to the system that lost access. The elements can not be reregistered without ending their jobs or started tasks. See *z/OS MVS Programming: Sysplex Services Guide* for information about how to prevent the loss of both the primary and alternate couple data sets.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA3FAI, IXCA3ARP

Routing Code: 2

Descriptor Code: 4

IXC810I SYSTEM *sysname* NOT USING COUPLE DATA SET FOR ARM REASON: *text*

Explanation: The ARM couple data set was formatted on a system that is incompatible with the specified system.

In the message text:

sysname

The name of the system that is not using the couple data set for automatic restart manager.

PRIMARY COUPLE DATA SET HAS THE WRONG VERSION

The primary ARM couple data set was formatted with a version of the format utility that is incompatible with the specified system.

ALTERNATE COUPLE DATA SET HAS THE WRONG VERSION

The alternate ARM couple data set was formatted with a version of the format utility that is incompatible with the specified system.

PRIMARY COUPLE DATA SET FORMATTED WITH WRONG SYMBOLIC SUBSTITUTION TABLE SIZE

The primary ARM couple data set was formatted on a version of z/OS whose symbolic substitution table size is smaller than the current systems table size. There is not enough space in internal records to represent elements from the current system. The CDS is incompatible with the current system.

ALTERNATE COUPLE DATA SET FORMATTED WITH WRONG SYMBOLIC SUBSTITUTION TABLE SIZE

The alternate ARM couple data set was formatted on a version of z/OS whose symbolic substitution table size is smaller than the current systems table size. There is not enough space in internal records to represent elements from the current system. The CDS is incompatible with the current system.

System action: Depending on the message text, the system does one of the following:

PRIMARY COUPLE DATA SET HAS THE WRONG VERSION

The sysplex runs without the ARM couple data set. Automatic restart manager services will not be available until a primary ARM couple data set formatted at the appropriate level is provided.

ALTERNATE COUPLE DATA SET HAS THE WRONG VERSION

The sysplex runs with the primary ARM couple data set only.

PRIMARY COUPLE DATA SET FORMATTED WITH WRONG SYMBOLIC SUBSTITUTION TABLE SIZE

The sysplex runs without the ARM couple data set. Automatic restart manager services will not be available until a primary ARM couple data set formatted at the appropriate level is provided.

ALTERNATE COUPLE DATA SET FORMATTED WITH WRONG SYMBOLIC SUBSTITUTION TABLE SIZE

The sysplex runs with the primary ARM couple data set only.

Operator response: Notify the system programmer.

System programmer response: Determine whether the system can run ARM compatibly with the systems in the sysplex. You may need to upgrade the system.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA3FDF

Routing Code: 2,10

Descriptor Code: 12

IXC811I SYSTEM *sysname* IS NOW ARM CAPABLE

Explanation: The designated system now has connectivity to a primary ARM couple data set. To enable restarts, activate an ARM policy using the SETXCF START,POLICY,TYPE=ARM command.

In the message text:

sysname

The name of the system that now has access to the ARM couple data set.

System action: The system continues processing.

Operator response: Enter the SETXCF START,POLICY,TYPE=ARM command to activate an ARM policy.

System programmer response: None

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA3FAI

Routing Code: 2

Descriptor Code: 4

IXC812I *JOBNAME* *jobname*, ELEMENT *elementname* FAILED. THE ELEMENT WAS RESTARTED *text*

Explanation: The designated job and element have been restarted as specified. The logged message IXC813I contains additional information related to the restart of the element.

In the message text:

jobname

The specified jobname.

elementname

The specified element name.

sysname

The name of the system that failed and caused the element to restarted on the current system

text

One of the following:

WITH PERSISTENT START TEXT.

The element was restarted using the same start text that was previously used to start the element.

WITH PERSISTENT JCL.

The element was restarted using the same JCL that was previously used to run the element's batch JOB.

WITH OVERRIDE JCL.

The element was restarted using override JCL specified in the active policy.

WITH OVERRIDE START TEXT.

The element was restarted using override start text specified in the active policy.

WITH PERSISTENT START TEXT.

The element was restarted using the same start text that was previously used to start the element.

WITH PERSISTENT JCL.

The element was restarted using the same JCL that was previously used to run the element's batch JOB.

WITH OVERRIDE JCL.

The element was restarted using override JCL specified in the active policy.

WITH OVERRIDE START TEXT.

The element was restarted using override start text specified in the active policy.

System action: The system continues processing and expects a re-registration by the restarted element.

Operator response: None.

System programmer response: None.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA3ERS, IXCA3SJT

Routing Code: 2

Descriptor Code: 4

IXC813I **JOBNAME** *jobname*, **ELEMENT**
elementname WAS RESTARTED WITH
THE FOLLOWING {START TEXT:
*starttext***OVERRIDE JCL: dsname} THE**
RESTART METHOD USED WAS *text*

Explanation: The designated job and element have been restarted as specified. This message is only written to the message log. The message IXC812I contains additional information related to the restart of the element.

In the message text:

jobname

The specified jobname.

elementname

The specified element name.

WAS RESTARTED WITH THE FOLLOWING START TEXT:

The element was restarted using the designated start text.

starttext

The text of the command used to restart this element.

WAS RESTARTED WITH THE FOLLOWING OVERRIDE JCL:

The element was restarted using the override JCL contained in the designated data set.

dsname

The name of the data set or data set and member that contained the override JCL that was used.

DETERMINED BY THE ACTIVE POLICY.

The element was restarted using the information contained in the active policy

SPECIFIED BY AN ELEMENT RESTART EXIT.

An element restart exit informed ARM as to the restart method that was to be used.

SPECIFIED BY THE ELEMENT ON REGISTRATION.

The element specified a restart command text that specified when the element last registered by issuing the IXCARM macro was used to restart the element.

DETERMINED BY THE ACTIVE POLICY.

The element was restarted using the information contained in the active policy.

SPECIFIED BY AN ELEMENT RESTART EXIT.

An element restart exit informed ARM as to the restart method that was to be used.

System action: The system continues processing and expects a re-registration by the restarted element.

Operator response: None.

System programmer response: None.

Source: Cross System Coupling Facility (SCXCF)

Detecting Module: IXCA3ERS, IXCA3SJT

Routing Code: 2

Descriptor Code: 4

Chapter 3. IXCH Messages

IXCH0001I *check_name* was entered with an unknown hexadecimal function code of *function code*.

Explanation: This check was not coded to recognize the specified function code. The function code was ignored.

System action: The system continues processing normally.

Operator response: Report the problem to 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.

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: N/A

Automation: N/A

Detecting Module: IXCHCCF, IXCHCCPL, IXCHCSIG, IXHCSTR

Routing Code: N/A

Descriptor Code: N/A

IXCH0101I *check_name* cannot be processed because an unexpected error occurred in module *mod*. Service *service* returned with RC = *rc*, and RSN = *rsn*. Diagnosis area:

diag word1 word2 word3 word4

Explanation: A service returned an unexpected return code.

System action: The system continues processing normally.

Operator response: Report the problem to 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.

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: N/A

Automation: N/A

Detecting Module: IXCHCCF, IXCHCCPL, IXCHCSIG, IXHCSTR

Routing Code: N/A

Descriptor Code: N/A

IXCH0102I *check_name* cannot be processed. It was entered with an unexpected hexadecimal entry code of *entry code*.

Explanation: An unexpected error occurred.

System action: The system will discontinue running this check.

Operator response: Report the problem to 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.

Problem determination: N/A

Source: Parallel Sysplex (XCF)

IXCH0104I • IXCH0107I

Reference Documentation: N/A

Automation: N/A

Detecting Module: IXCHCCF, IXCHCCPL, IXCHCSIG, IXCHCSTR

Routing Code: N/A

Descriptor Code: N/A

IXCH0104I *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. See <l linkend="xcfchk">XCF checks</l> in z/OS V1R8.0 IBM Health Checker for z/OS: User's Guide.

System action: The system will discontinue running this check.

Operator response: Report the problem to the system programmer.

System programmer response: Check the parameter described above and adjust it accordingly.

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS V1R8.0 IBM Health Checker for z/OS: User's Guide

Automation: N/A

Detecting Module: IXCHCCF, IXCHCCPL, IXCHCSIG, IXCHCSTR

Routing Code: N/A

Descriptor Code: N/A

IXCH0106I *check_name detected a parameter error. specified parameter(s) was/were specified when expected is/are expected.*

Explanation: The installation provided an incorrect number of parameters in either the HZSPRMxx parmlib member or a MODIFY hzsproc command. See <l linkend="xcfchk">XCF checks</l> in z/OS V1R8.0 IBM Health Checker for z/OS: User's Guide.

System action: The system will discontinue running this check.

Operator response: Report the problem to the system programmer.

System programmer response: Update parameters for this check.

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS V1R8.0 IBM Health Checker for z/OS: User's Guide

Automation: N/A

Detecting Module: IXCHCCF, IXCHCCPL, IXCHCSIG, IXCHCSTR

Routing Code: N/A

Descriptor Code: N/A

IXCH0107I *check_name is not applicable because system system_name is in XCF-LOCAL mode.*

Explanation: This check is not applicable in the current mode.

System action: The system will discontinue running this check.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCCF, IXCHCCPL, IXCHCSIG, IXCHCSTR

Routing Code: N/A

Descriptor Code: N/A

IXCH0108I *check_name is not applicable because system system_name is in MONOPLEX mode.*

Explanation: This check is not applicable in the current mode.

System action: The system will discontinue running this check.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCCPL, IXCHCSIG, IXCHCSTR

Routing Code: N/A

Descriptor Code: N/A

IXCH0201I *A policy change is in progress for structure Structure Name. At this time the check is not applicable for the indicated structure.*

Explanation: The check is currently not applicable for the indicated structure.

System action: The system continues processing normally.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCSTR

Routing Code: N/A

Descriptor Code: N/A

IXCH0202I *All coupling facility structures currently reside in their preferred locations based on their preference lists.*

Explanation: The check found good status of all coupling facility structures.

System action: The system continues processing normally.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

IXCH0203I • IXCH0205I

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCSTR

Routing Code: N/A

Descriptor Code: N/A

IXCH0203I Duplexed structure *structure instance* resides in coupling facility *active CF*. This does not match coupling facility *preferred CF* listed first/second in the preference list.

Explanation: Message provides information about the current location of structures which do not match the data in the CFRM couple data set.

System action: The system continues processing normally.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCSTR

Routing Code: N/A

Descriptor Code: N/A

IXCH0204I Structure *structure* resides in coupling facility *active CF*. This does not match coupling facility *preferred CF* listed first in the preference list in the CFRM couple data set.

Explanation: Message provides information about the current location of structures which do not match the data in the preference list for the structure.

System action: The system continues processing normally.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCSTR

Routing Code: N/A

Descriptor Code: N/A

IXCH0205I Structure *structure* is not currently excluded from sharing a coupling facility with structure *excluded structure*. This is not as requested based on the exclusion list.

Explanation: Message provides information about the structures which do not match the exclusion list data in the CFRM couple data set.

System action: The system continues processing normally.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCSTR

Routing Code: N/A

Descriptor Code: N/A

IXCH0206E One or more CF structures are not in their preferred

location(s).

Explanation: XCF tries to allocate structures according to the attributes of the structure, the attributes of the coupling facility (for example, non-volatility and ICF when failure isolation is required), and the preference list for that structure. If a structure is not allocated in the most preferred coupling facility, it may signify a problem with the coupling facility and/or the preference list for the structure.

This message is accompanied by message IXCH0203I or IXCH0204I, which list the structures that are not in their preferred locations.

System action: The system continues processing normally.

Operator response: Report the problem to the system programmer.

System programmer response: Examine the log messages for the allocation of the structures (messages IXL014I and IXC574I) to understand why the most preferred coupling facility was not chosen to host the specific structure.

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCSTR

Routing Code: N/A

Descriptor Code: N/A

IXCH0207E One or more CF structures have an exclusion list violation.

Explanation: A check found an exclusion list violation. See accompanying message IXCH0205I for more information.

System action: The system continues processing normally.

Operator response: Report the problem to the system programmer.

System programmer response: Determine why the structures are not excluded and take appropriate action.

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCSTR

Routing Code: N/A

Descriptor Code: N/A

IXCH0208I All coupling facility structure exclusion lists are currently satisfied.

Explanation: The check found that all coupling facility structure exclusion lists are currently satisfied.

System action: The system continues processing normally.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCSTR

Routing Code: N/A

Descriptor Code: N/A

IXCH0209I There are currently no structures allocated in any coupling facilities. At this time the check is not applicable.

Explanation: The check is not applicable in the current environment.

System action: The system continues processing normally.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCSTR

Routing Code: N/A

Descriptor Code: N/A

IXCH0240E Multiple PRIMARY couple datasets reside on volume *volume*.

Explanation: The check found multiple PRIMARY couple data sets on the same volume. The following PRIMARY couple data sets reside on the *volume* shown in the message text:

dsn1
dsn2
dsn3

System action: The system continues processing normally.

Operator response: Report the problem to the system programmer.

System programmer response: For maximum performance and availability, IBM recommends that the primary SYSPLEX couple dataset, the primary CFRM couple dataset, and the primary LOGR couple dataset, be placed on different volumes.

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCCPL

Routing Code: N/A

Descriptor Code: N/A

IXCH0241I The following PRIMARY couple datasets reside on unique volumes:

```
ds1
ds2
ds3
```

This is consistent with the IBM recommendation that the primary SYSPLEX couple dataset, the primary CFRM couple dataset, and the primary LOGR couple dataset, should be placed on different volumes.

Explanation: The check found good status for the location of primary couple data sets.

System action: The system continues processing normally.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCCPL

Routing Code: N/A

Descriptor Code: N/A

IXCH0242E One or more couple datasets have a single point of failure.

Explanation: This message is followed by message IXCH0907I which contains a table showing the couple data sets with either a primary and alternate on the same volume or that do not have an alternate at all.

System action: The system continues processing normally.

Operator response: Report the problem to the system programmer.

System programmer response: IBM recommends that for maximum availability, there is an alternate couple dataset and that it is on a different volume than the primary couple dataset.

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCCPL

Routing Code: N/A

Descriptor Code: N/A

IXCH0243I For each couple dataset type the primary and alternate reside on different volumes this is consistent with the IBM recommendation.

Explanation: The check found no single point of failure for couple data sets.

System action: The system continues processing normally.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCCPL

Routing Code: N/A

Descriptor Code: N/A

IXCH0246I The couple dataset is currently formatted large enough for only one system. The check is not applicable in this environment.

Explanation: The check cannot be processed because the sysplex couple data set is not large enough.

System action: The system continues processing normally.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation:

z/OS V1R8.0 IBM Health Checker for z/OS: User's Guide
z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCSIG

Routing Code: N/A

Descriptor Code: N/A

IXCH0247E Structure *Strname* does not have enough lists to support full

signal connectivity.

Explanation: This check assumes that a signal structure is intended to support full signal connectivity among all possible systems in the sysplex. The expected number of systems in the sysplex is determined by the number of systems supported by the primary sysplex couple data set. The structure has *ListCount* lists, but *ListsNeeded* lists are needed to provide full signal connectivity between all *NumberSystems* systems that could be in the sysplex.

Whenever XCF allocates a signaling structure, it tries to allocate it with enough lists to provide full signaling connectivity among all possible systems in the sysplex. If XCF finds it needs more lists, it will attempt to rebuild the structure to get them. When XCF switches to a new primary sysplex couple data set that supports more systems than the previous one, it will attempt to rebuild the structure to get more lists in anticipation of the need to establish signaling paths with more systems. The failure of this check suggests that XCF was unable to allocate the structure with the desired number of lists (an unlikely pathological case caused by space constraints), or its attempt to rebuild the structure failed.

System action: The system continues processing normally.

Operator response: Report the problem to the system programmer.

System programmer response: Examine logs to determine why the rebuild of the structure failed. Messages IXL013I and IXL015I are relevant. Resolve the indicated problem(s). If XCF does not automatically initiate a rebuild of the structure with an appropriate number of lists as a result of the problem resolution, initiate a rebuild of the structure. To do so, issue the command SETXCF START,REBUILD,STRNAME=IXCx_{xxx} where "IXCx_{xxx}" is the name of the signaling structure. Upon successful completion of the rebuild, verify that the structure was allocated with the necessary number of lists. XCF issues message IXC457I on the system that allocates the structure to indicate the number of lists in the structure and the number of systems that can establish full signaling connectivity through those lists.

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCSIG

Routing Code: N/A

Descriptor Code: N/A

IXCH0248E Structure Strname is too small for full signal

connectivity.

Explanation: This check assumes that a signal structure is intended to support full signal connectivity among all possible systems in the sysplex. The expected number of systems in the sysplex is determined by the number of systems supported by the primary sysplex couple data set. When a list within the structure is used for a signal path, the *checkowner_or_installation* specification requires that there be at least *MinimumNumber* list entries available for each list (each such list entry corresponds to one XCF signal). If this structure were to be used to provide full signal connectivity between all *NumberSystems* systems that could be in the sysplex, there would fewer than *ComputedNumber* list entries per list.

System action: The system continues processing normally.

Operator response: Report the problem to the system programmer.

System programmer response: Run the CF sizer tool available on the Web to determine the appropriate structure size. Modify CFRM policy accordingly. Activate that policy. Rebuild the structure.

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCSIG

Routing Code: N/A

Descriptor Code: N/A

IXCH0249I All signal structures appear to be capable of supporting full signal connectivity. This check assumes that a signal structure is intended to support full signal connectivity between all *NumberSystems* possible systems in the sysplex. The expected number of systems in the sysplex is determined by the number of systems supported by the primary sysplex couple data set. Each structure has at least the *ListsNeeded* lists needed to support full signal connectivity. Each structure has enough list entries to allow the *checkowner_or_installation* minimum of *MinimumNumber* list entries per list path when the structure is used to support full signal connectivity.

IXCH0250I • IXCH0410E

Explanation: The check found that all structures are capable of full signaling capability.

System action: The system continues processing normally.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation:

z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCSIG

Routing Code: N/A

Descriptor Code: N/A

IXCH0250I There are no signaling structures currently allocated. The check is not applicable.

Explanation: Informational message indicating check is currently not applicable.

System action: The system continues processing normally.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation:

z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCSIG

Routing Code: N/A

Descriptor Code: N/A

IXCH0410E Inadequate number of signaling paths were found between

systems.

Explanation: This message is followed by message IXCH0903I, which lists information about inadequate connectivity.

The number of operational XCF signaling paths between systems is less than the *checkowner_or_installation* specified value. This is inadequate to reduce vulnerability to failures. When there are more operational paths, failures are less likely to cause loss of XCF communication between systems.

System action: The system continues processing normally.

Operator response: Report the problem to the system programmer.

System programmer response: Add paths to the configuration as needed.

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCSIG

Routing Code: N/A

Descriptor Code: N/A

IXCH0411I There are at least *num* operational XCF PATHINs and PATHOUTs from this system to all other systems in the sysplex. This number equals or exceeds the *checkowner_or_installation* specified minimum.

Explanation: The check found good connectivity between this systems and all others in the sysplex.

System action: The system continues processing normally.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCSIG

Routing Code: N/A

Descriptor Code: N/A

IXCH0414E Group 'UNDESIG' is not assigned to one or more transport

classes.

Explanation: This message is followed by message IXCH0901I, which is a table listing the transport classes that do not have UNDESIG assigned to them.

Group 'UNDESIG' has not been assigned to the transport classes indicated in the table below. IBM suggests that users coding the group keyword explicitly assign the collection of undesignated groups to each transport class by coding the pseudo-group name UNDESIG in GROUP keyword on the CLASSDEF statement in the COUPLExx member of PARMLIB.

System action: The system continues processing normally.

Operator response: Report the problem to the system programmer.

System programmer response: Edit the COUPLExx member of PARMLIB and be sure that each CLASSDEF assigns at least the pseudo-group name UNDESIG to the transport class via the GROUP keyword. For example:

```
CLASSDEF CLASS(ONE) GROUP(UNDESIG)
CLASSDEF CLASS(TWO) GROUP(UNDESIG, GROUP2)
```

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCSIG

Routing Code: N/A

Descriptor Code: N/A

IXCH0415I The pseudo-group 'UNDESIG' has been assigned to all transport classes defined on system_name.

Explanation: The check found good status of UNDESIG on all transport classes.

System action: The system continues processing normally.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCSIG

Routing Code: N/A

Descriptor Code: N/A

IXCH0417E One or more transport classes do not have enough operational

signaling paths to a system.

Explanation: This message is followed by IXCH0902I, which is a table listing all the transport classes that have an inadequate number of operational signaling paths to systems in the sysplex.

Transport class definitions are used to segregate XCF signal traffic. If a transport class does not have an operational outbound signaling path to communicate with a particular target system, the signals using that transport class are rerouted over a signal path from some other transport class. This means that the desired segregation of message traffic is not obtained.

Messages routed to an alternate signaling path incur additional overhead and can degrade the performance of messages that are supposed to use the alternate class. The consequences can be particularly severe if the buffer size used by the alternate class is smaller than the buffer size used by the rerouted message. In such cases, XCF may have to send additional control signals to change the size of the inbound message buffers on the target system. Since the number of buffers in a buffer pool gets smaller when the buffers are bigger, signal capacity is reduced. If the target system thereby experiences "no buffer" conditions, signal throughput will be impacted.

To avoid the consequences of this lack of segregation, assigning at least one signaling path to the transport class for each possible target system. For capacity and availability, additional paths may be desired. The check parameter determines the minimum number of signaling paths required per transport class per system.

System action: The system continues processing normally.

Operator response: Report the problem to the system programmer.

System programmer response: A particular transport class might not have enough operational signaling paths for a particular target system because there are too few paths assigned to the transport class, or because some of the assigned paths were not operational at the time of the check. If there are too few paths assigned to the class, you must either start more outbound signaling paths (ensuring that they are assigned to this transport class), or modify existing signaling paths to change them from one transport class to another. If the signaling paths were not operational, determine the cause, make repairs as needed, and restore the paths to service.

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCSIG

Routing Code: N/A

Descriptor Code: N/A

IXCH0418I All transport classes on *system_name* have the minimum specified number of paths to every other system in the sysplex.

Explanation: The check found that all transport classes in the system have the minimum number of paths to every other system in the sysplex.

System action: The system continues processing normally.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCSIG

Routing Code: N/A

Descriptor Code: N/A

IXCH0420E Transport class definitions do not provide sufficient size

segregation.

Explanation: The XCF transport class definitions on system *system_name* do not provide sufficient size segregation for XCF message traffic. The *checkowner_or_installation* requires that the transport class definitions provide *MinNumber* different message buffer sizes, but the check only found *ActualNumber*.

System action: The system continues processing normally.

Operator response: Report the problem to the system programmer.

| **System programmer response:** See Planning Signaling Services in a Sysplex section in *z/OS MVS Setting Up a Sysplex* for details on the IBM suggestion.

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCSIG

Routing Code: N/A

Descriptor Code: N/A

IXCH0421I The XCF transport class definitions on system *system_name* provide sufficient size segregation for XCF message traffic. The *checkowner_or_installation* requires that the transport class definitions provide *MinNumber* message buffer size(s). The check found *ActualNumber*.

| See Planning Signaling Services in a Sysplex section in *z/OS MVS Setting Up a Sysplex* for details on the IBM suggestion.

Explanation: The check found good status of transport class definitions that provide sufficient size segregation.

System action: The system continues processing normally.

Operator response: N/A

System programmer response: N/A

IXCH0424E

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCSIG

Routing Code: N/A

Descriptor Code: N/A

IXCH0424E A MAXMSG value for XCF signaling is smaller than the check

parameter.

Explanation: This message is followed by IXCH0904I, which is a table listing the maxmsg value that is too small and where it is defined.

One or more MAXMSG specifications in use by system *system_name* are smaller than the *checkowner_or_installation* specification. MAXMSG values should be greater than or equal to this value to pass the check. Message IXC0904I is issued to identify the particular MAXMSG value that is too small.

In the COUPLExx parmlib member, MAXMSG values can be specified on the COUPLE, CLASSDEF, PATHOUT, or PATHIN statements. The MAXMSG values associated with these statements can be modified after IPL via the SETXCF MODIFY operator command. The SETXCF START command can also be used to create new CLASSDEFS, PATHOUTs, or PATHINs. If a MAXMSG value is not explicitly coded on a statement in the COUPLExx parmlib member or on the SETXCF START command, a default value is used. If MAXMSG is not coded on the COUPLE statement, the IBM supplied default value is used for MAXMSG. If MAXMSG is not specified for a CLASSDEF, the MAXMSG value is inherited from the COUPLE MAXMSG value in effect at the time the CLASSDEF is defined. If MAXMSG is not specified for a PATHOUT, the MAXMSG value is inherited from the CLASSDEF MAXMSG value in effect at the time the PATHOUT is defined (the CLASSDEF to which the PATHOUT is assigned is used). If MAXMSG is not specified for a PATHIN, the MAXMSG value is inherited from the COUPLE MAXMSG in effect at the time the path is defined.

This check cannot determine whether a MAXMSG value was explicitly coded or inherited as described above. However, the check does understand the inheritance and assumes that the specification was inherited if the MAXMSG value of a "child" equals the MAXMSG value of its "parent". In such cases, the check will attempt to identify the "parent" as the problem.

System action: The system continues processing normally.

Operator response: Report the problem to the system programmer.

System programmer response: The MAXMSG values in error were probably specified in the COUPLEXX parmlib member, and if so, the necessary changes should be made there in preparation for the next IPL. However, the values specified in the parmlib member could have been modified via the SETXCF operator command after IPL. The check cannot determine whether such changes were made, so it could be possible that the parmlib values do not need to be changed. Regardless, the SETXCF MODIFY command can be used to modify the MAXMSG values currently being used by the system.

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation:

z/OS MVS Setting Up a Sysplex
z/OS MVS System Commands

Automation: N/A

Detecting Module: IXCHCSIG

Routing Code: N/A

Descriptor Code: N/A

IXCH0426I The XCF transport class MAXMSG value is currently equal to or larger than the checkowner_or_installation specified value defaultMAXMSG.

Explanation: The check found an appropriate MAXMSG transport value.

System action: The system continues processing normally.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCSIG

Routing Code: N/A

Descriptor Code: N/A

IXCH0427E One or more PATHINs support fewer messages than recommended.

Explanation: This message is followed by message IXCH0905I, which is a table listing PATHINs that support fewer messages than recommended.

The total amount of space available for buffers is specified by the MAXMSG value. The number of buffers for a given MAXMSG value is determined by the size of the messages. Larger messages require more space, so there will be fewer buffers. Smaller messages require less space, so there will be more buffers. The number of buffers can be increased either by increasing the MAXMSG value for the signaling path or by decreasing the size of the messages that are sent over the path.

The buffer that receives a message cannot be reused until the message data has been extracted from the buffer. Normally this occurs when the message exit routine of the target member invokes the XCF Message-In service (IXCMSGI) to receive the message. If the signaling path does not have a buffer available to receive a message that is pending transfer on the sending side, signal traffic is delayed. Such delays could lead to message backlogs on the sending system, possibly causing message requests to be rejected due to a "no buffer" condition. The inbound signaling path needs to have a large enough buffer supply to be able to continue receiving pending messages while waiting for in-use buffers to be recycled.

System action: The system continues processing normally.

Operator response: Report the problem to the system programmer.

System programmer response: Determine if the transport class definitions on the outbound system are producing the behavior you had intended. It could be the case that the inbound path is receiving messages that are larger than you had expected. For example, if a transport class does not have signaling paths for a particular target system, the messages that use that class will be sent via an alternate path. This lack of class connectivity could cause large messages to be routed over a path that was intended to support small messages. If the transport class definitions are producing the intended behavior, increase the MAXMSG value for the inbound path to at least the SUGGESTED MAXMSG value listed in the table below.

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCSIG

Routing Code: N/A

Descriptor Code: N/A

IXCH0428I All inbound signal paths that can be checked from system_name currently support at least as many messages as the checkowner_or_installation specified minimum of parm.

Explanation: The check found an appropriate status for inbound signaling paths.

System action: The system continues processing normally.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCSIG

Routing Code: N/A

Descriptor Code: N/A

IXCH0430I System system_name is currently the only system in the sysplex. This check is not applicable to the single system environment.

Explanation: The check is currently not applicable in this environment.

System action: The system continues running normally.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation:

z/OS V1R8.0 IBM Health Checker for z/OS: User's Guide

z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCSIG

Routing Code: N/A

Descriptor Code: N/A

IXCH0441I There are no coupling facilities available to system system_name. No checks relating to using coupling facilities can be run.

Explanation: The specified system does not have coupling facility resources defined. Checks relating to coupling facility resources cannot be performed.

System action: The system continues processing normally.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation:

z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCCF

Routing Code: N/A

Descriptor Code: N/A

IXCH0443E One or more single points of failure in signaling have been detected.

Explanation: This message is followed by message IXCH0906I, which is a table listing all the single points of failure that have been found in signaling.

System action: The system continues processing normally.

Operator response: Report the problem to the system programmer.

System programmer response: Correct all single points of failure listed in the table below.

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCSIG

Routing Code: N/A

Descriptor Code: N/A

IXCH0445I There is no single point of failure in signaling connectivity from system *system_name* to all other systems in the sysplex.

Explanation: The check found no single points of failure in signaling connectivity.

System action: The system continues processing normally.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCSIG

Routing Code: N/A

Descriptor Code: N/A

IXCH0446E System *system_name* has only one online operational channel

path to coupling facility *cfname*.

Explanation: The specified system has only one channel path that can be used to communicate to the indicated coupling facility. This represents a single point of failure regarding communication to the coupling facility.

System action: The system continues processing normally.

IXCH0447I • IXCH0448E

Operator response: Report the problem to the system programmer.

System programmer response: Issue display command (D CF,CFNAME = cfname) to obtain the current information regarding coupling facility connectivity information. Inspect the sender path status for each defined channel path.

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCCF

Routing Code: N/A

Descriptor Code: N/A

IXCH0447I *check_name is not applicable because system system_name has no coupling facility services available.*

Explanation: The specified system does not have coupling facility services available. Coupling Facility support functions are not installed on this system. Checks relating to coupling facility resources cannot be performed.

System action: The system will discontinue running this check.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCCF

Routing Code: N/A

Descriptor Code: N/A

IXCH0448E *System system_name has no online operational channel paths to coupling facility cfname.*

Explanation: The specified system has lost connectivity to the coupling facility identified.

System action: The system continues processing normally.

Operator response: Report the problem to the system programmer.

System programmer response: Issue display command (D CF) to obtain the current information regarding coupling facility connectivity information. Inspect the sender path status for each defined channel path.

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation:

z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCCF

Routing Code: N/A

Descriptor Code: N/A

IXCH0449I System *system_name* has all installed channel paths connected to coupling facility *cfname* online and operational.

Explanation: the check found good status of channel paths to the coupling facility.

System action: The system continues processing normally.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCCF

Routing Code: N/A

Descriptor Code: N/A

IXCH0450E System *system_name* has one or more not-operational channel

paths to coupling facility *cfname*.

Explanation: The specified system has at least one channel path defined for the specified coupling facility that is not-operational or not-connected. The system cannot use any not-operational or not-connected channel paths to communicate to the coupling facility.

System action: The system continues processing normally.

Operator response: Report the problem to the system programmer.

System programmer response: Issue display command (D CF,CFNAME = *cfname*) to obtain the current information regarding coupling facility connectivity information. Inspect the sender path status for the defined channel paths.

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation:

z/OS MVS Setting Up a Sysplex
z/OS MVS System Commands

Automation: N/A

Detecting Module: IXCHCCF

Routing Code: N/A

Descriptor Code: N/A

IXCH0451I System *system_name* has no online operational channel paths to

COUPLING FACILITY: *descriptor*

PARTITION: *partition* **CPCID:** *cpcid*

Explanation: The specified system does not have connectivity to the coupling facility identified.

IXCH0452I • IXCH0453E

System action: The system continues processing normally.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCCF

Routing Code: N/A

Descriptor Code: N/A

IXCH0452I System *system_name* has no online operational channel paths to coupling facility control unit *CU*.

Explanation: The specified system does not have connectivity to the coupling facility identified.

System action: The system continues processing normally.

Operator response: Report the problem to the system programmer.

System programmer response: Issue display command (D CF) to obtain the current information regarding coupling facility connectivity information. Determine if this coupling facility is defined in the CFRM policy and should have connectivity to this system. IBM recommends that coupling facilities not intended to be used by a system should have all channel paths configured offline from that system to the coupling facility.

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation:

z/OS MVS Setting Up a Sysplex
z/OS MVS System Commands

Automation: N/A

Detecting Module: IXCHCCF

Routing Code: N/A

Descriptor Code: N/A

IXCH0453E System *system_name* is connected to a coupling facility that is

not defined in the CFRM Policy.

COUPLING FACILITY: *descriptor*

PARTITION: *partition* **CPCID:** *cpcid*

Explanation: The specified system has connectivity to the coupling facility identified, however the coupling facility has not been defined in the CFRM policy.

System action: The system continues processing normally.

Operator response: Report the problem to the system programmer.

System programmer response: Issue display command (D CF) to obtain the current information regarding coupling facility identification information. Determine if this coupling facility should be defined in the CFRM policy. If this system does not require connectivity to the coupling facility, the channel paths should be configured offline. IBM

recommends that coupling facilities not intended to be used by a system should have all channel paths configured offline from that system to the coupling facility.

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation:

z/OS MVS Setting Up a Sysplex
z/OS MVS System Commands

Automation: N/A

Detecting Module: IXCHCCF

Routing Code: N/A

Descriptor Code: N/A

IXCH0454I Not all installed channel paths are online from system *system_name* to coupling facility *cfname*.

Explanation: There are channel paths that are installed but not online. It should be determined whether this is intended.

System action: The system continues processing normally.

Operator response: Report the problem to the system programmer.

System programmer response: Issue the D CF command and insure that all paths that are configured online are operational.

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation:

z/OS MVS Setting Up a Sysplex
z/OS MVS System Commands

Automation: N/A

Detecting Module: IXCHCCF

Routing Code: N/A

Descriptor Code: N/A

IXCH0507I The current XCF cleanup value is set to *value* seconds. This equals the *checkowner_or_installation* specified value.

Explanation: The check found good XCF cleanup value status.

System action: The system continues processing normally.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCCP

Routing Code: N/A

IXCH0508E • IXCH0509I

Descriptor Code: N/A

IXCH0508E The current XCF cleanup value is NOT consistent with the

checkowner_or_installation recommendation.

Explanation: The current XCF cleanup value is set to *value* seconds. This is *higher/lower* than the *checkowner_or_installation* specified value of *parm* seconds.

System action: The system continues processing normally.

Operator response: Report the problem to the system programmer.

System programmer response: Issue the 'SETXCF COUPLE,CLEANUP=xx' command at the operating system console. Remember to update the CLEANUP() parameter in the COUPLExx member of PARMLIB prior to the next IPL.

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation:

z/OS MVS Setting Up a Sysplex
z/OS MVS System Commands

Automation: N/A

Detecting Module: IXCHCCPL

Routing Code: N/A

Descriptor Code: N/A

IXCH0509I The current XCF Failure Detection Interval is set to *fdi* seconds. This satisfies the *checkowner_or_installation specification of parm seconds.*

Explanation: The check found good XCF failure detection interval status.

System action: The system continues processing normally.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation:

z/OS MVS Setting Up a Sysplex
z/OS MVS Initialization and Tuning Guide
z/OS MVS Initialization and Tuning Reference

Automation: N/A

Detecting Module: IXCHCCPL

Routing Code: N/A

Descriptor Code: N/A

IXCH0510E The current XCF Failure Detection Interval is NOT consistent

with the *checkowner_or_installation* recommendation.

Explanation: The current XCF Failure Detection Interval is set to *fdi* seconds. This is *higher/lower* than the *checkowner_or_installation* specification of *parm* seconds determined by equation (parameter 1) * (system timeout value) + (parameter 2)

System action: The system continues processing normally.

Operator response: Report the problem to the system programmer.

System programmer response: Adjust system timeout value or the XCF Failure Detection Interval.

To adjust the system timeout value issue 'SET EXS=xx' at operating system console. Update the EXSPATxx member of PARMLIB with 'SPINTIME=xx'.

To adjust the XCF Failure Detection Interval issue 'SETXCF COUPLE,INTERVAL=xx' at the operating system console. Update the COUPLExx member of PARMLIB with 'INTERVAL=xx'.

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation:

z/OS MVS Setting Up a Sysplex

z/OS MVS Initialization and Tuning Guide

z/OS MVS Initialization and Tuning Reference

Automation: N/A

Detecting Module: IXCHCCPL

Routing Code: N/A

Descriptor Code: N/A

IXCH0513I Sysplex Failure Management (SFM) is *state* on this system. This satisfies the *checkowner_or_installation* specification.

Explanation: The check found good SFM status on this system.

System action: The system continues processing normally.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCCPL

Routing Code: N/A

Descriptor Code: N/A

IXCH0514E The state of Sysplex Failure Management is NOT consistent

with the *checkowner_or_installation* recommendation.

Explanation: Sysplex Failure Management (SFM) is *state* on this system. The *checkowner_or_installation* specification requires that SFM be *parm*.

IXCH0601I • IXCH0602E

System action: The system continues processing normally.

Operator response: Report the problem to the system programmer.

System programmer response: Define an SFM policy with the administrative data utility IXCMIAPIU.

Start an SFM policy by issuing 'SETXCF START,POLICY,TYPE=SFM,POLNAME=xx' at the operating system console.

Stop an active SFM policy by issuing 'SETXCF STOP,POLICY,TYPE=SFM' at the operating system console.

IBM suggests that SFM should be ACTIVE.

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation:

z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCCPL

Routing Code: N/A

Descriptor Code: N/A

IXCH0601I The peak number of *type* is *peak*. This is less than the threshold *threshold*.

Explanation: The check found good status of peak number values.

System action: The system continues processing normally.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCCPL

Routing Code: N/A

Descriptor Code: N/A

IXCH0602E The sysplex couple dataset may need to be formatted to a

larger size.

Explanation: The peak number of *type* is *peak*. This is less than or equal to the maximum of *max* but is greater than or equal to the threshold of *threshold* determined by the maximum minus the check parameter.

System action: The system continues processing normally.

Operator response: Report the problem to the system programmer.

System programmer response: Format a larger sysplex couple dataset by running the format utility with new parameters. Switch the newly formatted couple dataset in as the new alternate. Then pswitch the alternate to the primary.

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation:

z/OS MVS Setting Up a Sysplex

Automation: N/A

Detecting Module: IXCHCCPL

Routing Code: N/A

Descriptor Code: N/A

IXCH0901I Transport classes that do not service group 'UNDESIG'.

CLASS NAME = The transport class name that does not service 'UNDESIG'.

**CLASS
NAME**

Explanation: Displays transport classes that do not service group UNDESIG.

System action: The system continues processing.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: N/A

Automation: N/A

Detecting Module: IXCHCSIG

Routing Code: N/A

Descriptor Code: N/A

IXCH0902I Transport classes that do not have at least the *checkowner_or_installation* specified value of *checkparm* signaling paths assigned to the indicated systems.

CLASS NAME = The Name of the transport class.

OTHER SYSTEM = The name of the connected system that contains less paths for the indicated transport class than needed to satisfy the check.

#PATHS FOUND = The inadequate number of paths that were found from this system to "OTHER SYSTEM".

**CLASS OTHER #PATHS
NAME SYSTEM FOUND**
----- ----- -----

Explanation: Displays transport classes that do not have at least the installation defined or default number of signaling paths defined.

System action: The system continues processing.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

IXCH0903I • IXCH0904I

Source: Parallel Sysplex (XCF)

Reference Documentation: N/A

Automation: N/A

Detecting Module: IXCHCSIG

Routing Code: N/A

Descriptor Code: N/A

IXCH0903I Number of operational paths that are less than the *checkowner_or_installation* specified value of *parm*.

PATH DIRECTION = The direction that has inadequate paths.
OTHER SYSTEM = The name of the connected system that has less than
the number of paths needed to satisfy the check.
#PATHS FOUND = The number of paths found from this system to
"OTHER SYSTEM".

PATH DIRECTION	OTHER SYSTEM	#PATHS FOUND
-----	-----	-----

Explanation: Displays the number of operational paths that are less than the installation defined or default value of paths.

System action: The system continues processing.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: N/A

Automation: N/A

Detecting Module: IXCHCSIG

Routing Code: N/A

Descriptor Code: N/A

IXCH0904I MAXMSG values that are less than the *checkowner_or_installation* specified value of *parm*.

MAXMSG VALUE = The value of the current MAXMSG value.
TYPE = An indicator of where the MAXMSG value was found
"COUPLE"/"CLASSDEF"/"PATHIN"/"PATHOUT".
NAME = This differs depending on the type.
COUPLE = "N/A"
CLASSDEF = The classname where MAXMSG is defined.
PATHIN/PATHOUT = The device number (CTCs) or the
structure name (STRs).

MAXMSG VALUE	TYPE	NAME
-----	-----	-----

Explanation: Displays the MAXMSG values that are less than the installation or default level.

System action: The system continues processing.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: N/A

Automation: N/A

Detecting Module: IXCHCSIG

Routing Code: N/A

Descriptor Code: N/A

IXCH0905I Information needed to adjust the MAXMSG value.

The following is a context description of the information:

PATHIN (PATHIN TYPE-NAME) is receiving (**MESSAGE SIZE**) byte messages from system (**OTHER SYSTEM**) at the time of the check. With a **MAXMSG** value of (**CURR. MAXMSG**) this inbound path can receive at most (**MESSAGES SUPPORTED**) messages at a time, which is less than the *checkowner_or_installation* specified minimum of *parm*.

PATHIN TYPE-NAME	= The type (CTC/STR)-(DEVICE#/STRUCTURE NAME).
MESSAGE SIZE	= The size in bytes of the longest message that the path can currently receive.
OTHER SYSTEM	= The name of the connected system.
CURR MAXMSG	= The current MAXMSG value.
MESSAGES SUPPORTED	= The number of messages currently supported.
SUGG. MAXMSG	= The check suggested MAXMSG value.

PATHIN TYPE-NAME	MESSAGE SIZE	OTHER SYSTEM	CURR. MAXMSG	MESSAGES SUPPORTED	SUGG. MAXMSG
-----	-----	-----	-----	-----	-----

Explanation: Displays the information needed to adjust the MAXMSG value to an appropriate level.

System action: The system continues processing.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: N/A

Automation: N/A

Detecting Module: IXCHCSIG

Routing Code: N/A

Descriptor Code: N/A

IXCH0906I • IXCH0907I

IXCH0906I Single points of failure in signaling.

PATH DIRECTION = The direction of the path PATHIN/PATHOUT.
OTHER SYSTEM = The name of the system the path is connected to.
RESOURCE TYPE = The type of resource that is the single point of failure. ex. "CF"
RESOURCE NAME = The name of the "RESOURCE TYPE".

NOTE: If there is only 1 path there can be no separation. Therefore if only 1 path is found it will receive the 'N/A ONLY 1 PATH' message.

PATH DIRECTION	OTHER SYSTEM	RESOURCE TYPE	RESOURCE NAME
-----	-----	-----	-----

Explanation: Displays single points of failure in signaling.

System action: The system continues processing.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: N/A

Automation: N/A

Detecting Module: IXCHCSIG

Routing Code: N/A

Descriptor Code: N/A

IXCH0907I Information needed to determine where couple dataset single points of failure are.

CDS TYPE = The type of couple dataset. ex. "CFRM" or "SYSPLEX"
CDS VOLSER = The volume serial where the couple dataset resides.
ALT/PRI = The word ALT or PRI to indicate the alternate or primary couple datasets respectively.
ALTERNATE OR PRIMARY DATASET NAME = The dataset name of the couple dataset.

CDS TYPE	CDS VOLSER	ALT /PRI	ALTERNATE OR PRIMARY DATASET NAME
-----	-----	-----	-----

Explanation: Displays information needed to find couple data set points of failure.

System action: The system continues processing.

Operator response: N/A

System programmer response: N/A

Problem determination: N/A

Source: Parallel Sysplex (XCF)

Reference Documentation: N/A

Automation: N/A

Detecting Module: IXCHCSIG

Routing Code: N/A

Descriptor Code: N/A

Chapter 4. IXG Messages

| **IXG001E LOGR POLICY SYNTAX ERROR ON
LINE# nnnn . THE VALUE SPECIFIED
FOR KEYWORD keyword IS NOT VALID.**

| **Explanation:** The LOGR Policy Processing has detected an error in the value for *keyword*.

In the message text:

nnnn

is the line number in which the syntax error was encountered.

keyword

is the keyword that contains an invalid value.

System action: The system ignores the keyword value and continues processing the remaining control statements. However, the control statements will only be checked for syntactical correctness and will not change the contents of the LOGR Policy.

User response: None.

Operator response: Notify the system programmer.

Application Programmer Response: None.

System programmer response: Correct the syntax error and rerun the XCF Administrative Data Utility.

Source: System Logger (SCLOG)

Detecting Module: MANY

Routing Code: -

Descriptor Code: -

| **IXG002E LOGR POLICY PROCESSING ENDED
WITH RETCODE=*retcode*
RSNCODE=*rsncode***

| **Explanation:** The LOGR Policy Processing ended with a non-zero return code when the policy was being updated using either the IXGINVNT service or the administrative data utility (IXCMIAPU).

In the message text:

| *retcode*
is the RETURN CODE.

| *rsncode*
is the REASON CODE.

| **System action:** Processing is terminated when the *retcode* value is greater than a warning condition (4). For warning conditions, processing continues.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: See the return and

reason code description documented for the IXGINVNT service in *z/OS MVS Programming: Assembler Services Reference IAR-XCT*. The return and reason codes documented for the IXGINVNT service also apply to the IXCMIAPU utility.

| If you also get message IXG003I, fields *diag1* and *diag2* contain information from fields ANSAA_DIAG1 and ANSAA_DIAG2 mapped by IXGANSAA. For example, if the system issues message IXG002 with RETCODE=00000008 and RSNODE=000000805, the IXGINVNT return and reason codes indicate that a dynamic allocation error occurred. The *diag1* and *diag2* fields of message IXG003I contain the specific dynamic allocation return code or DFSMS reason code. Refer to *z/OS MVS Programming: Authorized Assembler Services Guide* for meaning of the dynamic allocation return codes. For DFSMS reason codes, convert them from hexl to decimal and prefix them with IGD0 to get the associated DFSMS message. You can find the decimal DFSMS reason codes in *z/OS DFSMSdfp Diagnosis*. You can also find messages related to the error (such as IGD, IDC, IXG, IEF, or ICH messages) by looking in SYSLOG or OPERLOG.

Source: System Logger (SCLOG)

Detecting Module: MANY

Routing Code: -

Descriptor Code: -

| **IXG003I LOGR POLICY PROCESSING
ENCOUNTERED AN UNEXPECTED
ERROR. DIAGNOSIS INFORMATION:
*diag1-diag4***

| **Explanation:** Processing of the IXCMIAPU utility LOGR policy for the input line identified in message IXG005I ended with non-zero results. This message accompanies message IXG002E. You need to save the values presented in this message because they can provide useful diagnostic information for the IBM Support Center.

| In the message text:

| *diag1*

| *diag2*

| *diag3*

| *diag4*

| These four diagnostic fields (*diag1* - *diag4*) are mapped by the IXGANSAA answer area macro.

| **System action:** For error conditions, the processing of the current control statement ended. The system continues processing the remaining control statements. However, the control statements will only be checked for

IXG004I • IXG007E

| syntactical correctness and will not change the contents
| of the system logger inventory. For warning conditions,
| the processing of the current statement was completed
| but some non-terminal errors occurred. The system
| continues processing the remaining control statements.

User response: None.

Operator response: Contact the system programmer.

Application Programmer Response: None.

System programmer response: You need to save
the diagnostic information presented with this message.
If this error persists, report the problem to the IBM
Support Center.

Source: System logger (SCLOG)

Detecting Module: MANY

Routing Code: -

Descriptor Code: -

IXG004I LOGR POLICY PROCESSING ENDED WITHOUT ERROR

Explanation: The LOGR Policy Processing
successfully completed processing of a control
statement.

System action: The LOGR Policy Processing
processes the next control statement, if more exist.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGI1CMP

Routing Code: -

Descriptor Code: -

IXG005I LOGR POLICY PROCESSING LINE# nnnn

Explanation: The control statement beginning on line
nnnn is syntactically correct and the LOGR Utility has
begun to process the control statement verb that is on
line number nnnn.

In the message text:

nnnn

is the line number which contains the control
statement verb that is currently being processed.

System action: The LOGR Policy Processing
processes the control statement verb.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGI1FUN

Routing Code: -

Descriptor Code: -

IXG006I LOGR POLICY PROCESSING ENCOUNTERED AN UNEXPECTED ERROR. DIAGNOSIS INFORMATION: diag_info

Explanation: Processing of the IXCMIAPI utility ends
because of unexpected errors.

In the message text:

diag_info

Diagnostic information for use by IBM.

System action: Processing of the current control
statement ends. The system continues processing the
remaining control statements; however, the control
statements will only be checked for syntactical
correctness and will not change the contents of the
LOGR policy.

User response: None.

Operator response: Notify the system programmer.

Application Programmer Response: None.

System programmer response: Correct any syntax
errors indicated by IXG or ASA system messages. Then
resubmit the job. If the error persists, contact the IBM
Support Center and provide the diagnostic information.

Source: System logger (SCLOG)

Detecting Module: MANY

Routing Code: -

Descriptor Code: -

IXG007E A STORAGE MANAGEMENT SUBSYSTEM (SMS) ATTRIBUTE CLASS IS UNDEFINED.

Explanation: A storage class requested to define
attributes of staging data sets or log stream data sets is
not defined to the storage management subsystem
(SMS) and cannot be used for data set allocation.

System action: The LOGR Policy Processing
terminates processing of the current control statement
verb.

User response: None.

Operator response: Notify the system programmer.

Application Programmer Response: None.

System programmer response: Define the storage class to SMS and rerun the XCF Administrative Data Utility.

Source: System logger (SCLOG)

Detecting Module: IXGI3INV

Routing Code: -

Descriptor Code: -

IXG008E THE SYSTEM LOGGER ADDRESS SPACE IS NOT AVAILABLE

Explanation: The system logger address space is either not accepting requests for system logger services at this time or the system logger address space is not active.

System action: The LOGR policy processing can not process the control statement. The LOGR policy remains unchanged.

User response: None.

Operator response: Determine why the system logger address space is not available to accept service requests.

Application Programmer Response: None.

System programmer response: Once the system logger address space is active, rerun the XCF Administrative Data Utility.

Source: System logger (SCLOG)

Detecting Module: IXGI1INV

Routing Code: -

Descriptor Code: -

IXG009E THE MAXBUFSIZE VALUE IS NOT WITHIN THE VALID RANGE OR IS LESS THAN THE CURRENT VALUE

Explanation: The value specified for the MAXBUFSIZE keyword on either a DEFINE or UPDATE request is not valid. For a DEFINE request or UPDATE request, the value specified for the MAXBUFSIZE keyword is not within the range of acceptable values. The range of acceptable values is 1 to 65532. For an UPDATE request:

- the input MaxBufSize value specified is less than the MAXBUFSIZE value currently associated with a DASD-only log stream, or
- the current DASD-only MAXBUFSIZE value is greater than the MAXBUFSIZE value associated with the STRUCTNAME specified on the UPDATE request or the current structure MAXBUFSIZE value associated with the STRUCTNAME specified on the UPDATE request.

System action: System logger does not process the request.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: For a DEFINE request, specify a valid value for MAXBUFSIZE and reissue the request. For an UPDATE request, either specify a value within the valid range for MAXBUFSIZE that is greater than or equal to the current DASD-only MAXBUFSIZE value, or ensure that the structure specified for the STRUCTNAME keyword has a maximum buffer size that is greater than or equal to the current MAXBUFSIZE associated with the log stream specified on the update request.

Source: System logger (SCLOG)

Detecting Module: IXGI3INV

Routing Code: -

Descriptor Code: -

IXG010E NO SPACE IS AVAILABLE FOR type ENTRIES

Explanation: The system logger couple data set defined by the LOGR policy has no free space for the type of entry you are trying to define.

In the message text:

type

is the type of entry trying to be defined.

System action: The entry is not defined.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: Delete unneeded entries of this type or define a new couple data set for the LOGR policy, specifying a larger number of records for the type of entry you are trying to define. If you define a new couple data set, make it the primary data set for the LOGR policy using the SET™ command.

Source: System logger (SCLOG)

Detecting Module: MANY

Routing Code: -

Descriptor Code: -

IXG011E THE MAXIMUM NUMBER OF LOGSTREAMS ALLOWED FOR THIS STRUCTURE HAVE BEEN DEFINED

Explanation: There are no free list numbers for this structure. No additional logs treams may be defined to this structure.

System action: The log stream is not defined.

IXG012E • IXG015E

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: The log stream may be defined to a different structure of the structure may need to be deleted and redefined specifying a larger LOGSNUM value. If the LOGSNUM is increased, changes may need to be made to the LOGR Policy.

Source: System logger (SCLOG)

Detecting Module: MANY

Routing Code: -

Descriptor Code: -M

IXG012E **LOGSTREAM** *logstream* **ALREADY EXISTS**

| **Explanation:** The log stream name specified on a define request or the new log stream name on an update request already exists in the LOGR inventory couple data set.

In the message text:

logstream

| is the log stream name.

| **System action:** The system rejects the log stream define or update request with a return code 8, reason code X'080E' condition (see IxgRsnCodeStreamDefined in IXGCON macro).

User response: None.

Operator response: None.

Application Programmer Response: None.

| **System programmer response:** If you no longer need the existing log stream, delete it. Then you can reuse the name for a new or renamed log stream. If you still need the existing log stream, use a different log stream name for your new or renamed log stream.

Source: System logger (SCLOG)

Detecting Module: MANY

Routing Code: -

Descriptor Code: -

IXG013E **STRUCTURE** *strname* **ALREADY EXISTS**

Explanation: A structure entry with the same name already exists in the Log Data Inventory.

In the message text:

strname

| is the structure trying to be defined.

System action: The entry is not defined.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: If the current entry is no longer needed, then it may be deleted and a new entry can then be defined with the same name. If the current entry is needed, then a different structure name will have to be used when defining the new structure.

Source: System logger (SCLOG)

Detecting Module: MANY

Routing Code: -

Descriptor Code: -

IXG014E **LOGSTREAM** *logstream* **IS CURRENTLY IN USE**

Explanation: The log stream has one or more applications currently connected to it (this maybe an active or failed connection), so this update request or delete request is rejected.

In the message text:

logstream

The log stream you are trying to update or delete.

System action: The log stream is not updated/deleted.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: All the applications that are currently connected to this log stream must issue a DISCONNECT before the log stream can be updated/deleted. If the application is cancelled or ABENDS then a DISCONNECT will be issued for the application.

Source: System logger (SCLOG)

Detecting Module: MANY

Routing Code: -

Descriptor Code: -

IXG015E **STRUCTURE** *strname* **IS CURRENTLY IN USE**

Explanation: An attempt was made to delete a log stream that one or more structures currently reference.

In the message text:

strname

| is the structure trying to be deleted.

System action: The structure is not deleted.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: All the log streams that reference this structure will have to be deleted before the structure can be deleted.

Source: System logger (SCLOG)

Detecting Module: MANY

Routing Code: -

Descriptor Code: -

IXG016E THE VALUE SPECIFIED FOR THE LOGSNUM KEYWORD IS NOT WITHIN THE VALID RANGE

Explanation: The value specified for the LOGSNUM keyword is not within the range of acceptable values. The range of acceptable values is 1 through 512.

System action: The STRUCTURE is not defined to the LOGR Inventory.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: Define the structure with a valid value for LOGSNUM that is between 1 and 512.

Source: System logger (SCLOG)

Detecting Module: IXGI3INV

Routing Code: -

Descriptor Code: -

IXG017E LOGSTREAM *logstream* SPECIFIED ON A LIKE KEYWORD DOES NOT EXIST

Explanation: An attempt was made to update or delete a log stream that is not defined in the log date inventory.

In the message text:

logstream

is the log stream trying to be updated/deleted.

System action: The log stream is not updated/deleted.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: An incorrect name may have been specified for the log stream name, or the log stream may have already been deleted.

Source: System logger (SCLOG)

Detecting Module: MANY

Routing Code: -

Descriptor Code: -

IXG018E STRUCTURE *strname* DOES NOT EXIST

Explanation: The structure name specified on the STRUCTNAME parameter in the IXCMIAPU utility does not exist in the LOGR policy. One of the following occurred:

- You specified the name of the structure incorrectly.
- The structure specified has been deleted or has not been defined.

In the message text:

strname

is the name of the structure.

System action: The IXCMIAPU utility does not perform the request.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: Correct the structure name on the request. If necessary, use the REPORT parameter or the LIST request on the IXCMIAPU utility to identify the structure names in the LOGR policy.

Source: System logger (SCLOG)

Detecting Module: MANY

Routing Code: -

Descriptor Code: -

IXG019E LOGSTREAM *logstream* SPECIFIED ON A LIKE KEYWORD DOES NOT EXIST

Explanation: An attempt was made to use a log stream as a model, but the log stream specified on the LIKE keyword does not exist in the Log Data Inventory.

In the message text:

logstream

is the log stream trying to be used as a model..

System action: The log stream is not defined.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: An incorrect name may have been specified for the LIKE keyword, or the log stream may have been deleted.

Source: System logger (SCLOG)

Detecting Module: MANY

IXG020E • IXG031E

Routing Code: -

Descriptor Code: -

IXG020E *strname* IS INVALID FOR A STRUCTURE NAME

Explanation: The structure name specified is not valid.

In the message text:

strname

is the name of the structure.

System action: The structure is not defined/deleted.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: Change the name for the structure being defined/deleted to conform to the rules for a structure name.

Source: System logger (SCLOG)

Detecting Module: MANY

Routing Code: -

Descriptor Code: -

IXG021E *logstream* IS INVALID FOR A LOGSTREAM NAME

Explanation: The log stream name specified is not valid.

In the message text:

logstream

is the name of the log stream.

System action: The log stream is not defined/updated/deleted.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: Change the name for the structure being defined/updated/deleted to conform to the rules for a log stream name.

Source: System logger (SCLOG)

Detecting Module: MANY

Routing Code: -

Descriptor Code: -

IXG022E THE VALUE SPECIFIED FOR THE AVGBUFSIZE KEYWORD IS NOT WITHIN THE VALID RANGE

Explanation: The value specified for the AVGBUFSIZE keyword is not within the range of acceptable values. The range of acceptable values is 1 to the value of the MAXBUFSIZE keyword. When the MAXBUFSIZE default is taken, the MAXBUFSIZE value is 65536.

System action: The structure is not defined to the LOGR Inventory.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: Correct the AVGBUFSIZE keyword value and rerun the job.

Source: System logger (SCLOG)

Detecting Module: IXGI3INV

Routing Code: -

Descriptor Code: -

IXG030E THE INVENTORY FUNCTIONAL COUPLE DATASET IS NOT FORMATTED CORRECTLY

Explanation: The system logger couple data set contains inventory records that are not in the correct format for the current release of system logger.

System action: The STRUCTURE or LOGSTREAM request is not performed.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: Reformat the Inventory Functional Couple Dataset for the current release of system logger and rerun the XCF Administrative Data Utility.

Source: System logger (SCLOG)

Detecting Module: IXGI3INV

Routing Code: -

Descriptor Code: -

IXG031E LOGSTREAM *logstream* SPECIFIED ON A keyword KEYWORD IS NOT VALID FOR A LOGSTREAM NAME.

Explanation: The log stream name specified on the identified keyword is syntactically incorrect.

In the message text:

logstream
| is the log stream name.
| *keyword*
| is the keyword containing the error.

| **System action:** The log stream is not defined nor updated.

User response: None.

Operator response: None.

Application Programmer Response: None.

| **System programmer response:** Correct the log stream name value on the keyword to conform to the rules for a log stream name.

Source: System logger (SCLOG)

Detecting Module: MANY

Routing Code: -

Descriptor Code: -

IXG032E *name* SPECIFIED ON THE *keyword* KEYWORD IS INVALID.

Explanation: The value *name* is syntactically invalid.

In the message text:

name
is a value specified on the HLQ, LS_DATACLAS, LS_STORCLAS, LS_MGMTCLAS, STG_DATACLAS, STG_STORCLAS, OR STG_MGMTCLAS keyword.

keyword
One of the following:

HLQ
The High Level Qualifier keyword.

LS_MGMTCLAS
The SMS Management Class keyword used when allocating log stream data sets.

LS_STORCLAS
The SMS Storage Class keyword used when allocating log stream data sets.

LS_DATACLAS
The SMS Data Class keyword used when allocating log stream data sets.

STG_MGMTCLAS
The SMS Management Class keyword used when allocating log stream staging data sets.

STG_STORCLAS
The SMS Storage Class keyword used when allocating log stream staging data sets.

STG_DATACLAS
The SMS Data Class keyword used when allocating log stream staging data sets.

System action: The log stream is not defined.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: Correct the syntax error to conform to the LOGR policy rules for the HLQ, LS_DATACLAS, LS_MGMTCLAS, LS_STORCLAS, STG_DATACLAS, STG_MGMTCLAS and STG_STORCLAS keywords and resubmit the log stream request.

Source: System logger (SCLOG)

Detecting Module: MANY

Routing Code: -

Descriptor Code: -

IXG033E USER DOES NOT HAVE SAF AUTHORIZATION TO PERFORM THE *request* REQUEST

Explanation: The Inventory DEFINE, DELETE, UPDATE, LIST or REPORT(YES) request failed because the user did not have the required SAF authorization. Access to the following RESOURCES and CLASSES are required:

- Defining/deleting a structure entry:
 - Alter access to CLASS(FACILITY) RESOURCE(MVSADMIN.LOGR)
- Defining/updating/deleting a log stream entry:
 - Alter access to CLASS(LOGSTRM) RESOURCE(your.log stream)
 - Update access to CLASS(FACILITY) RESOURCE(IXLSTR.your_structure) if STRUCTNAME is specified on the log stream definition
- Reporting or List option:
 - Read access to CLASS(FACILITY) RESOURCE(MVSADMIN.LOGR)

In the message text:

request

One of the following:

DEFINE

A DEFINE log stream or DEFINE Structure request.

DELETE

A DELETE log stream or DELETE Structure request.

UPDATE

A UPDATE log stream request.

LIST

A LIST log stream or LIST Structure request.

REPORT

A REPORT(YES) request.

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System action: The Inventory request is not performed.

User response: None.

Operator response: Contact the system programmer.

Application Programmer Response: None.

System programmer response: Ensure that the userid associated with the request has the required SAF authorization to perform the request and resubmit the Inventory request.

Source: System logger (SCLOG)

Detecting Module: MANY

Routing Code: -

Descriptor Code: -

IXG034E DATA TYPE(LOGR) IS NOT SUPPORTED ON THE CURRENT LEVEL OF THE SYSTEM

Explanation: The administrative data utility cannot be run on the current level of the system for DATA TYPE(LOGR). System logger requires the system level to be version 5 release 2 of the MVS/ESA System Product or higher to perform system logger inventory requests.

System action: The inventory request is not performed.

User response: None.

Operator response: Contact the system programmer.

Application Programmer Response: None.

System programmer response: The request can only be run on a system with the required version and release of the MVS/ESA System Product. Resubmit the inventory request to run on a system with the correct version and release of the MVS/ESA System Product that is required for the desired inventory request.

Source: System logger (SCLOG)

Detecting Module: MANY

Routing Code: -

Descriptor Code: -

IXG035E THE VALUE SPECIFIED FOR THE LOWOFFLOAD KEYWORD IS NOT WITHIN THE VALID RANGE. THE RANGE OF ACCEPTABLE VALUES

Explanation: The value specified for the LOWOFFLOAD keyword is not within the range of acceptable values. The range of acceptable values is greater than or equal to 0 and less than the specified (or defaulted) HIGHOFFLOAD value.

System action: The LOGSTREAM is not defined to the LOGR Inventory.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: Correct the LOWOFFLOAD keyword value and rerun the job.

Source: System logger (SCLOG)

Detecting Module: IXGI3INV

Routing Code: -

Descriptor Code: -

IXG036E THE VALUE SPECIFIED FOR THE HIGHOFFLOAD KEYWORD IS NOT WITHIN THE VALID RANGE.

Explanation: The value specified for the HIGHOFFLOAD keyword is not within the range of acceptable values. The range of acceptable values is greater than the LOWOFFLOAD value and less than 100.

System action: The LOGSTREAM is not defined to the LOGR Inventory.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: Correct the HIGHOFFLOAD keyword value and rerun the job.

Source: System logger (SCLOG)

Detecting Module: IXGI3INV

Routing Code: -

Descriptor Code: -

IXG037E KEYWORD *keyword* CAN ONLY BE SPECIFIED WHEN THE LOGSTREAM IS DEFINED TO USE STAGING DATASETS TO DUPLEX LOG DATA.

Explanation: The value *keyword* can only be specified when the log stream is defined to use staging data sets to duplex log data resident in the coupling facility.

In the message text:

keyword

is a keyword specified on the LOGSTREAM DEFINE or UPDATE statement.

System action: The log stream is not defined nor updated.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: Remove the keyword or update the log stream definition to specify that staging data sets should be used to duplex coupling facility resident log data by specifying either the STG_DUPLEX=YES or DASDONLY=YES for the log stream. Note that DASDONLY=YES is not allowed on UPDATE LOGSTREAM requests.

Source: System logger (SCLOG)

Detecting Module: MANY

Routing Code: -

Descriptor Code: -

IXG040E THE VALUE SPECIFIED FOR KEYWORD *keyword* IS NOT WITHIN THE VALID RANGE OF 0 TO 16,777,215.

Explanation: The value specified for the *keyword* is not within the range of acceptable values. The range of acceptable values is 0 to 16 777 215.

In the message text:

keyword

One of the following:

LS_SIZE

the value of LS_SIZE is not in the acceptable range.

STG_SIZE

the value of STG_SIZE is not in the acceptable range.

System action: The log stream is not defined to the LOGR inventory.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: Correct the *keyword* value and rerun the job.

Source: System logger (SCLOG)

Detecting Module: IXGI3INV

Routing Code: -

Descriptor Code: -

IXG041E NO STRUCTURE DEFINED FOR LOGSTREAM *logstream*

Explanation: A structure name was not provided for this log stream through the STRUCTNAME keyword or defined for a log stream named on a LIKE keyword. A STRUCTNAME value is required to successfully define to the system logger inventory.

In the message text:

logstream

is the log stream that does not have a structure defined for it.

System action: The LOGSTREAM is not defined to the LOGR Inventory.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: Provide a value for the STRUCTNAME keyword or define a structure for the log stream referenced on the LIKE keyword.

Source: System logger (SCLOG)

Detecting Module: IXGI3INV

Routing Code: -

Descriptor Code: -

IXG047I THE LOGR COUPLE DATA SET IS INACCESSIBLE ON SYSTEM *sysname*

Explanation: The LOGR couple data set has become inaccessible.

In the message text:

sysname

is the name of the system which has lost access to the LOGR couple data set.

System action: The IXGLOGR address space ended because access to a couple data set is required in order to run system logger services.

User response: None.

Operator response: Determine why the couple data set is not available. Correct the access problem and start the IXGLOGR address space again. See the explanation for the IXG056I message for information about starting the system logger address space again.

Application Programmer Response: None.

System programmer response: Not applicable.

Source: System logger (SCLOG)

Detecting Module: IXGI3IYT

Routing Code: 2,10

Descriptor Code: 4

IXG049I LOGR COUPLE DATA SET FORMAT LEVEL: *n*

Explanation: This message is used to display information regarding the LOGR couple data set format level.

In the message text:

n indicates the format level of this couple data set.

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Where HBB5220 indicates this LOGR CDS was formatted at a release level before HBB6603.

Where HBB6603 indicates this LOGR CDS was formatted at release HBB6603 or a higher level.

System action: None.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System Logger (SCLOG)

Detecting Module: MANY

Routing Code: -

Descriptor Code: -

IXG051I SYSTEM LOGGER ADDRESS SPACE CREATE FAILED.

Explanation: The system logger address space create (ASCRE) failed.

System action: The system does not start the system logger component.

User response: None.

Operator response: Contact the system programmer.

Application Programmer Response: None.

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

Source: System logger (SCLOG)

Detecting Module: IXGBLF00

Routing Code: 2,10

Descriptor Code: 4

IXG052I SYSTEM LOGGER ALREADY ACTIVE.

Explanation: An operator attempted to start the system logger component through the START command when the system logger component was already active in the MVS.

System action: None.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGBLF01

Routing Code: 2

Descriptor Code: 5

IXG053I SYSTEM LOGGER DID NOT INITIALIZE BECAUSE *reason*

Explanation: An attempt was made to start system logger, but the system detected a condition that caused system logger initialization to fail.

In the message text:

reason

One of the following:

THE SYSTEM IS IN XCF LOCAL MODE

System logger requires sysplex mode.

IXGLOGR=NOSTART SPECIFIED ON LOGR SUBSYS

The installation specified INITPARM(IXGLOGR=NOSTART) in an IEFSSNxx parmlib member, which results in the IXGLOGR address space not being started on this system.

System action: The system does not start system logger, meaning the IXGLOGR address space is not active nor available for the duration of this IPL.

When the IXGLOGR address space is not available for reason IXGLOGR=NOSTART SPECIFIED ON LOGR SUBSYS, the following system actions result:

1. The LOGR (or named) subsystem functional routines were established.
However, any JCL DD SUBSYS=(LOGR,exit,...) or dynamic allocation equivalents will likely result in the subsystem exit routine encountering a return code 8, reason code 0814x condition. See IxgRsnCodeNotAvailForIPL in IXGCON macro.
For example, if the logger subsystem default exit IXGSEXIT was requested in this environment, then system logger message IXG511I would be issued indicating the IXGCONN service failed with the return and reason codes listed above.
Errors returned by any system logger subsystem exit routine will cause system logger to issue message IXG504I indicating the exit error condition.
2. Attempts to start the IXGLOGR address space (re: IXGLOGRS procedure) will not complete successfully as system logger will not allow the IXGLOGR address space to start because of the IXGLOGR=NOSTART specification.
3. Any system logger API (IXGxxxx) service request made on this system will result in the requester receiving a return code 8, reason code 0814x (IxgRsnCodeNotAvailForIPL) condition.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: If system logger

services are required, then plan and process the appropriate configuration changes that ensure the correct environment, and re IPL the system.

Source: System logger (SCLOG)

Detecting Module: IXGBLF01

Routing Code: 11

Descriptor Code: 6

IXG054A LOGR COUPLE DATA SET NOT AVAILABLE. MAKE A COUPLE DATA SET AVAILABLE OR REPLY C TO CANCEL THE *name* REQUEST.

Explanation: No Couple Data Set of type LOGR is available. Either make a Couple Data Set of type LOGR available so that IXGLOGR address space initialization can continue or reply C to cancel the IXGLOGR address space.

In the message text:

name

is the name of the job requesting system logger services.

System action: Processing for the requested system logger service stops. The system issues message IXG054 to prompt the operator to make a LOGR couple data set available or to reply C to cancel the request from the named job. If a LOGR couple data set becomes available, then IXGLOGR address space continues processing the request. If the operator replies C then the IXGLOGR address space rejects the request.

User response: None.

Operator response: Make a valid LOGR couple data set available if system logger services are intended to be available for operation at the installation. Otherwise, reply C.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGBLF01

Routing Code: 1,2

Descriptor Code: 2

IXG055I SYSTEM LOGGER WILL NO LONGER ISSUE SMF RECORDS

Explanation: The task that issues system management facility (SMF) records on behalf of logger took an unexpected abend and no more records will be issued.

System action: System logger will no longer issue SMF records.

User response: None.

Operator response: Contact system programmer.

Application Programmer Response: None.

System programmer response: Search the problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center with the dump. If SMF records are essential to installation operations, consider taking down the IXGLOGR address space (this will impact any executing system logger applications) and then restarting system logger.

Source: System logger (SCLOG)

Detecting Module: IXGBLF01

Routing Code: 10

Descriptor Code: 4

IXG056I SYSTEM LOGGER ADDRESS SPACE HAS ENDED*text*

Explanation: The system logger address space has ended.

In the message text:

IXGLOGR IS AUTOMATICALLY RESTARTING.

IXGLOGR CANNOT BE AUTOMATICALLY RESTARTED.

OPERATOR ISSUED FORCE COMMAND. MANUAL RESTART REQUIRED.

System action: System logger services will be unavailable until the address space is restarted.

User response: None.

Operator response: Contact the system programmer.

Application Programmer Response: None.

System programmer response: System logger will attempt to automatically restart unless the system logger address space termination was due to operator command, or system logger has failed two auto restart attempts consecutively (an attempt at restarting is considered failed if logger is unable to initialize). If the system logger address space was not ended due to operator command, determine what caused the system logger address space to end by checking for error messages and by checking for any dumps created by the system logger address space. If the cause was not related to a configuration problem (such as if system logger lost access to the TYPE=LOGR couple data set) then contact the IBM Support Center.

Source: System logger (SCLOG)

Detecting Module: IXGR1EOT

Routing Code: 2,10

Descriptor Code: 4

IXG057I	SYSTEM LOGGER ADDRESS SPACE INITIALIZATION FAILED DIAGNOSTIC INFORMATION: <i>diag1 diag2 diag3 diag4</i>
----------------	--

Explanation: The system logger address space has failed to initialize.

In the message text:

diag1, diag2, diag3, diag4
is diagnostic information relating to the failure.

System action: System logger services will be unavailable until the problem is corrected and the address space restarted.

User response: None.

Operator response: Contact system programmer.

Application Programmer Response: None.

System programmer response: If system logger services are required, you can attempt to restart the address space through "S IXGLOGRS" command. Should the problem persist, then contact the IBM Support Center and provide the diagnostic fields included in the message.

Source: System Logger (SCLOG)

Detecting Module: IXGBLF01

Routing Code: 2,10

Descriptor Code: 4

IXG058E	LOGSTREAM CONNECTIONS MAY HAVE BEEN LOST DUE TO SYSTEM LOGGER TERMINATION
----------------	--

Explanation: One or more log streams were lost when system logger terminated.

System action: System logger services will be unavailable until the system logger address space is restarted. If the system logger address space unexpectedly terminated, system logger will attempt to automatically restart. If the restart attempt is successful, message IXG058 will be DOMed. If system logger is unable to restart automatically, see message IXG056I and message IXG067E for further assistance.

User response: None.

Operator response: Contact system programmer.

Application Programmer Response: None.

| **System programmer response:** If you require the system logger services, restart the address space through the "S IXGLOGRS" command. Look for the cause of the problem by checking for other system messages or dumps issued at the time that system logger terminated.

Source: System Logger (SCLOG)

Detecting Module: IXGR1EOT

Routing Code: 1,10

Descriptor Code: 11

IXG059I	CORRUPTED INDEX ENTRY DETECTED IN LOGR CDS. <i>text</i>
----------------	--

Explanation: An index record entry in the LOGR CDS has been corrupted with invalid characters or the index record entry references another CDS record that is not valid.

In the message text:

indexnum is the position of the corrupted entry in the index entry record.

indexent is the first 26 bytes of the corrupted index entry in hexadecimal.

SYSTEM INDEX ENTRY *indexnum* **HAS BEEN
DELETED.** *indexentnnnnn n*

LOGSTREAM INDEX ENTRY *indexnum* **HAS BEEN
DELETED.** *indexentnnnnn n*

System action: The system has made a component trace exception record containing the bad entry. The index entry has been deleted.

User response: None.

Operator response: Not applicable.

Application Programmer Response: None.

System programmer response: System logger may need to be recycled (S IXGLOGRS command) if it could not continue processing with the corrupted record.

Source: System Logger (SCLOG)

Detecting Module: IXGI3IWT

Routing Code: -

Descriptor Code: 4

IXG060I	invldcnt CORRUPTED ENTRIES WERE DETECTED IN THE LOGR CDS <i>text</i>
----------------	---

Explanation: One or more index record entries in the LOGR CDS has been corrupted with invalid characters.

In the message text:

invldcnt is the number of invalid entries in the index record.

System action: For each corrupted index entry, a component trace exception record has been cut containing the bad entry.

User response: None.

Operator response: Not applicable.

Application Programmer Response: None.

System programmer response: Not applicable.

Source: System Logger (SCLOG)

Detecting Module: IXGI3IYT

Routing Code: -

Descriptor Code: 4

**IXG061I *restrcnt* OF *invldcnt* CORRUPTED
ENTRIES IN THE LOGR CDS *text***

Explanation: Zero or more corrupted index record entries in the LOGR CDS have been restored to their correct values.

In the message text:

restrcnt is the number of restored entries in the index record.

invldcnt

is the number of invalid entries in the index record.

STRUCTURE INDEX RECORD HAVE BEEN RESTORED.

LOGSTREAM INDEX RECORD HAVE BEEN RESTORED.

System action: Not applicable.

User response: None.

Operator response: Not applicable.

Application Programmer Response: None.

System programmer response: This message and message IXG060I may be issued several times since system logger may not be able to restore all of the corrupted entries to their correct values at once. Normal progress is being made if successive messages indicate one (or more) corrupted entries have been restored and the number of corrupted entries detected decreases. If normal progress is not being made or if a related ABEND1C5 occurs, contact the IBM Support Center for assistance.

Source: System Logger (SCLOG)

Detecting Module: IXGI3IYT

Routing Code: -

Descriptor Code: 4

**IXG062A SYSTEM LOGGER CLEANUP NOT
PROCESSING FOR *jobname*, *waitcount*
ASYNCH EVENTS NOT DONE. REPLY
TO CONTINUE TERMINATION.**

Explanation: System logger has detected that cleanup of asynchronous events associated with the named address space of asid is not processing.

In the message text:

jobname

is the name of the address space or ASID that is terminating.

waitcount

is the number of asynchronous events that have not completed yet.

System action: The system continues to wait for the asynchronous events related to the address space to complete. If progress is detected, the message will be automatically DOMed, and system logger will continue to wait for all asynchronous events to complete. When all asynchronous events complete, the messages will be DOMed, and system logger will continue cleanup.

User response: None.

Operator response: Display system logger and/or GRS activity to see if any contention exists for system resources.

Application Programmer Response: None.

System programmer response: Determine if the address space in the message is having problems finishing its processing, or if the address space is waiting for other address spaces to finish their processing. Next, determine if IXGLOGR is waiting for asynchronous activity to finish. It may be necessary to terminate users of the address space in the message; for example, if RRS is terminating, then there may be clients of RRS that have outstanding system logger operations in progress. If this does not succeed, reply to this message with any character. System logger will continue the cleanup without waiting for the asynchronous events to complete. This may cause jobs that are still using log streams owned by the terminating address space to abend.

Source: System Logger (SCLOG)

Detecting Module: IXGWORKT, IXGMSG

Routing Code: 1,2

Descriptor Code: 2

**IXG063I LOGGER ABENDED AND REQUESTED
AN SVC DUMP WHILE PROCESSING
LOGSTREAM: *logstream* STRUCTURE:
strname GROUP: *groupname*
dumptitleinfo**

Explanation: System logger has entered software recovery processing while processing for the named resources.

In the message text:

logstream

is the name of the log stream being used. If no log stream can be identified, the value of this field will be **UNKNOWN**.

strname

is the name of the structure being used. If no

IXG064I • IXG065I

structure can be identified, or this is a DASDONLY log stream, the value of this field will be ****UNKNOWN****.

| **group**
| is the name of the group that the log stream
| belongs to. It can be either PRODUCTION or
| TEST. The value will be ****UNKNOWN**** if not
| known.

dumptitleinfo

is part of the dump title used when requesting a dump associated with this message. The full dump title is of the form:

```
COMPON=LOGGER,COMPID=5752SCL0G,ISSUER=IXGR1REC,  
MODULE=IXGxxxxx,ABEND=yyyyy,REASON=zzzzzzz
```

System action: The system analyzes the error related to the named resources and gathers diagnostic data. The system attempts a retry if it is deemed appropriate. Otherwise "Continue-With-Termination" is indicated.

User response: None.

Operator response: Check for any error messages or dumps related to system logger and the named structure and log stream. If you cannot determine the cause of the condition, notify the System programmer.

Application Programmer Response: None.

| **System programmer response:** This message
| identifies the log stream where the problem originated. If
| you can identify contention or other serious problems
| with this log stream or structure, you need to terminate
| applications that are using this log stream or structure.
| See System Logger Recovery section, in *z/OS MVS*
| *Setting Up a Sysplex* for collecting additional
| documentation and for a discussion of further actions
| that you might need to take. If you cannot resolve the
| problem, contact the IBM Support Center.

Source: System Logger (SCLOG)

| **Detecting Module:** IXGR1REC,IXGR1REC,IXGXMSG

Routing Code: 2,10

Descriptor Code: 4

IXG064I IMPROPER ATTEMPT TO INITIALIZE LOGGER

Explanation: There was an attempt to initialize system logger in an improper manner.

System action: An improper attempt to initialize system logger has been rejected. System logger is prevented from being submitted as a job, and from being started as a task inappropriately. There is no effect on the system logger address space.

User response: None.

Operator response: If desired, system logger may be initialized by referencing the IXGLOGRS procedure.

Application Programmer Response: None.

System programmer response: The correct method of starting system logger is by an IPL or through the S IXGLOGRS command.

Source: System Logger (SCLOG)

Detecting Module: IXGBLF00, IXGBLF01

Routing Code: 2,10

Descriptor Code: 4

IXG065I SYSTEM *sysname* NOT USING *cstype* LOGGER COUPLE DATA SET, CDS WITH *fmlvlb* FORMAT LEVEL IS HIGHER THAN THIS SYSTEM CAN USE, THE HIGHEST FORMAT LEVEL SUPPORTED BY THIS SYSTEM IS *fmlvlh*.

Explanation: The LOGR couple data set is not useable on this system because this system is not at the minimum release level required to use the couple data set.

In the message text:

sysname	The name of the system that cannot use the LOGR couple data set.
cstype	One of the following couple data sets: PRIMARY The primary LOGR CDS. ALTERNATE The alternate LOGR CDS.
fmlvlb	The format level or version of the LOGR couple data set that is not supported by this system release level. If "UNKNOWN" appears in the message, then this release simply does not have the compatibility support applied to identify the unsupported format level.
fmlvlh	The highest format level or version of a couple data set that is supported by this system release level.

System action: Processing continues. Messages IXC251I and IXC250I are also issued, and they identify the name of the LOGR couple data set being rejected because of the data set consistency checking on this system. If the rejection of the couple data set causes this system to not have access to a primary LOGR couple data set, then message IXG054A will be issued requesting that a LOGR couple data set be made available. Until a primary LOGR couple data set is made available to this system, no logger functions can be exploited by the system, such as updating logger inventory (policy) information or connecting to any log streams.

User response: None.

Operator response: Notify the system programmer.

Application Programmer Response: None.

System programmer response: If this release level system needs to be brought into the sysplex, then refer to *z/OS MVS Setting Up a Sysplex* for information about formatting the LOGR couple data set and making it available to the sysplex, in addition to guidance on handling LOGR couple data set format levels and required release levels. If it is intended to use these LOGR couple data set(s) formatted at a higher level than this system can use, then re-IPL this system at the appropriate release level.

Source: System Logger (SCLOG)

Detecting Module: IXGINVF

Routing Code: 1,2,10

Descriptor Code: 12

IXG066I SYSTEM LOGGER EVENT MONITOR IS NOT ACTIVE.

Explanation: The task that monitors system logger events (such as logstream offloads and allocation/HSM requests) terminated abnormally. No more system logger event monitoring will be performed on this system unless system logger or the system is restarted.

System action: System logger will no longer monitor events, including offload activity and data set allocation and recall requests.

User response: None.

Operator response: Contact system programmer.

Application Programmer Response: None.

System programmer response: Search the problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center with the dump. If monitoring is essential to installation operations, consider taking down the IXGLOGR address space (this will impact any executing system logger applications) and then restarting the system logger (through START IXGLOGRS).

Source: System Logger (SCLOG)

Detecting Module: IXGBLF01

Routing Code: 10

Descriptor Code: 4

IXG067E ISSUE S IXGLOGRS TO RESTART SYSTEM LOGGER

Explanation: System logger has been terminated. The START IXGLOGRS command is required to restart system logger.

System action: None.

User response: None.

Operator response: Contact system programmer.

Application Programmer Response: None.

System programmer response: System logger is unable to automatically restart because IXGLOGR was ended due to operator command or has failed two consecutive restart attempts (an attempt is considered failed if logger is unable to initialize). See message IXG056I for the reason IXGLOGR is unable to auto restart. If the system logger address space did not end due to operator command, then determine what caused the system logger address space to end by checking for error messages and by checking for any dumps. If the cause was not related to a configuration problem (such as if system logger lost access to the TYPE=LOGR couple data set) then contact the IBM Support Center.

Source: System Logger (SCLOG)

Detecting Module: IXGR1EOT

Routing Code: 1,10

Descriptor Code: 11

IXG068D CONFIRM LOGGER TO CONVERT DRXRC-TYPE RESOURCES ON THIS IPL. REPLY Y TO CONVERT THEM OR N TO NOT CONVERT THEM

Explanation: When the system is IPLED with system parameter DRMODE=YES, it indicates that a recovery system is being IPLED as part of a disaster recovery scenario and special handling of certain resources are required. The system issues system logger message IXG068D to allow the installation to confirm that system logger should identify and convert any DRXRC-type resources. That is, system logger will make existing DRXRC-type staging data sets available for log stream recovery, and any log streams with STG_DUPLEX(YES), DUPLEXMODE(DRXRC) currently specified will be converted to STG_DUPLEX(NO).

It is assumed the necessary actions, (e.g. XRC XEND and XRECOVER commands) have been taken to establish the DASD consistency groups related to the system logger data sets before this recovery system being IPLED with DRMODE=YES.

Following this message confirmation, system logger messages IXG072I, IXG224I and IXG069I will be issued when system logger has taken action to include the appropriate log stream DRXRC-type resources in log stream data recovery. If the DRXRC convert processing cannot be completed, message IXG073D will be issued requesting an additional response before system logger honors log connections or LOGR couple data set inventory updates or both.

System action: System logger initialization processing stops until the operator replies to this message. Following the response, system logger initialization processing continues. See Operator Response later in this section for more details.

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Operator response: Choose one of the following replies:

- Y** To request that system logger initialization continue and allow system logger to **include** DRXRC-type staging data sets in its log data recovery for coupling facility structure-based log streams that had been connected before this IPL. Following this response, system logger messages, such as IXG072I, IXG224I and IXG069I, will be issued when system logger has taken action to include the appropriate log stream DRXRC-type staging data sets in log data recovery.
- N** To request that system logger initialization continue and requests system logger to **NOT convert** DRXRC-type staging data sets for log stream recovery at this time.
- For log streams using DRXRC-type staging data sets, the N reply will be treated by system logger as if the system were IPLED with DRMODE=NO. If the only copies of some log streams primary (interim) log data are in a DRXRC-type staging data sets and the reply N is used, the recovery for these log streams might not succeed (message IXG212E) and the log streams marked as damaged ("possible loss of data").

If an incorrect reply is entered, the system issues message IXG116I to notify the operator of the error. The system then reissues message IXG068D.

Regardless of the response to message IXG068D, system logger conventional system level log stream recovery and log stream connection recovery will be performed for log streams that had failed connections.

User response: None.

Application Programmer Response: None.

System programmer response: Consult with the installation storage administrator and determine that it is appropriate for system logger to make use of DRXRC-type staging data sets for log stream recovery purposes on this system. DRXRC-type staging data sets would have been established in certain system logger configurations in order to allow staging data set DASD mirroring to occur asynchronously from log stream write activity. This means that these DRXRC-type staging data sets should only be used for log stream recovery when it has been determined that all the related mirrored DASD, for example, couple data sets, offload data sets, etc., within the same consistency group are also being used to restore the system and sysplex.

Use the D XCF,C,TYPE=LOGR and D LOGGER,C,SYSPLEX commands or use the IXCMIAPI DATA TYPE(LOGR) utility with the LIST LOGSTREAM NAME(*) DETAIL options to help identify which log streams are using DRXRC-type staging data

sets and need conversion for log data recovery use.

Source: System Logger (SCLOG)

Detecting Module: IXGC4XRC

Routing Code: -

Descriptor Code: -

IXG069I SYSTEM LOGGER DRXRC-TYPE RESOURCES MADE AVAILABLE FOR LOGSTREAM RECOVERY

Explanation: The system was IPLED with system parameter DRMODE=YES and the operator replied Y to message IXG068D and system logger completed its identification and preparation of the log stream resources needing recovery.

System action: Processing continues.

For each of the affected log streams, system logger had already taken the following actions before issuing IXG069I:

- The log stream's attributes are updated to STG_DUPLEX(NO), and the message IXG224I is issued for each updated log stream.
- System level recovery of the log stream data has been initiated for the log streams that had failed connections from the same system name as this recovery system just IPLED.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: Once message IXG069I is issued, all the log streams that had DRXRC-type staging data sets in use on the primary (production) sysplex site now have the DRXRC-type staging data sets ready for log stream recovery purposes on the secondary (recovery) sysplex site. As additional recovery systems are IPLED in the recovery sysplex site, DRMODE=YES will not need to be specified or a reply of N can be entered in response to IXG068D on those other recovery systems.

Source: System Logger (SCLOG)

Detecting Module: IXGC4XRC

Routing Code: 2

Descriptor Code: 4

IXG070I ANTRQST REQUEST FOR OBTAINING THE CONSISTENCY TIME FAILED WITH RETCODE=*retcode* RSNCODE=*rsncode*

Explanation: Loggers attempt to obtain the consistency time from XRC session failed. Refer to message IXG071D to indicate how system logger should proceed.

In the message text:

- | `retcode` is the error return code from the ANTRQST API request.
- | `rsnocode`
- | is the error reason code from the ANTRQST API request.

System action: System logger also issued message IXG071D and initialization processing stops until you provide a reply.

Operator response: Notify the system programmer.

User response: None.

Application Programmer Response: None.

System programmer response: Consult with the installation storage administrator and determine whether any log stream DRXRC-type staging data sets need to be managed for this DRMODE=YES IPL. Use the D XCF,C,TYPE=LOGR and D LOGGER,C,SYSPLEX commands or use the IXCMIAPI DATA TYPE (LOGR) utility with the REPORT(YES) and LIST LOGSTREAM NAME(*)DETAIL options to help identify which log streams are using DRXRC-type staging data sets and need conversion for log data recovery use.

Use the necessary XRC commands, (e.g. XQUERY) services to identify the cause of the problem and make the necessary corrections. See the *z/OS DFSMS Advanced Copy Services* for an explanation of the ANTRQST service return and reason codes.

If RETCODE=7101 RSNCODE=3554068441 appears in the IXG070I message, system logger converted the XRC return information because a zero time stamp was received.

Contact the IBM Support Center and provide the diagnostic information.

Reply to message IXG071D to allow system logger initialization to continue.

Source: System Logger (SCLOG)

Detecting Module: IXGC4XRC

Routing Code: 2,10

Descriptor Code: 7,11

IXG071D REPLY R TO RETRY OR U TO USE THE CURRENT TIME AS THE CONSISTENCY TIME.

Explanation: Loggers attempt to obtain the consistency time from XRC session failed. Message IXG070I will have the return and reason code for the service failure. To perform the recovery operation, system logger needs a consistent time view from XRC. System logger uses the consistency time for managing converted DRXRC-type staging data set resources during log stream log data recovery.

System action: System logger initialization processing stops and the system logger address space has been made partially available mainly for display purposes. Following the response, the remaining system logger DRXRC conversion is attempted again or terminated. See Operator Response later in this section for more details.

Operator response: Notify the system programmer, then respond to the message by selecting one of the following replies:

- R** To request that system logger retry to obtain the consistency time from XRC. Use this response after taking the steps to remedy the reason for the failure identified in message IXG070I.
- U** To request that system logger use the current time as the consistency time for managing converted DRXRC-type staging data set resources during log stream log data recovery. System logger will include all log stream log data in any converted DRXRC-type staging data set during the log stream recovery.

If you enter an incorrect reply, the system issues message IXG116I to notify the operator of the error. The system then reissues message IXG070D.

Regardless of the response to message IXG071D, system logger conventional system level log stream connection recovery will be performed for log streams that had failed connections.

User response: None.

Application Programmer Response: None.

System programmer response: Consult with the installation storage administrator and determine whether any log stream DRXRC-type staging data sets need to be managed for this DRMODE=YES IPL.

Use the D XCF,C,TYPE=LOGR and D LOGGER,C,SYSPLEX commands or use the IXCMIAPI DATA TYPE(LOGR) utility with the REPORT(YES) and LIST LOGSTREAM NAME(*)DETAIL options to help identify which log streams are using DRXRC-type staging data sets and need conversion for log data recovery use.

Use the necessary XRC commands, (e.g. XQUERY) and services to identify the cause of the problem and make the necessary corrections. Refer to *z/OS DFSMS Advanced Copy Services* for an explanation of the ANTRQST service return and reason codes. If RETCODE=7101 RSNCODE=3554068441 appears in the IXG070I message, then system logger converted the XRC return information because a zero time stamp was received.

Contact the IBM Support Center and provide the diagnostic information.

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Reply to message IXG071D to allow system logger initialization to continue.

Source: System Logger (SCLOG)

Detecting Module: IXGC4XRC

Routing Code: 1,2

Descriptor Code: 2

IXG072I CONSISTENCY TIME OF *conntime* IS BEING USED BY LOGGER FOR DRXRC RECOVERY PURPOSES

Explanation: System logger uses the consistency time (UTC or coordinated universal time) for managing converted DRXRC-type staging data set resources during log stream log data recovery.

In the message text:

conntime

The consistency time obtained from XRC ANTRQST macro.

System action: Processing continues.

If message IXG070I and IXG071D were issued and the reply was **U**, then system logger obtained the current time and will include all log stream log data in any converted DRXRC-type staging data sets.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System Logger (SCLOG)

Detecting Module: IXGC4XRC

Routing Code: 2

Descriptor Code: 4

IXG073D LOGGER DRXRC CONVERSION HAS NOT COMPLETED. REPLY R TO RETRY OR C TO CANCEL DRXRC PROCESSING.

Explanation: The system was IPLed with system parameter DRMODE=YES. When DRMODE=YES is specified in combination with a Y reply to message IXG068D, it indicates that a recovery system is being IPLed as part of a disaster recovery scenario and special handling of certain resources are required.

However, system logger had not been able to complete its identification and preparation, meaning conversion, of the log stream resources needing recovery. System logger needs this process to be completed in order to recover the data from these resources.

System action: System logger initialization processing stops and the system logger address space has been

made partially available mainly for display purposes. Following the response, the remaining system logger DRXRC conversion is attempted again or terminated. See Operator Response below for more details.

User response: None.

Operator response: Choose one of the following replies:

- R** To request that system logger retry the process of converting (identifying and preparing) any remaining log stream DRXRC-type resources. This makes the DRXRC-type resource available for log stream recovery. If the above processing is finished then message IXG069I will be issued indicating that system logger DRXRC-type resources are now available for log stream recovery.
- C** To request that system logger cancel the process of converting (identifying and preparing) any remaining log stream DRXRC-type resources.

For log streams using DRXRC-type staging data sets, and not yet converted, the C reply will be treated by system logger as if the system were IPLed with DRMODE=NO. If the only copies of some log streams primary (interim) log data are in a DRXRC-type staging data sets, then the recovery for these log streams might not succeed (message IXG212E) and the log streams marked as damaged (possible loss of data).

If an incorrect reply is entered, the system issues message IXG116I to notify the operator of the error. The system then reissues message IXG073D.

Regardless of the response to message IXG073D, system logger conventional system level log stream recovery and log stream connection recovery will be performed for log streams that had failed connections.

Application Programmer Response: None.

System programmer response: Use the D XCF,C,TYPE=LOGR and D LOGGER,C,SYSPLEX commands or use the IXCMIAPI DATA TYPE(LOGR) utility with the REPORT(YES) and LIST LOGSTREAM NAME(*) DETAIL options to help identify which log streams are using DRXRC-type staging data sets and still need conversion for log data recovery use.

Consult with the installation storage administrator and determine where the DRXRC-type staging data sets reside and make sure all of them are online so system logger can get access to the couple data set.

Source: System Logger (SCLOG)

Detecting Module: IXGBLF01

Routing Code: 1,2

Descriptor Code: 2

IXG074I	SYSTEM LOGGER SERVICES DISABLED FOR GROUP: TEST
	<p>Explanation: The system logger TEST group service tasks failed. D LOGGER, ST will identify that the system logger TEST environment is not operational.</p> <p>System action: The system takes the following actions:</p> <ul style="list-style-type: none"> • Disconnects all log streams defined with GROUP(TEST) from the system. • Might issue other messages, such as IXG063I. • Issues an ENF signal for each disconnected log stream <p>Note: Although system logger services have been disabled for TEST log streams, the system still permits the SETLOGR FORCE,DELETE,LSN=xxx command and might permit DEFINE and UPDATE commands for TEST log streams.</p> <p>Operator response: Notify the system programmer.</p> <p>User response: None.</p> <p>Application Programmer Response: None.</p> <p>System programmer response: If this TEST group is critical, you must restart the system logger address space (IXGLOGR)</p> <p>Source: System Logger (SCLOG)</p> <p>Detecting Module: IXGBLF01</p> <p>Routing Code: 2, 10</p> <p>Descriptor Code: 3</p>
IXG075E	SYSTEM LOGGER CONSTRAINED FOR GROUP: PRODUCTION
	<p>Explanation: Log streams defined with group attribute PRODUCTION cannot be connected because the system is constrained or log streams in other groups might have consumed some of the allotted set of resources required for log stream connections.</p> <p>System action: The connection request is rejected</p> <p>Operator response: Notify the system programmer.</p> <p>User response: None.</p> <p>Application Programmer Response: None.</p> <p>System programmer response: TEST log streams connections might prevent PRODUCTION log streams from connecting. You might need to disconnect TEST log streams in order for the PRODUCTION connection to succeed.</p> <p>Source: System Logger (SCLOG)</p> <p>Detecting Module: IXGC4CON</p> <p>Routing Code: 2,10</p>

Descriptor Code: 7,11	
IXG076I	SYSTEM LOGGER CONSTRAINED FOR GROUP: TEST
	<p>Explanation: Log streams defined with GROUP(TEST) cannot be connected because the system is constrained or log streams in the TEST group have consumed their allotted set of resources required for log stream connections.</p> <p>System action: The connection request is rejected.</p> <p>Operator response: Notify the system programmer.</p> <p>User response: None.</p> <p>Application Programmer Response: None.</p> <p>System programmer response: PRODUCTION log streams might prevent TEST log streams from connecting. You might need to disconnect PRODUCTION log streams in order for the TEST connection to proceed.</p> <p>Source: System Logger (SCLOG)</p> <p>Detecting Module: IXGC4CON</p> <p>Routing Code: 10</p> <p>Descriptor Code: 4</p>
IXG077I	SYSTEM LOGGER HEALTH CHECKS NOT ACTIVATED ON SYSTEM <i>sysname</i> REASON <i>reason</i>
	<p>Explanation: Logger health checks were not activated on this system. System Logger encountered an error while trying to establish the Logger health checks.</p> <p>In the message text:</p> <p><i>sysname</i> The name of the system where health checks were not activated.</p> <p><i>reason</i> Diagnostic reason code. See system programmer response for more details.</p> <p>System action: Logger health checks will not run on this system. No other logger processing will be adversely affected.</p> <p>Operator response: Notify the system programmer.</p> <p>User response: None.</p> <p>Application Programmer Response: None.</p> <p>System programmer response: Review Logrec for a Logger software record that contains PIDS/5752SCLOG RIDs/IXGBLF01, and FLDS/RETCODE VALU/H0000000C FLDS/REASON VALU/H02020007 for the service name, service type, return and reason codes.</p>

IXG101I

- | You need to consult other publications depending on the diagnostic reason codes:
- | **0X** There was a problem issuing a STORAGE request, consult *z/OS MVS Programming: Assembler Services Reference IAR-XCT* with the return code from the trace.
- | **1X** There was a problem issuing a CSVDYNEX request, consult *z/OS MVS Programming: Authorized Assembler Services Reference ALE-DYN* with the return and reason codes from the trace.
- | **2X** There was a problem issuing a HZSCHECK request, consult *IBM Health Checker for z/OS: User's Guide* with the return and reason codes from the trace.
- | If the health checks are essential, you can force the IXGLOGR asid and restart Logger to retry adding the checks. If the problem cannot be determined and corrected, contact the IBM Support Center.
- | **Source:** System Logger (SCLOG)
- | **Detecting Module:** IXGBLF01
- | **Routing Code:** 10
- | **Descriptor Code:** 4

IXG101I STRUCTURE REBUILD INTO STRUCTURE *strname* STOPPED FOR REASON: *text*

Explanation: The structure rebuild process has failed because of the specified reason.

In the message text:

strname

is the new structure in the rebuild operation.

NEW STRUCTURE TOO SMALL TO CONTAIN LOGSTREAM DATA

The Structure Rebuild process has failed because the new structure is not allocated with enough data entries to hold all the log stream data from all the connectors participating in the structure rebuild.

Message IXG106I is issued when the structure rebuild is stopped for this reason. See message IXG106I for the correct action to take.

IXLLIST FAILURE

An IXLLIST list structure request failed during Local Buffer restore processing.

A SYSLOGR Trace entry is produced and written to the system logger trace buffer. A dump of the system logger trace buffer should be requested to obtain diagnostic information that the IBM support center will need to diagnose the reason that caused the structure rebuild to stop.

INTERNAL SYSTEM LOGGER FAILURE

An internal system logger service failed preventing the structure rebuild from continuing. The structure rebuild is stopped.

A SYSLOGR trace entry is produced and written to the system logger trace buffer. A dump of the system logger trace buffer should be requested to obtain diagnostic information that the IBM support center will need to diagnose the reason that caused the structure rebuild to stop.

CONNECTION TO THE NEW STRUCTURE FAILED

A peer connector failed in attempting to connect to the new structure during structure rebuild. Since not all original connectors have successfully connected to the new structure, the rebuild is stopped.

A SYSLOGR trace entry is produced and written to the system logger trace buffer. A dump of the system logger trace buffer should be requested to obtain diagnostic information that the IBM support center will need to diagnose the reason that caused the structure rebuild to stop.

LOSS OF CONNECTIVITY TO THE NEW STRUCTURE

The system has lost connectivity to the new structure and cannot participate in the rebuild process. The structure rebuild is stopped because the system that lost connectivity to the new structure was not using staging data sets to duplex all of the log streams that it was currently connected to at the time the structure rebuild started. The structure rebuild is stopped to prevent a loss of data condition for the log streams that this system is connected to.

The installation should determine why the system lost connectivity to the new structure. Correct the reason for the connectivity loss and reinitiate a structure rebuild through the SETXCF START,REBUILD console command.

IXLLIST OPERATION FAILED FOR NEW STRUCTURE

An IXLLIST operation failed during structure rebuilding processing, preventing structure rebuild from proceeding successfully.

A SYSLOGR trace entry is produced and written to the system logger trace buffer. A dump of the system logger trace buffer should be requested to obtain diagnostic information that the IBM support center will need to diagnose the reason that caused the structure rebuild to stop.

SYSTEM LOGGER STORAGE MANAGER FAILURE

A request to the system logger storage manager to obtain resources needed by structure rebuild processing had failed. The failure prevents the structure rebuild from proceeding successfully.

A SYSLOGR trace entry is produced and written to the system logger trace buffer. A dump of the

system logger trace buffer should be requested to obtain diagnostic information that the IBM support center will need to diagnose the reason that caused the structure rebuild to stop.

SYSTEM FAILURE

A system has terminated while rebuild is in progress. The rebuild is stopped to prevent possible loss of data.

The installation may reinitiate a structure rebuild through the SETXCF START,REBUILD operator command if another attempt to rebuild the structure is desired. Be aware that if the original structure does not have any other systems currently connected to the structure in the active state, reinitiating a structure rebuild may result in a loss of data for log streams that were connected to by the system that terminated if the log data written by the terminated system was not duplexed by system logger staging data sets.

To display detailed information about the indicated structure, the following command may be issued from the operator console:

- D XCF,STRUCTURE,STRNAME=*name*

SYSTEM LOGGER INVENTORY ERROR

A request to update the system logger inventory records during structure rebuild processing had failed. The failure prevents the structure rebuild from proceeding successfully.

A SYSLOGR trace entry is produced and written to the system logger trace buffer. A dump of the system logger trace buffer should be requested to obtain diagnostic information that the IBM support center will need to diagnose the reason that caused the structure rebuild to stop.

NEW STRUCTURE HAS UNACCEPTABLE ATTRIBUTES

The structure created for rebuild cannot be used because it is not allocated with enough data entries to support the number of log streams requested on the Inventory structure definition LOGSNUM keyword.

System logger uses a small percentage of the allocated data entries in a structure for internal processing. The most likely cause of this problem is that the Coupling Facility which contains the newly allocated structure does not have enough space available to allocate the structure at the requested size.

Either more space needs to be made available in the coupling facility, or the structure needs to be allocated in a coupling facility that can accommodate it. More space can be made available in a coupling facility by causing structures to be deallocated from that facility, or by decreasing the amount of space reserved for structure dumps. It may be necessary to modify the preference list or

the exclusion list defined in the CFRM policy to allow the structure to be allocated in a more suitable coupling facility. Alternatively, it may be necessary to make a new coupling facility available for the sysplex to use.

ERROR POPULATING NEW STRUCTURE WITH CONTROL LIST

An internal failure occurred while refreshing control blocks and populating the new structure with a control list.

A SYSLOGR trace entry is produced and written to the system logger trace buffer. A dump of the system logger trace buffer should be requested to obtain diagnostic information that the IBM support center will need to diagnose the reason that caused the structure rebuild to stop.

NEW STRUCTURE HAS INSUFFICIENT VECTOR LENGTH

The structure created for rebuild cannot be used because the list notification vector for the list structure is not large enough for all the lists that need to be monitored for list transitions. There was not enough storage available in the Hardware System Area (HSA) for a larger vector. Enter a DISPLAY XCF,STR command to determine which structures are in use. For each structure that is in use, enter a DISPLAY,SCF,STR,STRNAME=*inusestr*, where *inusestr* is the name of an in use structure, to determine which applications are connected to the structure from this system. Consult the system programmer as needed to determine whether to reduce the number of connector connected to structures from the system stopped the structure rebuild, or to modify the way in which the connectors are using the structure, or to perform the steps needed to increase the amount of storage in the Hardware System Area (HSA).

LIST MONITORING REQUEST FOR THE NEW STRUCTURE FAILED

A list monitoring request has failed for a list used by system logger to manage the log streams defined to structure *name*. The failure prevents the structure rebuild from proceeding successfully.

A SYSLOGR trace entry is produced and written to the system logger trace buffer. A dump of the system logger trace buffer should be requested to obtain diagnostic information that the IBM support center will need to diagnose the reason that caused the structure rebuild to stop.

NEW STRUCTURE HAS INSUFFICIENT OPERATIONAL LEVEL

The new structure resides in a coupling facility which does not have a minimum operation level of 1. System logger requires a Coupling Facility operation level of 1 or greater. It may be necessary to modify the preference list or the exclusion list defined in the CFRM policy to allow the structure to

be allocated in a Coupling Facility with the required operation level. Alternatively, it may be necessary to make a new coupling facility available for the sysplex to use with an operation level of at least 1.

STAGING DATASET ERROR

An error was encountered while repopulating the list structure with log data from staging data sets.

A SYSLOGR trace entry is produced and written to the system logger trace buffer. A dump of the system logger trace buffer should be requested to obtain diagnostic information that the IBM support center will need to diagnose the reason that caused the structure rebuild to stop.

IXLLIST FAILURE

IXLLIST FAILURE occurred during coupling facility repopulation from staging data sets.

A SYSLOGR trace entry is produced and written to the system logger trace buffer. A dump of the system logger trace buffer should be requested to obtain diagnostic information that the IBM support center will need to diagnose the reason that caused the structure rebuild to stop.

System action: A structure rebuild stop has been initiated and the structure rebuild stop process begins.

User response: None.

Operator response: Notify the system programmer.

Application Programmer Response: None.

System programmer response: Take the action described for the specific structure rebuild stop reason.

Source: System logger (SCLOG)

Detecting Module: MANY

Routing Code: 2

Descriptor Code: 4

**IXG104I STRUCTURE REBUILD INTO
STRUCTURE *strname* HAS BEEN
STARTED FOR REASON:** *text*

Explanation: The structure rebuild has been initiated because of the specified reason.

In the message text:

strname
is the new structure in the rebuild operation.

STRUCTURE FAILURE

A structure failure condition was detected.

LOSS OF CONNECTIVITY TO THE STRUCTURE

Connectivity to the structure does not exist.

COUPLING FACILITY VOLATILITY STATE CHANGE

A structure has changed from non-volatile to volatile state.

System action: A structure rebuild starts for structure *name*.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: MANY

Routing Code: 2

Descriptor Code: 4

**IXG105I UNABLE TO START STRUCTURE
REBUILD INTO STRUCTURE *strname*
FOR REASON:** *text*

Explanation: The initiation of the structure rebuild process for the specific reason has failed.

In the message text:

strname
is the new structure in the rebuild operation.

diag1, diag2

Used by IBM Support Center for problem determination.

STRUCTURE FAILURE

DIAG1: *diag1* DIAG2 *diag2*

A structure failure condition was detected.

LOSS OF CONNECTIVITY TO THE STRUCTURE

DIAG1: *diag1* DIAG2 *diag2*

Connectivity to the structure does not exist.

COUPLING FACILITY VOLATILITY STATE CHANGE

DIAG1: *diag1* DIAG2 *diag2*

A structure has changed from non-volatile to volatile state.

System action: The request to initiate a structure rebuild was not successful.

User response: None.

Operator response: If another system within the sysplex connected to structure *name* could not initiate a structure rebuild, a SETXCF START,REBUILD,STRNAME=*name*' console command can be issued to to initiate a structure rebuild.

Application Programmer Response: None.

System programmer response: Contact the IBM support center if a structure rebuild can not be initiated automatically by system logger or initiated manually by the SETXCF console command issued by the operator.

Source: System logger (SCLOG)

Detecting Module: MANY

Routing Code: 1**Descriptor Code:** 11

IXG106I REBUILT STRUCTURE NOT LARGE ENOUGH TO ACCOMMODATE THE CONTENTS OF *strname*. ORIGINAL STRUCTURE HAS *decimalnumber* ELEMENTS, STRUCTURE CREATED FOR REBUILD ATTEMPT HAS *decimalnumber* ELEMENTS.

Explanation: The structure created during rebuild processing for *strname*, is not large enough. Either an inadequate size is specified in the policy or the containing Coupling Facility does not have enough space available to allocate the structure at the requested size.

In the message text:

strname

is the name of the structure undergoing structure rebuild.

decimalnumber

is the size of the structure which was originally created.

System action: The structure rebuild is stopped by system logger.

User response: None.

Operator response: Contact the system programmer.

Application Programmer Response: None.

System programmer response: If the size of the original structure is greater than the maximum structure size defined in the CFRM active policy, use the XCF Administrative Data Utility to increase the structure size specified in a policy. Have the operator activate the updated policy and re-initiate a structure rebuild through the SETXCF START,REBUILD console command.

If the allocated structure size of the new structure is less than the size defined in the policy for the structure, the coupling facility containing the structure did not have enough space available to allocate the structure as large as the policy allowed. Either more space needs to be made available in the coupling facility, or the structure needs to be allocated in a coupling facility that can accommodate it. More space can be made available in a coupling facility by causing structures to be deallocated from that facility, or by decreasing the amount of space reserved for structure dumps. It may be necessary to modify the preference list or the exclusion list defined in the CFRM policy to allow the structure to be allocated in a more suitable coupling facility. Alternatively, it may be necessary to make a new coupling facility available for the sysplex to use.

Source: System logger (SCLOG)

Detecting Module: IXGL1SRB

Routing Code: 2**Descriptor Code:** 4

IXG107I STRUCTURE REBUILD FAILED FOR STRUCTURE *strname* DUE TO A *text*

Explanation: Structure rebuild for structure *strname* has failed, leaving connectors to log streams defined to this structure unable to access log stream data.

In the message text:

strname

The name of the structure for which the structure rebuild failed for.

LOSS OF CONNECTIVITY TO THE STRUCTURE. LOGSTREAM DATA DEFINED TO THIS STRUCTURE IS NOT ACCESSIBLE.

The system does not have access to the log stream data in the structure due to a loss of connectivity between the MVS system and the coupling facility in which structure *strname* resides.

STRUCTURE FAILURE. LOGSTREAM DATA DEFINED TO THIS STRUCTURE IS NOT ACCESSIBLE.

The system does not have access to the log stream data in the structure due to a structure failure against structure *strname* or a failure in the coupling facility in which structure *strname* resides.

System action: The structure rebuild has stopped.

User response: None.

Operator response: Contact the system programmer.

Application Programmer Response: None.

System programmer response: The structure rebuild has stopped. Access to log stream data is not possible due to the structure being in a failed state or a lack of connectivity to the structure by the system.

Determine why the structure rebuild was stopped (see message IXG101I) and reinitiate a structure rebuild through the SETXCF START,REBUILD operator command.

Source: System logger (SCLOG)

Detecting Module: IXGC4RBE

Routing Code: 2

Descriptor Code: 4

IXG109E SYSTEM LOGGER INVENTORY REQUEST FAILED FOR LOGSTREAM *logstream*. THE FAILURE RESULTS IN DOWN LEVEL CONNECTION INFORMATION IN THE SYSTEM LOGGER COUPLE DATASET FOR THIS CONNECTION.

Explanation: An attempt to update the system logger

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inventory functional couple data set for log stream *logstream* failed. The failure results in down level connection information in the system logger couple data set for this connection. Down Level connection information for a connector may result in a false notification to the connector(s) that this log stream has suffered a loss of data condition.

In the message text:

logstream

Name of the log stream that the request failed for.

System action: A SYSLOGR trace entry is produced and written to the system logger trace buffer.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: A dump of the system logger trace buffer may be requested to obtain diagnostic information that the IBM support center will need to diagnose the reason for the condition that caused this message to be issued.

Source: System logger (SCLOG)

Detecting Module: IXGC4RPC

Routing Code: 10

Descriptor Code: 12

**IXG110I STRUCTURE REBUILD FOR
STRUCTURE *strname* IS COMPLETE.
LOGSTREAM DATA DEFINED TO THIS
STRUCTURE MAY BE LOST FOR
CERTAIN LOGSTREAMS**

Explanation: The structure rebuild for structure *strname* has completed successfully. When structure rebuild completed, some log streams had a loss of data condition due to not all data for the log stream being restored to the new rebuilt structure.

An ENF 48 signal was broadcasted and received by registered listeners listing all log streams that might have lost data due to a failed instance of a system logger in the sysplex not participating in the structure rebuild.

In the message text:

strname

is the name of the structure which the structure rebuild has failed for.

System action: Structure rebuild completes successfully.

User response: None.

Operator response: Not Applicable.

Application Programmer Response: None.

System programmer response: Not Applicable.

Source: System logger (SCLOG)

Detecting Module: IXGC4RBE

Routing Code: 2

Descriptor Code: 4

**IXG111I *rebuildtype* REBUILD FOR STRUCTURE
strname IS COMPLETE. LOGSTREAM
DATA DEFINED TO THIS STRUCTURE
IS AVAILABLE**

Explanation: Structure or Duplex rebuild for structure *strname* has completed successfully. Connectors may resume requests against the log streams defined to structure *strname*.

In the message text:

rebuildtype

The type of rebuild: STRUCTURE or DUPLEXING.

strname

The name of the structure which the structure rebuild has completed for.

System action: Structure rebuild completes successfully.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGC4RBE

Routing Code: 2

Descriptor Code: 4

**IXG112I SYSTEM LOGGER INITIALIZATION
FAILED.**

Explanation: System logger was unable to complete initialization processing of the System Logger Function Couple Dataset. System logger requests which are related to log streams or Coupling Facility structures may not be able to be processed on the system.

System action: The system logger address space becomes active. A SYSLOGR trace entry is produced and written to the system logger trace buffer.

User response: None.

Operator response: Contact the system programmer.

Application Programmer Response: None.

System programmer response: A SYSLOGR trace entry is produced and written to the system logger trace buffer. A dump of the System logger trace buffer should be requested to obtain diagnostic information that the IBM support center will need to diagnose the reason

why System logger initialization failed.

Source: System logger (SCLOG)

Detecting Module: IXGBLF01

Routing Code: 11

Descriptor Code: 6

IXG113E SYSTEM LOGGER DUPLEX MODE TRANSITION FAILED FOR LOGSTREAM *logstream*. THE FAILURE PREVENTS SYSTEM LOGGER FROM USING *text*

Explanation: An attempt by system logger to dynamically change the way coupling facility resident log data is duplexed for log stream *logstream* failed. The failure prevents System logger from changing the way in which coupling facility log data is duplexed until it can be written to log stream data sets.

In the message text:

logstream

Name of the log stream that the request failed for.

text

One of the following:

STAGING DATASETS TO DUPLEX COUPLING FACILITY RESIDENT LOG DATA.

System logger can not use Staging Data Sets to duplex coupling facility resident log data despite the transition of the connection from failure-independent to failure-dependent. Coupling facility resident log data continues to be duplexed in local buffers that reside on the MVS image that wrote the log data.

LOCAL BUFFERS TO DUPLEX COUPLING FACILITY RESIDENT LOG DATA.

System logger can not use Local Buffers resident on the MVS image that wrote the log data to duplex coupling facility resident log data despite the transition of the connection from failure-dependent to failure-independent. Coupling facility resident log data continues to be duplexed in staging data sets.

NO LOGGER DUPLEXING TO DUPLEX COUPLING FACILITY RESIDENT LOG DATA.

System logger has determined that it no longer needs to duplex data, since XES is duplexing the data in failure-isolated structures. However, system logger was unable to delete its staging data set and will continue to use it.

System action: System logger continues to process requests.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGC4RPC

Routing Code: 10

Descriptor Code: 12

IXG114A OFFLOAD IS NOT PROGRESSING ON sysname LOGSTREAM: *logstream*, STRUCTURE: *strname* CHECK FOR OFFLOAD INHIBITORS WITHIN *checksys*

Explanation: On system *sysname*, an offload initiated as part of log stream recovery for log stream *logstream* on structure *strname* is not progressing. The offload function involves reading log data from interim storage and writing it to DASD log data sets. Writing data to DASD log data set(s) involves DASD I/O and the potential need to allocate a new or existing log data set.

In the message text:

sysname

is the name of the system on which the system logger address space is not progressing with log stream recovery.

logstream

is the name of the log stream which is in the process of being offloaded.

strname

the name of the structure associated with the log stream.

checksys

identifies the likely system candidate that should be checked or if all systems in the "SYSPLEX" should be checked for inhibitors preventing the log stream recovery on system *sysname*.

System action: Until this offload completes, system logger on system *sysname* is unable to process functions such as log stream connect requests, log stream disconnect requests, log stream deletion requests and is unable to process most structure events for all structures to which the system is connected.

The inability of this system to process structure events could result in delays in structure rebuild and the inability of other systems in the sysplex to reconnect to one of the affected structures. The affected structures are any structure to which system *sysname* is connected.

Once the offload completes, this message will be DOMed.

This message is accompanied by message IXG115A.

User response: None.

Operator response: Check for any conditions in the

IXG115A

installation that might be preventing the offload from proceeding.

1. Check for outstanding WTOs or WTORs.

Check for any outstanding WTORs or WTOs that are awaiting action that might be preventing system logger from being able to allocate a log data set.

2. Check for start pendings.

Check for any start pending conditions against either the offload DASD device or any devices required to allocate/unallocate log data sets such as the catalog device and any device on which a new log data set could be allocated. If start pending conditions are found any of these devices, resolve the condition.

3. Check for resource contention.

Issue the DISPLAY GRS,C command to display resource contention. If there is resource contention that is preventing system logger from allocating log data sets. If so, resolve the contention.

4. Check for recall of migrated log data sets.

Resolve any recall requests for migrated log data sets.

If none of the above steps resolves the condition, notify the system programmer.

Application Programmer Response: None.

System programmer response: Please refer to the system programmer response for IXG115A.

Source: System Logger (SCLOG)

Detecting Module: IXGC4RSC

Routing Code: 1

Descriptor Code: 2

**IXG115A CORRECT THE OFFLOAD CONDITION
ON *sysname* FOR *strname* OR REPLY
TASK-END TO END THE STRUCTURE
TASK.**

Explanation: On system *sysname*, an offload initiated as part of log stream recovery for log stream *logstream*, is not progressing. The offload function involves reading log data from interim storage and writing it to DASD log data sets. Writing data to DASD log data set(s) involves DASD I/O and may involve allocating a new or existing offload data set.

In the message text:

sysname

is the name of the system on which the system logger address space is not progressing with log stream recovery.

strname

is the name of the structure for which the log stream offload is not progressing.

System action: Until this offload completes, system

logger on system *sysname* is unable to process the following functions related to the structure *strname*:

- log stream connect requests
- log stream disconnect requests
- log stream deletion requests
- structure events

The inability of this system to process structure events could result in delays in structure rebuild and the inability of other systems in the sysplex to reconnect to the structure.

Once the offload completes, this message will be DOMed.

This message is accompanied by message IXG114A. This message may also be accompanied by messages IXG311I and IXG312E and/or IXG271I and IXG272E on a system that is currently processing an offload for the log stream.

User response: None.

Operator response: Check for any conditions in the installation that might be preventing the offload from proceeding.

1. Check for outstanding WTOs or WTORs.

Check for any outstanding WTORs or WTOs that are awaiting action that might be preventing system logger from being able to allocate a log data set.

Check for messages IXG311I and IXG312E on systems connected to the logstream. If messages IXG311I and IXG312E were issued from a different system from messages IXG114A and IXG115A for this logstream, then replying "FAIL" to IXG312E will allow system logger an opportunity to try to complete an offload on the same system as where message IXG115A was issued. If system logger can complete the offload on this system, then the IXG115A condition can be cleared without any additional action.

If messages IXG311I and IXG312E were issued from the same system as messages IXG114A and IXG115A for the logstream, then replying "FAIL" to IXG312E will most likely clear the IXG115A condition, but may cause the logstream recovery to be incomplete. If the logstream recovery is incomplete, then the log stream may end up becoming failed-persistent or a logstream connection request might be rejected.

Also, look for messages IXG271I and IXG272E on the system identified in IXG115A. Replying "FAIL" to IXG272E may aid in allowing the logstream recovery to continue, but this response may also cause the logstream recovery to be incomplete (similar to that described above).

2. Check for start pendings.

Check for any start pending conditions against either the offload DASD device or any devices required to allocate/unallocate log data sets such as the catalog device and any device on which a new log data set

- could be allocated. If start pending conditions are found any of these devices, resolve the condition.
3. Check for resource contention.
Issue the DISPLAY GRS,C command to display resource contention. If there is resource contention that is preventing system logger from allocating log data sets. If so, resolve the contention.
 4. Check for recall of migrated log data sets.
Resolve any recall requests for migrated log data sets.
 5. Check for messages IXG311I and IXG312E on systems connected to the log stream.
If messages IXG311I and IXG312E were issued from a different system than messages IXG114A and IXG115A for this log stream, then replying FAIL to IXG312E will give system logger the opportunity to complete an offload on the same system as where message IXG115A was issued. If system logger can complete the offload on this system, then the IXG115A condition can be cleared without any additional action.
If messages IXG311I and IXG312E were issued from the same system as messages IXG114A and IXG115A for the log stream, then replying FAIL to IXG312E may clear the IXG115A condition, but may cause the log stream recovery to be incomplete. If the log stream recovery is incomplete, then the log stream may end up becoming failed-persistent or a log stream connection request might be rejected.

If none of the above steps resolves the condition, notify the system programmer.

Application Programmer Response: None.

System programmer response: If the problem persists after the actions in the **Operator Response**, you can reply TASK-END to this message. System logger will then abend the structure task owning the connection to structure *strname*. A system logger dump will be requested for all the systems in the sysplex and a dump of the structure *strname* will also be requested. All active log stream connections owned by this system to the structure, and the structure connection will be placed in a failed state.

If the problem appears to be a system error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center, providing the dump.

Source: System Logger (SCLOG)

Detecting Module: IXGC4RSC

Routing Code: 1,2

Descriptor Code: 2

IXG116I THE RESPONSE TO MESSAGE *messageid* IS INCORRECT: *reply text*

Explanation: The operator entered an incorrect response to a message.

In the message text:

messageid

The message identifier.

reply

The incorrect response.

text

IS NOT A VALID ACTION

The operator entered an incorrect response to message *messageid*.

System action: The system reissues the message that received an incorrect reply.

User response: None.

Operator response: See the operator response for message *messageid* and respond accordingly, if applicable.

Application Programmer Response: None.

System programmer response: Not Applicable.

Source: System Logger (SCLOG)

Detecting Module: Many

Routing Code: 1,2

Descriptor Code: 12

IXG117I *rebuildtype* REBUILD STARTED FOR STRUCTURE *strname* *count* OF *count* LOGSTREAMS CONNECTED TO STRUCTURE:

logstream *logstream*

Explanation: The Names of up to 10 (the maximum recommended) Log streams connected to the Structure that is being rebuilt are listed. This message is accompanied by ENF 48, Type LOGSTRMSNOTAVAIL, Subtype STRREBUILDSTART.

When the rebuild activity is complete, logger will issue a message indicating the status of the request. Also another ENF 48 signal is issued, indicating the completion status of the REBUILD.

In the message text:

rebuildtype

The type of rebuild: STRUCTURE or DUPLEXING.

strname

Is the structure in the rebuild operation.

count

Is the number of log streams listed.

logstream

The name of the log stream.

System action: The rebuild continues.

User response: None.

Operator response: If a listing of all the log streams in the structure is needed, issue the D LOGGER Command, specifying the structure being rebuilt.

Application Programmer Response: None.

System programmer response: None.

Source: System Logger (SCLOG)

Detecting Module: IXGC4RBE

Routing Code: 2

Descriptor Code: 4

IXG119I **LOGGER STAGING DRXRC
DUPLEXING IN EFFECT FOR
LOGSTREAM *logstream*
DSN=DataSetName ON VOLUME *volume***

Explanation: Message issued on the first log stream connection for a system or following a structure rebuild after the staging data set is successfully established to indicate system logger is now duplexing the log data in a staging data set for specific secondary/recovery site conditions. Refer to message IXG068D.

In the message text:

logstream

The name of the log stream duplexed in this manner.

DataSetName

The staging data set name.

volume The volume name or the string ????? when the volume could not be determined.

System action: System logger will duplex log data written to primary storage (coupling facility structure) in local buffers for any primary site log stream recovery conditions. System logger will also duplex asynchronously the same log data in a DRXRC-type staging data set for potential log stream recovery purposes on a secondary or recovery site.

User response: None.

Operator response: Not applicable.

Application Programmer Response: None.

System programmer response: If extended Remote Copy (XRC) is being used to mirror the DASD for the system logger configuration, then contact the storage administrator to ensure the staging data set is allocated on a volume and is being managed as expected. See z/OS DFSMS Advanced Copy Services and z/OS MVS Setting Up a Sysplex for more information about XRC

and system logger's use of DRXRC-type staging data set use.

Source: System Logger (SCLOG)

Detecting Module: IXGC4CON

Routing Code: 10

Descriptor Code: 12

IXG120E **LOGGER STAGING DRXRC
DUPLEXING REQUESTED BUT NOT IN
EFFECT FOR LOGSTREAM *logstream***

Explanation: Message is issued when system logger is attempting to obtain a DRXRC-type staging data set, but was unable to acquire one on this system for the identified log stream. It can occur during a log stream connect, following a structure rebuild, or after a permanent I/O error occurred for a prior instance of the DRXRC-type staging data set, and a new DRXRC-type staging data set instance cannot be obtained.

System logger primary site duplexing will depend on the LOGGERDUPLEX parameter. Refer to system logger message IXG217E. Message issued when system logger is attempting to obtain a DRXRC-type staging data set, but was unable to acquire one on this system for this log stream.

In the message text:

logstream

The name of the log stream that had the DRXRC-type staging data set error.

System action: System logger will duplex log data written to primary storage (coupling facility structure) in local buffers for any primary site log stream recovery conditions. System logger will be unable to duplex asynchronously the same log data in a DRXRC-type staging data set for potential log stream recovery purposes on a secondary or recovery site.

User response: None.

Operator response: Not applicable.

Application Programmer Response: None.

System programmer response: Correct the error related to the staging data set. To ensure system logger will attempt to allocate the DRXRC-type staging data set again do one of the following:

1. If in structure simplex-mode, issue a structure rebuild (SETXCF START,REBUILD... command).
2. If in structure duplex mode, transition from structure duplex-mode to simplex-mode (SETXCF STOP,REBUILD,DUPLEX... command), then issue the structure rebuild (see prior step a) or restart structure duplexing (SETXCF START,REBUILD,DUPLEX... command).
3. Disconnect all connection on this system and reconnect to the log stream.

Source: System Logger (SCLOG)

Detecting Module: IXGC4CON

Routing Code: 10

Descriptor Code: 4

IXG121I STALLED ASYNCHRONOUS IXGWRITE REQUESTS DETECTED DURING REBUILD FOR STRUCTURE *strname*. REBUILD ALLOWED TO CONTINUE

Explanation: During rebuild quiesce processing, System logger indicators showed outstanding asynchronous write activity. After delaying to allow for any potential writes to complete normally, system logger is responding to the rebuild quiesce request.

In the message text:

strname

| is the structure in the rebuild operation.

System action: System logger responds to the outstanding rebuild quiesce request after delaying to allow active asynchronous events time to complete.

Operator response: Notify the system programmer.

User response: None.

Application Programmer Response: None.

| **System programmer response:** Search problem reporting data bases for a fix for the problem. If there is no fix for the problem, get a dump of the system logger trace buffer, address space, and structure and contact the IBM Support Center. See Operator Command in IEADMCxx Parmlib Member in Chapter 2 and Getting a Dump of System Logger Information in Chapter 11 of z/OS MVS Diagnosis: Tools and Service Aids for more information about obtaining system logger dumps.

Source: System logger (SCLOG)

Detecting Module: IXGF1TTT

IXG202I REQUEST TO CONNECT TO LOGSTREAM *logstream* IN STRUCTURE *strname* ACCEPTED. CONNECTION TO ADDITIONAL LOGSTREAMS MAY FAIL DUE TO INSUFFICIENT STRUCTURE STORAGE

Explanation: The structure allocated for this log stream does not have sufficient storage to support the maximum number of log streams defined for the structure as indicated in the LOGR policy. Subsequent connect requests may fail.

In the message text:

logstream

| is the name of the log stream to be connected.

strname

| is the name of the structure associated with the log stream.

System action: The connect request was successful.

User response: None.

Operator response: Notify the system programmer.

Application Programmer Response: None.

System programmer response: If the log streams defined for this structure will be used concurrently, a larger structure is necessary. The size of the structure can be increased by updating the CFRM policy, or dynamically by using the SETXCF operator command.

Source: System logger (SCLOG)

Detecting Module: IXGC4CON

Routing Code: 10

Descriptor Code: 12

IXG202I REQUEST TO CONNECT TO LOGSTREAM *logstream* IN STRUCTURE *strname* REJECTED. INSUFFICIENT STORAGE FOR VECTOR TABLE.

Explanation: An application issued an IXGCONN request to connect to a log stream associated with structure *strname*, but the request failed because there is not enough storage in the Hardware System Area (HSA) to allocate a large enough vector table large for the number of log streams requested.

In the message text:

logstream

| is the name of the log stream to be connected.

strname

| is the name of the structure associated with the log stream.

System action: The connect request failed.

User response: None.

Operator response: Notify the system programmer.

Application Programmer Response: None.

System programmer response: Increase the amount of storage in the Hardware System Area (HSA), or reduce the number of log streams defined to the structure so that a smaller vector table can be allocated.

Source: System logger (SCLOG)

Detecting Module: IXGC4CON

Routing Code: 11

Descriptor Code: 6

IXG203I REQUEST TO CONNECT TO LOGSTREAM *logstream* IN STRUCTURE *strname* REJECTED. MINIMUM COUPLING FACILITY LEVEL REQUIRED IS *decimalnumber* CURRENT COUPLING FACILITY LEVEL IS *decimalnumber*

Explanation: An application issued the IXGCONN request to connect to a log stream, but the operational level of the coupling facility where the structure associated with the log stream is not at the level required for system logger. The minimum operational level of the coupling facility required is 1.

In the message text:

logstream
is the name of the log stream to be connected.
strname
is the name of the structure associated with the log stream.
decimalnumber
is the required operational level of the coupling facility.

System action: The connect request failed.

User response: None.

Operator response: Notify the system programmer.

Application Programmer Response: None.

System programmer response: Upgrade the coupling facility operational level to at least 1.

Source: System logger (SCLOG)

Detecting Module: IXGC4CON

Routing Code: 11

Descriptor Code: 6

IXG204I DISCONNECT COMPLETED FOR LOGSTREAM *logstream* IN STRUCTURE *strname* DUE TO ACTION RECOMMENDED BY XES.

Explanation: Based on loss of installation-defined policies set up in the SFM policy for loss of connectivity, cross system extended services (XES) has recommended that this system discontinue use of the coupling facility.

In the message text:

logstream
is the name of the disconnected log stream.
strname
is the name of the structure associated with the log stream.

System action: All connections to the structure were terminated.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGC4DIS

Routing Code: 11

Descriptor Code: 6

IXG205I DISCONNECT COMPLETED FOR LOGSTREAM *logstream* IN STRUCTURE *strname* DUE TO REBUILD FAILURE.

Explanation: A component error was encountered during rebuild. All log streams defined to the original structure will be disconnected and the structure disconnected from Cross-system extended services (XES) with a failure reason code.

In the message text:

logstream
is the name of the disconnected log stream.
strname
is the name of the structure associated with the log stream.

System action: All connections associated with the failed structure have been terminated. The system issues message IXG101I to explain the problem further.

User response: None.

Operator response: Notify the system programmer.

Application Programmer Response: None.

System programmer response: Determine why the structure rebuild was stopped (see message IXG101I) and reinitiate a structure rebuild through the SETXCF START,REBUILD operator command. Reconnect to the log stream after the structure has successfully been rebuilt.

Source: System logger (SCLOG)

Detecting Module: IXGC4DIS

Routing Code: 11

Descriptor Code: 6

IXG206I CONNECT FAILED FOR LOGSTREAM *logstream* IN STRUCTURE *strname*. NO SUITABLE COUPLING FACILITY FOUND.

Explanation: Cross-system extended services (XES) could not find a suitable coupling facility in which to allocate structure *strname*. Accompanying message IXG207I displays the name of each coupling facility attempted and the failure reason code for each.

In the message text:

logstream

is the name of the disconnected log stream.

strname

is the name of the structure associated with the log stream.

System action: The connect request failed. The system issues accompanying message IXG207I.

User response: None.

Operator response: Notify the system programmer.

Application Programmer Response: None.

System programmer response: See accompanying message IXG207I to determine why no suitable coupling facility was found by examining the failure reason code. Fix the problem and then retry the connect request.

Source: System logger (SCLOG)

Detecting Module: IXGC4CTS

Routing Code: 11

Descriptor Code: 6

IXG207I CF NAME: *cfname* **REASON CODE:** *reason-code* **CF MINIMUM SIZE:** *cysize K BYTES.*

Explanation: Cross-system extended services (XES) could not find a suitable coupling facility in which to allocate the structure specified in message IXG206I. IXG207I lists the name of the coupling facility attempted and the failure reason code.

In the message text:

cfname

is the name of the coupling facility.

reason-code

is the failure reason code.

cysize

is the required size (in decimal) of the CF in kilobytes, needed by system logger

System action: The connect request failed.

User response: None.

Operator response: Notify the system programmer.

Application Programmer Response: None.

System programmer response: See macro IXLYCONA for an explanation of the reason codes.

Source: System logger (SCLOG)

Detecting Module: IXGC4CTS

Routing Code: 11

Descriptor Code: 6

IXG208I DISCONNECT COMPLETED FOR LOGSTREAM *logstream* **IN STRUCTURE** *strname*. **UNABLE TO OFFLOAD DATA TO DASD.**

Explanation: A component error was encountered during the process of offloading data from interim storage to DASD log stream data sets. (For a coupling facility log stream, interim storage is in the coupling facility while for a DASD-only log stream interim storage is in local storage buffers.) The log stream is disconnected. For a coupling facility log stream, the connection to the structure is in a failed-persistent state.

In the message text:

logstream

is the name of the disconnected log stream.

strname

is the name of the structure associated with the log stream.

System action: The log stream has been abnormally terminated.

User response: None.

Operator response: Notify the system programmer.

Application Programmer Response: None.

System programmer response: Notify IBM Support Center.

Source: System logger (SCLOG)

Detecting Module: IXGC4DIS

Routing Code: 11

Descriptor Code: 6

IXG209I RECOVERY FOR LOGSTREAM *logstream* **IN STRUCTURE** *structure* **COMPLETED SUCCESSFULLY.**

Explanation: All log stream data for log stream *logstream* that may have not been offloaded to log stream DASD data sets due to a prior log stream connection failure has now been successfully offloaded to log stream DASD data sets.

In the message text:

logstream

is the name of the log stream that has been recovered.

strname

is the name of the structure associated with the log stream.

System action: Log stream recovery completed successfully.

User response: None.

Operator response: None.

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Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGC4RSC

Routing Code: 2

Descriptor Code: 4

IXG210E	RECOVERY FOR LOGSTREAM <i>logstream IN STRUCTURE strname WAS NOT SUCCESSFUL. DATA MAY BE LOST FOR THE CONNECTION ON SYSTEM sysname DUE TO: text</i>
----------------	---

Explanation: An error occurred during log stream recovery for the specified log stream. The error has resulted in log stream data being lost for the log stream.

In the message text:

logstream

is the name of the log stream that recovery was attempted for.

strname

is the name of the structure associated with the log stream.

sysname

is the name of the system where the connection resided whose data may have been lost.

diag1 — diag4

is diagnostic information relating to the log stream recovery failure. If diagnostic information is presented, it should be saved and provided to the IBM Software Support Center.

ERRORS ENCOUNTERED DURING STAGING DATASET PROCESSING

DIAGNOSTIC INFORMATION: diag1 diag2 diag3 diag4

An error occurred during log stream recovery for the specified log stream while reading log stream data from staging data sets.

STAGING DATASET ALLOCATION ERROR

DIAGNOSTIC INFORMATION: diag1 diag2 diag3 diag4

An error was encountered while attempting to allocate staging data sets for log stream recovery for the specified log stream.

System action: System logger detects that the log stream has a loss of data condition. System logger communicates this condition to applications when the application attempts to connect to the log stream.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: Do one of the following, depending on the text of this message:

- If this message contains the text 'DUE TO STAGING DATASET ALLOCATION ERROR', look for related allocation or SMS messages containing the staging data set name and try to resolve the allocation error.

If the error persists, contact the IBM Support Center. Provide the information in the *diagx* fields. If this message contains the text 'DUE TO ERRORS ENCOUNTERED DURING STAGING DATASET PROCESSING', contact the IBM Support Center and provide the information in the *diagx* fields.

Source: System logger (SCLOG)

Detecting Module: IXGC4RSC

Routing Code: 10

Descriptor Code: 4

IXG211E	RECOVERY FOR LOGSTREAM <i>logstream IN STRUCTURE strname WAS NOT SUCCESSFUL: text</i>
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Explanation: An error occurred during log stream recovery for log stream *logstream*. Failed connections to the log stream have not been recovered. There may be log stream data that does not reside in the log stream DASD data sets and is not duplexed by some combination of system logger local buffers, log stream staging data sets, or coupling facility list structure.

In the message text:

logstream

is the name of the log stream that has been recovered.

strname

is the name of the structure associated with the log stream.

diag1 — diag4

is diagnostic information relating to the log stream recovery failure. If diagnostic information is presented, it should be saved and provided to the IBM Software Support Center.

STRUCTURE CONNECTION INFORMATION WAS NOT AVAILABLE.

DIAGNOSTIC INFORMATION: diag1 diag2 diag3 diag4

Internal error.

NO STORAGE FOR STRUCTURE INFORMATION BUFFER.

DIAGNOSTIC INFORMATION: diag1 diag2 diag3 diag4

Internal error.

READ FOR LOGSTREAM RECORD FAILED.

DIAGNOSTIC INFORMATION: diag1 diag2 diag3 diag4

Internal error.	Internal error.
WRITER OFFLOAD CLEANUP FOR CONNECTOR FAILED.	DATA OFFLOAD FAILED.
<i>DIAGNOSTIC INFORMATION: diag1 diag2 diag3 diag4</i>	<i>DIAGNOSTIC INFORMATION: diag1 diag2 diag3 diag4</i>
Internal error.	Internal error.
CONNECT TO LOGSTREAM NEEDING RECOVERY FAILED.	INITIATE DATA OFFLOAD FAILED.
<i>DIAGNOSTIC INFORMATION: diag1 diag2 diag3 diag4</i>	<i>DIAGNOSTIC INFORMATION: diag1 diag2 diag3 diag4</i>
Internal error.	Internal error.
READ FOR YOUNGEST LOGSTREAM BLOCK FAILED.	SYSTEM RECORD PROCESSING FAILED.
<i>DIAGNOSTIC INFORMATION: diag1 diag2 diag3 diag4</i>	<i>DIAGNOSTIC INFORMATION: diag1 diag2 diag3 diag4</i>
Internal error.	Internal error.
NO STORAGE FOR IXLLIST BUFFER.	ACTIVE SYSTEM INFORMATION WAS NOT AVAILABLE.
<i>DIAGNOSTIC INFORMATION: diag1 diag2 diag3 diag4</i>	<i>DIAGNOSTIC INFORMATION: diag1 diag2 diag3 diag4</i>
Internal error.	Internal error.
READ FOR LIST CONTROLS FAILED.	COMPONENT SERIALIZATION ERROR.
<i>DIAGNOSTIC INFORMATION: diag1 diag2 diag3 diag4</i>	<i>DIAGNOSTIC INFORMATION: diag1 diag2 diag3 diag4</i>
Internal error.	Internal error.
WRITE FOR LIST CONTROLS FAILED.	COMPONENT STORAGE ERROR.
<i>DIAGNOSTIC INFORMATION: diag1 diag2 diag3 diag4</i>	<i>DIAGNOSTIC INFORMATION: diag1 diag2 diag3 diag4</i>
Internal error.	Internal error.
READ FOR LOGSTREAM CONTROL RECORD FAILED.	READ FOR STRUCTURE RECORD FAILED.
<i>DIAGNOSTIC INFORMATION: diag1 diag2 diag3 diag4</i>	<i>DIAGNOSTIC INFORMATION: diag1 diag2 diag3 diag4</i>
Internal error.	Internal error.
WRITE FOR LOGSTREAM CONTROL RECORD FAILED.	SERIALIZATION NOT AVAILABLE
<i>DIAGNOSTIC INFORMATION: diag1 diag2 diag3 diag4</i>	<i>DIAGNOSTIC INFORMATION: diag1 diag2 diag3 diag4</i>
Internal error.	Internal error.
READ/UPDATE LOGSTREAM RECORD FAILED.	System action:
<i>DIAGNOSTIC INFORMATION: diag1 diag2 diag3 diag4</i>	The log stream still has failed connections associated with it. Recovery for the log stream will be attempted again on a subsequent connect to the log stream or on a subsequent connect to a log stream defined to the structure <i>strname</i> .
Internal error.	User response: None.
LOGSTREAM INVENTORY UPDATE FAILED.	Operator response: Contact the system programmer.
<i>DIAGNOSTIC INFORMATION: diag1 diag2 diag3 diag4</i>	Application Programmer Response: None.
Internal error.	System programmer response: Look for related IXC-prefixed messages related to the structure referenced in this message and try to resolve the problem. The diagnosis information presented with this message should be saved. If this error persists, report the problem to the IBM Software Support Center.
WRITE LOGSTREAM RECORD FAILED.	Source: System logger (SCLOG)
<i>DIAGNOSTIC INFORMATION: diag1 diag2 diag3 diag4</i>	

Detecting Module: IXGC4RSC

Routing Code: 10

Descriptor Code: 4

IXG212E	RECOVERY FOR LOGSTREAM <i>logstream IN STRUCTURE strname WAS NOT SUCCESSFUL. DATA MAY BE LOST FOR THE CONNECTION ON SYSTEM sysname DUE TO: NO STAGING DATASETS USED BY THE LOGSTREAM.</i>
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Explanation: System logger detected that staging data sets were needed to perform log stream recovery for log stream *logstream*, but staging data sets were not in use to duplex log stream data at the time of connector failure. Log stream data for the failed connection may have been lost and the log stream is marked damaged.

In the message text:

logstream

is the name of the log stream that recovery was attempted for.

strname

is the name of the structure associated with the log stream.

sysname

is the name of the system where the connection resided whose data may have been lost.

System action: System logger detects that the log stream has a loss of data condition. This condition is communicated to applications when the application attempts to connect to the log stream.

User response: None.

Operator response: None.

Application Programmer Response: None.

Source: System logger (SCLOG)

Detecting Module: IXGC4RSC

Routing Code: 10

Descriptor Code: 4

IXG213E	RECOVERY FOR LOGSTREAM <i>logstream IN STRUCTURE strname WAS NOT SUCCESSFUL. DATA MAY BE LOST FOR THE CONNECTION ON SYSTEM sysname DUE TO: DATA NOT BEING AVAILABLE FOR LIST STRUCTURE REPOPULATION.</i>
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Explanation: System logger detected that log stream data was not available to connect *sysname* to repopulate the list structure during structure rebuild for log stream *logstream*. Log stream data may have been lost and the log stream is marked damaged. As part of

structure rebuild, each system participating in the structure rebuild is responsible for repopulating the new structure with log stream data written by that system, and still resident in the original structure (not offloaded to log stream DASD data sets yet) at the time the structure rebuild started. A system does not have a duplex copy of the log stream data in its local buffers, when a log stream data offload failed during log stream recovery processing and the log stream was connected after a system logger failure. The requester is notified with a warning return code on the IXGCONN request when this condition exists.

In the message text:

logstream

is the name of the log stream that recovery was attempted for.

strname

is the name of the structure associated with the log stream.

sysname

The name of the system where the connection resided whose data might have been lost.

System action: System logger detects that the log stream has a loss of data condition. This condition is communicated to applications when the application attempts to connect to the log stream.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGC4RSC

Routing Code: 10

Descriptor Code: 4

IXG214I	SYSTEM LOGGER LOGSTREAM DATA DUPLEXING FOR LOGSTREAM <i>logstream IS BEING DONE IN duplexmode text</i>
---------	--

Explanation: An attempt by System logger to offload coupling facility resident data to DASD for log stream *logstream* has failed. The failure may prevent System logger from using the preferred duplex mode, which is based on the failure dependency of the coupling facility in which the list structure that contains the log stream data resides in.

In the message text:

logstream

The name of the log stream that the request failed for.

duplexmode

One of the following:

STAGING DATA SETS

System logger is using staging data sets to duplex coupling facility resident log data despite the fact that local buffers may be used based on the failure dependency of the coupling facility that the log stream data resides in.

LOCAL BUFFERS

System logger is using local buffers to duplex coupling facility resident log data despite the fact that Staging Data Sets may be used based on the failure dependency of the coupling facility that the log stream data resides in.

text

One of the following:

STAGING DATA SETS MAY NOT BE THE PREFERRED MODE OF DUPLEXING

LOCAL BUFFERS MAY NOT BE THE PREFERRED MODE OF DUPLEXING

STAGING DRXRC ALSO BEING USED FOR DISASTER RECOVERY

System action: Duplexing of log stream data for log stream *logstream* will be done in the mode specified by *duplexmode*. The additional text may also indicate that DRXRC-type staging data set duplexing for disaster recovery (on a secondary or remote site) log stream duplexing might be in effect along with primary site local buffer duplexing.

User response: None.

Operator response: Not Applicable.

Application Programmer Response: None.

System programmer response: Not Applicable.

Source: System logger (SCLOG)

Detecting Module: IXGC4RPC, IXGC4CON

Routing Code: 10

Descriptor Code: 12

IXG215I **DISCONNECT COMPLETED FOR LOGSTREAM *logstream* IN STRUCTURE *strname* DUE TO SYSTEM LOGGER COMPONENT ERROR. DIAG: *diagnosticcode***

Explanation: A component error was encountered which resulted in system logger having to disconnect all the log streams in the named structure. An instance of this message is issued for each log stream in the structure. Additionally, system logger has disconnected from structure.

In the message text:

logstream

is the name of the disconnected log stream.

strname

is the name of the structure associated with the log stream.

diagnosticcode

is a diagnostic code for IBM support.

System action: All active log stream connections associated with the structure have been disconnected. Additionally, system logger has disconnected from the structure. The log stream and structure connections are left in a failed state and may be recovered by a peer system. If not, the log stream connects will remain failed and the structure connection will be failed-persistent. The system may issue a dump of the system logger address space.

User response: None.

Operator response: Notify the system programmer.

Application Programmer Response: None.

System programmer response: Reconnect the applications using the log streams to the log stream. Gather any dumps from the system logger address space (jobname is IXGLOGR) and contact the IBM Support Center.

Source: System Logger (SCLOG)

Detecting Module: IXGC4DIS

Routing Code: 11

Descriptor Code: 6

IXG216I **DISCONNECT COMPLETED FOR LOGSTREAM *logstream* DUE TO REQUIRED LOGGER RESOURCES NOT AVAILABLE. *reason***

Explanation: System logger was using a staging data set to duplex log data for a DASD only log stream, but an I/O error occurred and system logger could not allocate a new staging data set. System logger disconnects active connections to the log stream.

In the message text:

logstream

is the name of the disconnected log stream.

reason

One of the following:

STAGING DATA SET COULD NOT BE ALLOCATED AFTER I/O ERROR OCCURRED.

System logger was using a staging data set to duplex log data for a DASD only log stream. An I/O error occurred and a new staging data set could not be allocated.

IXG217E • IXG218A

System action: The active log stream connections have been disconnected.

User response: None.

Operator response: Notify the system programmer.

Application Programmer Response: None.

System programmer response: Check for I/O error and allocation error messages and correct the problem that led to the staging data set allocation error. After the problem has been resolved, have the application re-connect to the log stream.

Source: System logger (SCLOG)

Detecting Module: IXGC4DIS

Routing Code: 11

Descriptor Code: 6

IXG217E IXGLOGR ATTEMPT TO ALLOCATE A NEW STAGING DATASET FAILED FOR LOGSTREAM *logstream*. *allocctxt* DSN=*datasetname* voltext *volume*

Explanation: An attempt by IXGLOGR to allocate a new instance of a staging data set for log stream *logstream* failed. If you found an old instance of the staging data set and could not delete or reallocate it, a problem might exist on the volume specified in the message. **ON VOLUME** *xxxxxx* included in the message indicates the volume on which the staging data set resides. If **ON VOLUME ??????** is included in the message, you could not obtain the duplicate staging data set volume from the catalog.

In the message text:

logstream

is the name of the log stream.

allocctxt

One of the following:

blanks Unable to allocate a New Staging data set.

DUPLICATE NAME FOUND

Unable to allocate a new staging data set. A duplicate data set could not be allocated for the purpose of deleting it. This might be because the volume is not available.

datasetname

is the data set name.

voltext

One of the following:

blanks A volume serial is not available.

ON VOLUME

A volume serial is available.

volume

is the volume name or ??????.

System action: System logger will not be able to use

the staging data set. The impact depends on the function requesting the staging data set.

When Connect is requested, IXGCONN is rejected with Return Code 8-80C. Message IXG231I may also be issued.

When system logger encounters an I/O or access error with a staging data set, and a new staging data set 12 cannot be obtained, then for a CF-based log stream local buffers will be used to duplex the log stream data. Message IXG255I may also be issued. For a DASDONLY log stream, the log stream will be disconnected. An ENF48 signal will be issued with event indicator IxgenfLogstreamsNotAvailable, event reason IxgenfReqLogResNotAvail, and specific reason IxgenfStgAllocErr set on. Message IXG216I may also be issued. When a rebuild fails and system logger is unable to resume using the original structure, then an attempt will be made to ensure the log data is duplexed in staging data sets to minimize the potential for a loss of data condition. When a new staging data set cannot be allocated to keep the duplexed data, then the likelihood for a loss of data condition remains. Message IXG232I may also be issued. When a rebuild completes and the duplexmode is set to conditional, system logger may attempt to duplex to a staging data set versus using local buffers. If the staging data set cannot be obtained, then local buffers will continue to be used. Message IXG113I may also be issued. Other System logger messages may be issued for this log stream or staging data set. Other components may have issued diagnostic messages as well.

Operator response: Notify the system programmer.

User response: None.

Application Programmer Response: None.

System programmer response: Check for I/O error messages and allocation error messages and correct the problem. After the problem has been resolved, it may be necessary to cause the application to reconnect to the log stream.

Source: System logger (SCLOG)

Detecting Module: IXGA1AUS

Routing Code: 10

Descriptor Code: 4

IXG218A SYSTEM LOGGER IS UNABLE TO WRITE TO LOGSTREAM *logstream* UNTIL *date time* DUE TO FUTURE TIME VALUE DETECTED FROM PRIOR CONNECTION TO LOGSTREAM.

Explanation: System logger has detected that the timestamp of the last block written for the log stream indicated is well in the future. It is likely that this log stream was used in Y2K testing and an attempt has been made to reuse it once the testing was complete and the clock has been set back to the present

date/time. Note the date and time displayed are local values, in the form mm/dd/yyyy hh:mm:ss.

In the message text:

logstream

is the name of the log stream.

date

is the local date when IXGWRITEs will again be accepted.

time

is the local time when IXGWRITEs will again be accepted.

System action: No IXGWRITE requests for this log stream can be completed until the date/time indicated are reached. Until this date and time are reached, system logger will reject IXGWRITE requests with a return code X'0C'. System logger will also issue ABEND 1C5-00040003 to log the issue. Finally, system logger will request a dump to provide diagnostic information. The system will delete this message if either a successful IXGWRITE is processed for this log stream, or if all connectors on this system disconnect.

User response: None.

Operator response: Notify the system programmer.

Application Programmer Response: None.

System programmer response: The most likely cause of this problem is that the clock value for the sysplex has been adjusted backwards in time, and that this log stream was written to while the clock was adjusted forward. If the wait time indicated in this message is unacceptable, it will be necessary to disconnect from the log stream, delete it, redefine it, and reconnect.

Source: System logger (SCLOG)

Detecting Module: IXGA1SET

Routing Code: 1

Descriptor Code: 11

IXG219I SYSTEM LOGGER PROCESSED TRANSITION TO *newmode* MODE FOR STRUCTURE *strname*

Explanation: System logger has processed a structure transition to either duplex mode or simplex mode after a system-managed rebuild structure event was presented to system logger for this structure.

In the message text:

newmode

The mode that the structure is transitioning to: DUPLEX or SIMPLEX.

strname

The name of the structure that is transitioning to DUPLEX or SIMPLEX mode.

System action: System logger reacts to the structure state changing by examining each log stream connected to the structure and changing the duplex options for that log stream, appropriate for the definition of the log stream and the new environment that now exists. Message IXG113 will be issued for any log streams where the transition is not successful.

User response: None.

Operator response: To determine the new state of log streams in this structure, issue the appropriate D LOGGER command to display the status and duplexing state of the log streams requested.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGC4STE

Routing Code: 2

Descriptor Code: 4

IXG220I SYSTEM LOGGER PROCESSED A CF VOLATILITY STATE CHANGE FOR *volstate* STRUCTURE *strname*

Explanation: System logger has processed a volatility state change for a CF structure, after being notified of the event by XES.

In the message text:

volstate

The new volatility state of the structure that has experienced a volatility state change:
NON-VOLATILE or VOLATILE.

strname

The name of the structure that has experienced a volatility state change.

System action: System logger reacts to the volatility state change by examining each log stream connected to the structure and changing the duplex options for that log stream, appropriate for the definition of the log stream and the new environment that now exists. Message IXG113 will be issued for any log streams where the transition is not successful.

User response: None.

Operator response: To determine the new state of log streams in this structure, issue the appropriate D LOGGER command to display the status and duplexing state of the log streams requested.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGC4STE

Routing Code: 2

Descriptor Code: 4

IXG221I	INSUFFICIENT STRUCTURE STORAGE AVAILABLE FOR STRUCTURE <i>strname</i> AFTER ALTER PROCESSING. NEW LOGSTREAM CONNECTIONS MAY FAIL
----------------	---

Explanation: Structure *strname* does not have sufficient storage allocated to support the maximum number of log streams defined by LOGSNUM for the structure.

In the message text:

strname

The name of the structure associated with the XCF ALTER request.

System action: Future connections to the structure will fail unless the structure size is increased.

User response: None.

Operator response: Use the SETXCF ALTER support to increase the structure size.

Application Programmer Response: None.

System programmer response: Changes may need to be made to the XCF Policy to insure the minimum structure size is adequate.

Source: System logger (SCLOG)

Detecting Module: IXGF1DSR

Routing Code: 1

Descriptor Code: 11

IXG222I	SEVERE STRUCTURE STORAGE SHORTAGE DETECTED IN STRUCTURE <i>strname</i> AFTER ALTER PROCESSING.
----------------	---

Explanation: As a result of a structure alter operation (from a SETXCF START,ALTER command or an IXLALTER request for example), system logger determined that the structure allocated for this log stream is not large enough to support the current number of log streams connected to the structure.

In the message text:

strname

is the name of the structure associated with the SCF ALTER request.

System action: IXGWRITE requests issued by current connectors may fail unless the structure size is increased.

User response: None.

Operator response: Use the SETXCF ALTER command support to increase the structure size.

Application Programmer Response: None.

System programmer response: Changes may need to be made to the XCF Policy to insure the minimum structure size is adequate.

Source: System logger (SCLOG)

Detecting Module: IXGF1DSR

Routing Code: 1

Descriptor Code: 11

IXG223I	ENTRY TO ELEMENT RATIO CHANGE INITIATED FOR STRUCTURE <i>strname</i> SUBSEQUENT REBUILDS MAY FAIL
----------------	--

Explanation: A request has started to alter the entry to element ratio for a system logger structure *strname* by an agent other than system logger. The system logger is unable to track the target entry to element ratio in the TYPE=LOGR couple data set because it is not formatted at the correct level. A subsequent rebuild for this structure may fail as a result of this change because system logger will connect to the new instance of the structure with the entry to element ratio as defined through the AVGBUFSIZE keyword on the structure definition in the TYPE=LOGR policy.

In the message text:

strname

is the name of the structure.

System action: System logger continues processing.

User response: None.

Operator response: Notify the system programmer.

Application Programmer Response: None.

System programmer response: Determine whether it is acceptable for an application to initiate an alter of a system logger structure and change the structures entry to element ratio. If so, you should format a new couple data set with TYPE=LOGR and bring it into the sysplex as the active primary TYPE=LOGR couple data set. This allows system logger to track the entry to element changes so that it can use them on subsequent structure allocations. If it is not acceptable for an application to change the entry to element ratio for a system logger structure, then determine which application initiated the alter and either change the application or remove the applications authority to alter the structure.

Source: System logger (SCLOG)

Detecting Module: IXGC3SEX

Routing Code: -

Descriptor Code: -

**IXG224I LOGSTREAM *logstream* DUPLEXING
CHANGED TO STG_DUPLEX(No) *text***

Explanation: Indicates system logger changed the named *logstream* attribute from STG_DUPLEX(YES), DUPLEXMODE(DRXRC) to STG_DUPLEX(NO) since the log stream recovery will occur from the existing DRXRC-type staging data set since the system was IPL'd with DRMODE=YES system parameter and the response to system logger message IXG068D was Y.

In the message text:

logstream

The name of the log stream with the automatic attribute update.

text One of the following:
NO STAGING DATA SET WAS IN USE

There was no staging data set in use for this log stream before the attributes were converted.

**DRXRC TYPE RESOURCE MADE
AVAILABLE FOR LOGSTREAM RECOVERY**

System logger has converted the DRXRC type resources for this log stream and they can be used for log stream recovery purposes.

System action: Log stream duplexing method has been updated.

User response: None.

Operator response: Not applicable.

Application Programmer Response: None.

System programmer response: Not applicable.

Source: System Logger (SCLOG)

Detecting Module: IXGC4XRC

Routing Code: 10

Descriptor Code: 12

**IXG225I IXGLOGR FAILED TO *threadname*
STAGING DRXRC DUPLEXING FOR
LOGSTREAM *logstream* ON VOLUME
volume *servicename* SERVICE ERROR
RETCODE: *retcode*,RSNCODE: *rsncode***

Explanation: Message is issued when system logger is attempting to use a DRXRC-type staging data set or clean up a volume previously used for a DRXRC-type staging data set, but was unable to do this system for the identified log stream and error reason.

In the message text:

threadname

The name of the system logger function or thread being performed for the DRXRC-type

staging data set. Values can be ACTIVATE, DEACTIVATE or CLEAN UP.

logstream

The name of the log stream.

volume The volume name or ??????.

servicename

The name of the service that encountered an error.

retcode The return code from the service.

rsncode

The reason code from the service.

System action: System logger duplexing of log data written to primary storage, coupling facility structure, will depend on log stream attributes or conditions for any primary site log stream recovery purposes. When ACTIVATE appears as the *threadname* system logger will be unable to duplex asynchronously the same log data in a DRXRC-type staging data set for potential log stream recovery purposes on a secondary or recovery site.

When DEACTIVATE or CLEAN UP appears as the *threadname*, system logger was unable to mark the volume *volume* as not having a DRXRC-type staging data set actively in use. If the identified volume is part of an Extended Remote Copy (XRC) storage control session (scsession) designated as a LOGPLUS session, XRC volume consistency processing could also be impacted.

User response: None.

Operator response: Notify the system programmer.

Application Programmer Response: None.

System programmer response: If the *servicename* is not INTERNAL check in the z/OS publications for a description of the return and reason code and try to rectify the problem. For example, if the *servicename* is RESERVE check in *z/OS MVS Programming: Authorized Assembler Services Reference LLA-SDU* to gather more information about the Service. Similarly, if *servicename* is EXCP check the ECB completion code regarding EXCP in *z/OS DFSMSdtp Advanced Services* for more information. Also check for related I/O error messages and correct the problem. Refer to system logger message IXG120E for additional actions.

When the identified volume is a LOGPLUS XRC scsession identified as L+ in XQUERY report you may need to use the IBM Device Support Facilities ICKDSF utility with the REFORMAT command XRCLOGGER(CLEAR) option or use the INIT command to get the volume label information corrected.

If unable to identify the problem source or correct the error contact the IBM Support Center.

Source: System Logger (SCLOG)

Detecting Module: MANY, IXGXMSG

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Routing Code: 2

Descriptor Code: 4

**IXG226I STRUCTURE LIST CLEANUP ERROR
ENCOUNTERED FOR
STRUCTURE=*structname*,
CONNECTION ATTEMPT FAILED FOR
LOGSTREAM=*logstream***

Explanation: Unexpected list entries were found in the structure. Connect was unable to clean up structure list entries for this log stream. The structure lists may have been left from a previous use of the structure.

In the message text:

structname

The name of the structure.

logstream

The name of the logstream.

System action: The IXGCONN connect fails.

Message IXG231I may follow with further diagnostic information.

User response: None.

Operator response: Not applicable.

Application Programmer Response: None.

System programmer response: Since this is the first connection to this log stream, possible actions include moving the log stream to a different structure using IXGINVNT REQUEST (UPDATE), or initiating a structure rebuild by doing the following:

1. if in structure simplex-mode, issue a structure rebuild (SETXCF START,REBUILD...command), or
2. if in structure duplex-mode, transition to simplex-mode (SETXCF STOP,REBUILD,DUPLEX...command), then issue the structure duplexing (SETXCF START,REBUILD,DUPLEX...command).

Source: System Logger (SCLOG)

Detecting Module: IXGC4CON

Routing Code: 10

Descriptor Code: 12

**IXG230I LOGSTREAM *streamname* MAY HAVE
EXCESSIVE NUMBER OF UNUSED
LOCAL BUFFERS.**

| **Explanation:** This diagnostic message is related to log stream local buffer management and intended for IBM support. The system only issues this message when the log stream is defined with DIAG(YES).

In the message text:

streamname

| is the log stream name that has a problem.

System action: The system continues processing.

| **Operator response:** None.

| **User response:** Notify the system programmer.

Application Programmer Response: None.

| **System programmer response:** Notify IBM support. If message IRA204E or other indicators of auxiliary storage shortages are issued, disconnecting from the log stream might relieve the shortage. The IBM support center might request a dump of the system logger trace buffer and address space. See Operator Command in IEADMxx Parmlib Member in Chapter 2 and Getting a Dump of System Logger Information in Chapter 11 of *z/OS MVS Diagnosis: Tools and Service Aids* for more information about obtaining system logger dumps.

Source: System logger (SCLOG)

Detecting Module: IXGT5LBM

Routing Code: 2

Descriptor Code: 4

**IXG231I IXGCONN REQUEST=CONNECT TO
LOG STREAM *logstream* DID NOT
SUCCEED FOR JOB *jobname*. RETURN
CODE:*return-code* REASON
CODE:*reason-code* DIAG1:*reasoncode*
DIAG2:*reasoncode* DIAG3:*reasoncode*
DIAG4:*reasoncode***

Explanation: A request to connect to a log stream was not successful.

In the message text:

logstream

is the name of the log stream for which the connect failed.

jobname

is the name of the job or started task that issued the IXGCONN request.

returncode

is the return code.

reasoncode

is the reason code.

diag1, diag2, diag3, diag4

The answer area, IXGANSAA, diagnostic fields.

System action: Processing continues. The system writes the message to the hard copy log.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: See the return and reason code description documented for the IXGCONN service in *z/OS MVS Programming: Assembler Services Reference IAR-XCT*. Correct the problem.

Source: System logger (SCLOG)

Detecting Module: IXGC2CON

Routing Code: 10

Descriptor Code: 12

IXG232I **IXGCONN REQUEST=DISCONNECT**
FROM LOG STREAM *logstream* **DID**
NOT SUCCEED FOR JOB *jobname*.
RETURN CODE: *return-code* **REASON**
CODE: *reason-code* **DIAG1:** *reasoncode*
DIAG2: *reasoncode* **DIAG3:** *reasoncode*
DIAG4: *reasoncode*

Explanation: A request to disconnect from a log stream was not successful.

In the message text:

logstream

The name of the log stream for which the disconnect failed.

jobname

The name of the job or started task that issued the IXGCONN request.

returncode

The return code.

reasoncode

The reason code.

diag1, diag2, diag3, diag4

The answer area, IXGANSAA, diagnostic fields.

System action: Processing continues. The system writes the message to the hardcopy log.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: See the return and reason code description documented for the IXGCONN service in *z/OS MVS Programming: Assembler Services Reference IAR-XCT*. Correct the problem.

Source: System logger (SCLOG)

Detecting Module: IXGC2CON

Routing Code: 10

Descriptor Code: 12

IXG233I **LOGSTREAM** *logstream* **NOT**
SUPPORTED ON SYSTEM *sysname*,
SERVICE=n FAILED, *text*

Explanation: The system release level does not support the log stream type or attribute, so logger failed the request. The system might issue other system logger messages to this failed request. For example, on IXGCONN requests, the system will also issue message

| IXG231I with return code 8, reason code X'08E3'.

In the message text:

logstream

| is the name of the log stream.

sysname

| is the name of the system.

ATTRIBUTE DUPLEXMODE(DRXRC)

| Indicates the log stream DRXRC option for the DUPLEXMODE parameter is not supported at this release level.

RENAMED LOGSTREAM

| Indicates the renamed log stream, through UPDATE option NEWSTREAMNAME parameter is not supported at this release level.

ATTRIBUTE GROUP VALUE

| Indicates the log stream has a group value other than "PRODUCTION" and the group is not supported at this release level.

System action: System logger fails the specific request. The action of the requester receiving the failed request may vary.

Operator response: Notify the system programmer.

User response: None.

Application Programmer Response: None.

| **System programmer response:** Determine the root cause of the failure and take action to prevent the system logger exploiter from encountering this error condition. When the DRXRC attribute is not supported on this system release level, you can update the *logstream* with STG_DUPLEX(NO) or DUPLEXMODE(COND or UNCOND). Or if necessary, you can delete the *logstream* and redefine it without the DUPLEXMODE(DRXRC) attribute.

| When a renamed log stream or a log stream with a value other than GROUP(PRODUCTION) is not supported on this system release level, you will need to connect to it at the supported release level.

| **Source:** System Logger (SCLOG)

| **Detecting Module:** IXGC4CON

Routing Code: 10

Descriptor Code: 12

IXG235I **STALLED ASYNCHRONOUS IXGWRITE**
REQUESTS DETECTED DURING
DISCONNECT FOR LOGSTREAM
streamname. **DISCONNECT ALLOWED**
TO CONTINUE

Explanation: During connector disconnect processing, System logger indicators showed outstanding asynchronous write activity. After delaying to allow for

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any potential writes to complete normally, system logger is allowing the disconnect request to complete.

In the message text:

streamname

| is the log stream that the disconnect operation
| is being performed on.

System action: System logger disconnect processing for the connector proceeds after delaying to allow any still active asynchronous IXGWRITE requests time to complete.

Operator response: Notify the system programmer.

User response: None.

Application Programmer Response: None.

| **System programmer response:** Search problem reporting data bases for a fix for the problem. If there is no fix for the problem, get a dump of the system logger trace buffer, address space, and structure and contact the IBM Support Center. See Operator Command in IEADMCxx Parmlib Member in Chapter 2 and Getting a Dump of System Logger Information in Chapter 11 of *z/OS MVS Diagnosis: Tools and Service Aids* for more information about obtaining system logger dumps.

Source: System Logger (SCLOG)

Detecting Module: IXGF1TTT

IXG251I *text*

| **Explanation:** This message contains the messages generated from an allocation failure for system logger. It can also contain the actual messages generated from the IDCAMS program when system logger renames a staging data set as a result of an IXCMIAPI DATA TYPE(LOGR) or IXGINVNT API UPDATE LOGSTREAM NEWSTREAMNAME request.

System action: The system writes the message to the hard-copy log. The actual message identification number follows this message.

Operator response: See the operator response for the message that follows this message.

User response: None.

Application Programmer Response: None.

| **System programmer response:** See the system programmer response for the message identifier that is included in message IXG251I.

Source: System logger (SCLOG)

Detecting Module: IXGA1AUS

Routing Code: -

Descriptor Code: -

IXG252I *dsname* IS NO LONGER BEING MANAGED.

Explanation: The log stream data set is no longer being used but the system could not delete the data set.

In the message text:

dsname

| is the name of a log stream data set.

System action: None.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: The data set should be deleted using the IDCAMS delete command.

Source: System logger (SCLOG)

Detecting Module: IXGA1DEL

Routing Code: 2

Descriptor Code: 4

IXG253I SYSTEM LOGGER NO LONGER RECALLING DATA SETS ASYNCHRONOUSLY FOR GROUP: *group*

| **Explanation:** The System logger component responsible for recalling data sets asynchronously has failed for the indicated group.

| In the message text:

| *group*

| is the name of the group of log streams that data set recalls are no longer being processed asynchronously for.

System action: Migrated data sets will be recalled when they are allocated. Some performance degradation might result.

Operator response: None.

User response: None.

Application Programmer Response: None.

System programmer response: You need to consider if the System logger address space needs to be restarted to allow migrated data sets to be recalled asynchronously.

When TEST is specified in *group*, data set recalls for PRODUCTION group log streams are unaffected.

Source: System logger (SCLOG)

Detecting Module: IXGBLF01

Routing Code: 2

Descriptor Code: 4

IXG254I **SMS IS NOT ACTIVE. ACTIVATE SMS OR REPLY C FOR LOGGER TO CONTINUE REGARDLESS OF SMS BEING ACTIVE.**

Explanation: System logger found that System Managed Storage (SMS) address is not active. SMS must be active for system logger to properly use VSAM linear data sets.

System action: If SMS becomes active and system logger recognizes this before the operator replies, this message will be cleared. Performing an action against VSAM linear data sets while SMS is not active might result in error messages, and system logger processing might not complete successfully.

User response: None.

Operator response: Ensure system programmer has activated SMS, or reply C.

Application Programmer Response: None.

System programmer response: You should consider activating SMS as part of the system initialization to eliminate this message. To have SMS active, its address space must be initialized and it must be ready for work.

Source: System logger (SCLOG)

Detecting Module: IXGBLF01, IXGC4SLR

Routing Code: 1,2

Descriptor Code: 2

IXG255I **SYSTEM LOGGER IS NO LONGER USING A STAGING DATA SET FOR LOG STREAM *streamname***

Explanation: Due to an I/O error, system logger is unable to use a staging data for the log stream.

In the message text:

streamname
is the name of the log stream.

System action: The log stream no longer uses a staging data set and coupling facility data is backed up on the system's local storage buffer.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: You should consider if the log stream needs to be stopped and restarted to use a staging data set.

Source: System logger (SCLOG)

Detecting Module: IXGA1TSK

Routing Code: 2

Descriptor Code: 4

IXG256I **AN INVALID DATA SET SIZE WAS DETECTED, 64K IS USED. DATA SET: *dsname***

Explanation: System logger encountered an incorrect data set size for a DASD log stream data set or staging data set. The minimum data set size is 64K.

In the message text:

dsname
is the name of the data set.

System action: The data set is allocated using 64K as the size.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: The invalid size was either specified in a DATACLAS or at DEFINE time. This specification should be changed to at least 164K control intervals.

Source: System logger (SCLOG)

Detecting Module: IXGA1AUS

Routing Code: 11

Descriptor Code: 6

IXG257I **DATA SET DIRECTORY FOR LOGSTREAM *logstream* IN STRUCTURE *strname* IN GROUP *group* IS OVER 90% FULL.**

Explanation: The data set directory for the DASD log data sets for log stream *logstream* is nearly at its maximum capacity. The system issues this message when there are no DSEXTENT records defined in the LOGR couple data set (CDS). The message can also be issued for TEST group log streams if there are too few DSEXTENT records in the LOGR CDS (that is, less than 4) such that none of them can be used for the TEST group. If you reach the maximum number of data sets allowed in the data set directory (168) for a log stream, system logger cannot offload data from interim storage. (Interim storage for a coupling facility log stream is in the coupling facility, while for a DASD-only log stream it is in the local storage buffers.)

In the message text:

logstream
is the name of the log stream.

strname
is the name of the structure associated with the log stream.

group
| is the name of the group the log stream is defined
| to.

System action: System logger continues to offload until the data set directory is completely filled. System logger will also continue to process write requests to the log stream until the interim storage and DASD log data set space for the log stream are completely filled.
(Interim storage for a coupling facility log stream is in the coupling facility, while for a DASD-only log stream it is in the local storage buffers.) The system does not delete this message until either the number of log data sets for the log stream drops below 85% of the total allowed or the last connection to the log stream in the sysplex disconnects. If the shortage continues, the system might issue IXG301I, IXG261E, and IXG262A.

Operator response: None.

User response: None.

Application Programmer Response: None.

System programmer response: Either delete enough data from the log stream to free up space or disconnect from the log stream.

Source: System Logger (SCLOG)

Detecting Module: IXGA1SWT

Routing Code: 1

Descriptor Code: 2

IXG258I **DATA SET** *datasetname NOT ALLOCATED. RC=returncode ERROR=error INFO=infocode SMSRSN=smsreasoncode*

Explanation: System logger encountered a dynamic allocation error when allocating the specified data set. The message includes the data set name, dynamic allocation return code, error code (S99ERROR), information code (S99INFO) and DFSMS reason code (S99ERSN).

In the message text:

datasetname
is the data set name.

returncode
is the dynamic allocation return code.

error
is the dynamic allocation error code.

infocode
is the dynamic allocation information code.

smsreasoncode
is the DFSMS reason code.

System action: The system writes the message to the hardcopy log and continues processing.

User response: None.

Operator response: Notify the system programmer.

Application Programmer Response: None.

System programmer response: Reference the dynamic allocation documentation for the cause of the failure. Correct the problem, if possible. If not, contact the IBM Support Center.

Source: System logger (SCLOG)

Detecting Module: IXGA1AUS

Routing Code: -

Descriptor Code: -

IXG259I **DATA SET** *datasetname NOT UNALLOCATED. RC=returncode ERROR=errorINFO=infocode SMSRSN=smsreasoncode*

Explanation: System logger encountered a dynamic allocation error when unallocating the specified data set. The message includes the data set name, dynamic allocation return code, error code (S99ERROR), information code (S99INFO) and DFSMS reason code (S99ERSN).

In the message text:

datasetname
is the data set name.

returncode
is the dynamic allocation return code.

error
is the dynamic allocation error code.

infocode
is the dynamic allocation information code.

smsreasoncode
is the DFSMS reason code.

System action: The system writes the message to the hardcopy log and continues processing.

User response: None.

Operator response: Notify the system programmer.

Application Programmer Response: None.

System programmer response: Reference the dynamic allocation documentation for the cause of the failure. Correct the problem, if possible. If not, contact the IBM Support Center.

Source: System logger (SCLOG)

Detecting Module: IXGA1AUS

Routing Code: -

Descriptor Code: -

IXG260I *macroname* **FAILED FOR** *datasetname*.
RC=retcode RSN=rnocode

Explanation: System logger encountered an error from the specified macro interface while processing the specified migrated data set. The message includes the macro interface name, the data set name, macro return code, and macro reason code.

In the message text:

macroname

One of the following:

ARCHRCAL

An ARCHRCAL macro was issued to recall a migrated data set.

ARCHDEL

An ARCHDEL macro was issued to delete a migrated data set.

datasetname

is the data set name.

returncode

is the macro return code.

reasoncode

is the macro reason code.

System action: The system writes the message to the hard-copy log and continues processing.

Operator response: Notify the system programmer.

User response: None.

Application Programmer Response: None.

System programmer response: Refer to the macro documentation for the cause of the failure. Correct the problem, if possible. If not, contact the IBM Support Center.

Source: System Logger (SCLOG)

Detecting Module: IXGA1HSM

Routing Code: -

Descriptor Code: -

IXG261E **SHORTAGE OF DIRECTORY EXTENT RECORDS TOTAL** *numTotal* **IN USE:** *numInuse* **AVAILABLE:** *numAvail*

Explanation: System logger has detected a shortage of log data set directory extent records in the active LOGR couple data set for PRODUCTION group log streams. System logger might eventually fail log stream offloads if it cannot obtain a log data set directory extent required to process the offload. The system issues this message if the number of in-use log data set directory extent records in the active LOGR couple data set exceeds 85 percent of the total number of log data set directory extent records in the LOGR couple data set. The counts in the message are the values that existed

when the condition was detected. These do not reflect the real time record counts in the current couple data set.

In the message text:

numTotal

is the total number of log data set directory extent records formatted in the active primary LOGR couple data set.

numInuse

is the number of log data set directory extent records currently in use in the active primary LOGR couple data set.

numAvail

is the number of log data set directory extent records available for use in the active primary LOGR couple data set.

System action: The system logger will continue processing. This condition can proceed in one of two directions:

1. Shortage is relieved

This means that the number of in-use log data set directory extent records has dropped below 80 percent of the total formatted in the active primary LOGR couple data set for the PRODUCTION group.

This could happen either as a result of system activity resulting in a number of log data set directory extent records being freed from log streams, thus increasing the available pool for the PRODUCTION group or because a new LOGR couple data set was brought into the sysplex as the primary LOGR couple data set and this LOGR couple data set was formatted with a larger number of log data set directory extent records.

The shortage could also be relieved if the activities of TEST group log streams are reduced by deleting TEST group log streams or by reducing the retention period for log data associated with TEST group log streams.

If this storage is relieved, this message will be deleted (DOMed).

2. Shortage becomes critical

This means that the number of in-use log data set directory extent records has exceeded 95 percent of the total formatted in the active primary LOGR couple data set.

If this occurs, the system will issue message IXG262A to notify you of the critical shortage.

Operator response: Notify the system programmer.

User response: None.

Application Programmer Response: None.

System programmer response: You must increase the pool of available log data set directory extent records in the active primary LOGR couple data set.

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You can increase the available pool in one of the following two ways:

1. Formatting a new LOGR couple data set.

You can format a new LOGR couple data set and increase the number of log data set directory extent records through the DSEXTENT keyword on the couple data set format utility. As help in determining the number of additional log data set directory extent records to specify, this message includes the total number of log data set directory extent records that are formatted in active primary LOGR couple data set, *numTotal*, the number of currently in-use log data set directory extent records, *numInuse*, and the number of currently available log data set directory extent records, *numAvail*.

To relieve the shortage, you must reduce the number of in-use log data set directory extent records to below 80 percent of the total formatted.

2. Freeing log data set directory extents from existing log streams.

You can also relieve the shortage by freeing log data set directory extent records being consumed by existing log stream definitions. You can free log data set directory extent records in two different ways:

a. Deleting log stream definitions.

If you can identify unnecessary log stream definitions that are consuming log data set directory extents, deleting the log stream definition will immediately free the log data set directory extents associated with that log stream back into the available pool.

As an aid in detecting unnecessary log stream definitions, check the log stream GROUP attribute. You can delete TEST group log streams before you delete PRODUCTION group log streams.

b. Reducing the retention period for log data.

If you can identify log streams that are defined with excessive retention periods and these log streams are consuming log data set directory extent records, you can free up log data set directory extent records by reducing the retention period, thus increasing the available pool.

For TEST group based log streams, you can make the retention period small so that the data can be quickly deleted, thus occupying less directory extent records.

Note: System logger does not necessarily react immediately to reductions in the retention period. The rule for when system logger will process reductions in the retention period is upon the next log data set switch event for the log stream. This implies that the log stream must be connected and incurring sufficient write activity to force data set switch events.

You can run a report of the log streams defined in the LOGR couple data set to help you identify candidates for cleanup. The report utility program is IXCMIAPU.

Source: System Logger (SCLOG)

Detecting Module: IXGA1SWT

Routing Code: 1

Descriptor Code: 11

IXG262A CRITICAL SHORTAGE OF DIRECTORY EXTENT RECORDS TOTAL *numTotal* IN USE: *numInuse* AVAILABLE: *numAvail*

Explanation: The System logger has detected a critical shortage of log data set directory extent records in the active LOGR couple data set for PRODUCTION group log streams. System logger may shortly begin failing log stream offloads should it be unable to obtain a log data set directory extent required to process the offload. This message is issued once the number of in-use log data set directory extent records in the active LOGR couple data set exceeds 95 percent of the total number of log data set directory extent records in the LOGR couple data set. The counts in the message are the values that existed when the condition was detected. These do not reflect the real time record counts in the current couple data set.

In the message text:

numTotal

is the total number of log data set directory records formatted in the active primary LOGR couple data set.

numInuse

is the number of log data set directory records currently in use in the active primary LOGR couple data set.

numAvail

is the number of log data set directory records available for use in the active primary LOGR couple data set.

System action: The system logger will continue processing. This condition can proceed in one of the following two directions:

1. Critical shortage is relieved

This means that the number of in-use log data set directory extent records has dropped below 90 percent of the total formatted in the active primary LOGR couple data set.

This could happen either as a result of system activity resulting in a number of log data set directory extent records being freed from log streams, thus increasing the available pool or because a new LOGR couple data set was brought into the sysplex as the primary LOGR couple data

set and this LOGR couple data set was formatted with a larger number of log data set directory extent records.

You can delete TEST group log streams or reduce the retention period for log data associated with TEST group log streams to reduce the activities of TEST group log streams, thus relieving the storage.

If this critical shortage is relieved, this message will be deleted (DOMed). If the resulting environment still has a shortage of log data set directory extent records, message IXG261E will stay on the screen.

2. Offloads begin failing

This means that all the log data set directory extent records in the active primary LOGR couple data set are in-use and a log stream offload that required extending the log stream log data set directory could not obtain the needed extent.

If offloads begin failing, the system will issue message IXG301I with a return code 8 and reason code of X'85C'. If the log stream remains connected and log data set directory extent records become available, system logger will retry the offload.

Operator response: Notify the system programmer.

User response: None.

Application Programmer Response: None.

System programmer response: The pool of available log data set directory extent records in the active primary LOGR couple data set must be increased. You can increase the available pool in one of the following two ways:

1. Formatting a new LOGR couple data set.

You can format a new LOGR couple data set and increase the number of log data set directory extent records through the DSEXTENT keyword on the couple data set format utility. As help in determining the number of additional log data set directory extent records to specify, this message includes the total number of log data set directory extent records that are formatted in active primary LOGR couple data set, *numTotal*, the number of currently in-use log data set directory extent records, *numInuse*, and the number of currently available log data set directory extent records, *numAvail*.

To relieve the critical shortage, you must reduce the number of in-use log data set directory extent records to below 90 percent of the total formatted.

If the critical shortage is relieved, unless you reduce the number of in-use log data set directory extent records to below 80 percent of the total formatted, a shortage condition will result.

2. Freeing log data set directory extents from existing log streams.

You can also relieve the shortage by freeing log data set directory extent records being consumed by existing log stream definitions. You can free log data set directory extent records in two different ways:

a. Deleting log stream definitions.

If you can identify unnecessary log stream definitions that are consuming log data set directory extents, deleting the log stream definition will free the log data set directory extents associated with that log stream back into the available pool.

As an aid in detecting unnecessary log stream definitions, check the log stream GROUP attribute. You can delete TEST log streams before deleting PRODUCTION log streams.

b. Reducing the retention period for log data.

If you can identify log streams that are defined with excessive retention periods and these log streams are consuming log data set directory extent records, you can free up log data set directory extent records by reducing the retention period, thus increasing the available pool.

For TEST group log streams, you need to make the retention period small so that you can quickly delete the data. Thus the data occupy less directory extent records.

Note: The system logger does not necessarily react immediately to reductions in the retention period. The rule for when system logger will process reductions in the retention period is upon next log data set switch event for the log stream. This implies that the log stream must be connected and incurring sufficient write activity to force data set switch events.

You can run a report of the log streams defined in the LOGR couple data set to help you identify candidates for cleanup. The report utility program is IXCMIAPU.

Source: System Logger (SCLOG)

Detecting Module: IXGA1SWT

Routing Code: 1

Descriptor Code: 2

IXG263E IXGLOGR ATTEMPT TO ALLOCATE A DATA SET FAILED FOR LOGSTREAM *logstream*. UNSUPPORTED CISIZE USED=*cisize* DSN=*data-set-name*

Explanation: An attempt by IXGLOGR to allocate data set *datasetname* for log stream *logstream* failed because the CI size *cisize* used for the data set is not supported by system logger. The STG_DATACLAS or the LS_DATACLAS specification for the log stream definition may reference an SMS data class that uses a VSAM linear data set CI size other than 4096.

In the message text:

logstream

is the name of the log stream.

csize

is the unsupported CI size of the data set.

data-set-name

is the data set name.

System action: System logger will not be able to use the data set. If the data set was just allocated new, it will be deleted. If the data set previously existed, it will just be unallocated. The impact depends on the function requesting the data set. If a staging data set was allocated with a CI size that is not supported, connections to the log stream may be prevented or recovery for the log stream might not be able to complete successfully. If a log stream data set was allocated with a CI size that is not supported, then offloads may fail and/or attempts to browse data from the log stream may also be unsuccessful.

User response: None.**Operator response:** Notify the system programmer.**Application Programmer Response:** None.

System programmer response: Check the SMS Data class that is being used for the data set, and ensure the log stream STG_DATACLAS or LS_DATACLAS specification references an SMS data class that uses a VSAM linear data set CI size of 4096.

Source: System logger (SCLOG)**Detecting Module:** IXGA1AUS**Routing Code:** 10**Descriptor Code:** 4

IXG264E SMS IS NOT INSTALLED. INSTALL SMS OR REPLY C FOR LOGGER TO CONTINUE REGARDLESS OF SMS BEING INSTALLED.

Explanation: System logger found that System Managed Storage (SMS) is not installed. SMS must be installed and active for system logger to properly use VSAM linear data sets.

System action: If SMS is installed and system logger recognizes this before the operator replies, the message will be cleared. However, if SMS is now installed but not yet active, message IXG254I will be issued. Performing an action against a VSAM linear data set while SMS is not active might result in an error message and system logger processing might not complete successfully.

User response: None.**Operator response:** Ensure the system programmer has installed SMS, or reply C.**Application Programmer Response:** None.**System programmer response:** You should consider

installing and activating SMS as part of the system initialization to eliminate this message. To have SMS installed, it must be defined as a subsystem.

Source: System logger (SCLOG)**Detecting Module:** IXGBLF01, IXGC4SLR**Routing Code:** 1,2**Descriptor Code:** 2

IXG266I LOGGER DATA SET DELETION ACTIVITY FOR LOGSTREAM *logstream* WAS QUIESCED BY *group taskname* TASK.

Explanation: System logger quiesced data set deletion activity for the specified log stream because it was taking longer than 50 seconds, and other log stream processing requests were being delayed.

In the message text:

logstream
is the name of the log stream.

group
is the name of the group to which the service task belongs (either PRODUCTION OR TEST). *group* is set to blank if *taskname* is MONITORING

taskname
identifies the logger task, LOGSTREAM MISC or MONITORING, that handled the quiescing of the log stream deletion activity.

System action: System logger quiesces the data set deletion activity for the log stream and continues its operation in a normal manner.

Operator response: None.**User response:** None.**Application Programmer Response:** None.

System programmer response: Check if any remaining data sets that might still need to be deleted are eventually deleted on subsequent log stream offloads.

Source: System logger (SCLOG)**Detecting Module:** IXGL2MON

IXG267I *DataSetType DATASET DataSetName ALLOCATED WITH INCORRECT VSAM SHAREOPTIONS, USE IS ACCEPTED BUT NOT RECOMMENDED.*

Explanation: System logger detected that a dataset which has just been allocated has incorrect VSAM SHAREOPTIONS. This can lead to system logger being unable to read back the data for operations such as Logstream Recovery and Browse requests. Datasets used for system logger in this environment MUST have VSAM SHAREOPTIONS set to at least (3,3), either

through the SMS DATACLAS that is associated with the Logstream, or a similar method.

In the message text:

DataSetType

The type of the data set. This can be either:

Logstream

A Logstream (Offload) Dataset is allocated.

Staging

A Staging (Recovery) Dataset is allocated.

DataSetName

The name of the data set.

System action: System logger allows the Allocation. However, in order to ensure correct operation of the system, the SHAREOPTIONS MUST be updated. See System Programmer Response.

User response: None.

Operator response: Contact the system programmer.

Application Programmer Response: None.

System programmer response: The VSAM SHAREOPTIONS for this data set are incorrect, and must be changed through IDCAMS to avoid future problems trying to access the data. In addition, the logstream attribute LS_DATACLAS or STG_DATACLAS may need to be changed to point to an SMS DATACLAS that has the correct options. To determine the current DATACLAS values, run the IXCMIAPU Utility and specify "LIST LOGSTREAM NAME(logstream)". If the log stream is not defined with xx_DATACLAS, then you may need to update your ACS Routines, or other allocation defaults on your system. Alternatively, the SMS DATACLAS can be altered. Be aware that this type of change will impact any data set associated with this DATACLAS.

Source: System Logger (SCLOG)

Detecting Module: MANY

Routing Code: -

Descriptor Code: -

IXG268I *datasettype DATASET dsname CAN NOT BE OPENED FOR JOB jobname DUE TO shroptdatanotavail*

Explanation: System logger detected that a dataset could not be opened due to incorrect VSAM SHAREOPTIONS, or another unexpected error. Typically, the dataset is being used by another process with exclusive access.

This can lead to system logger being unable to read back the data for operations such as Logstream Recovery and Browse requests. Datasets used for system logger must have VSAM SHAREOPTIONS set to at least (3,3), either through the SMS DATACLAS that is associated with the log stream, or a similar

method, in order to avoid problems when the log streams are used in a multisystem environment. Also, system logger must have access to its datasets whenever it needs to update them.

This problem can be due to HSM allocating a dataset exclusive that system logger requires. In this case, retrying the operation will correct the problem.

In the message text:

datasettype

The type of the data set. This can be either:

Logstream

A Logstream (Offload) Dataset open failed.

Staging

A Staging (Recovery) Dataset open failed.

dsname

The name of the data set.

jobname

The name of the job or started task that issued the request.

shropt

shropt can be either:

INCORRECT VSAM SHAREOPTIONS OR OTHER ERROR

VSAM SHAREOPTIONS may not be correct.

UNEXPECTED OPEN ERROR

Unexpected Open Error was received.

datanotavail

REQUESTED DATA MAY NOT BE AVAILABLE

Data may not be accessible in this dataset.

System action: The Action depends on the type of data set being allocated.

For a Logstream data set being allocated for output, the system ignores the dataset and allocates a new one. No data is lost in this case.

For a Logstream data set being allocated for input, the data in the data set is not accessible. The data is not lost but can not be read at this time.

For a Staging data set being allocated for input, the data is not accessible, and no other copy of the data may exist, either in local buffers or a CF Structure. Check for other system logger messages associated with this Logstream.

This message may be accompanied by MSGIEC161I. Refer to the explanation of this message for more details.

User response: None.

Operator response: Notify the system programmer.

Application Programmer Response: None.

System programmer response: If the VSAM

SHAREOPTIONS for this dataset are incorrect, they must be changed through IDCAMS to avoid future problems trying to access the data. In addition, the log stream attribute LS_DATACLAS or STG_DATACLAS may need to be changed to point to an SMS DATACLAS that has the correct options. To determine the current DATACLAS values, run the IXCMIAPI Utility and specify "LIST LOGSTREAM NAME(*logstream*)". If the log stream is not defined with xx_DATACLAS, then you might need to update your ACS Routines, or other Allocation defaults on your system.

Alternatively, the SMS DATACLAS can be altered. Be aware that this type of change may impact other datasets associated with this DATACLAS.

If the VSAM SHAREOPTIONS are correct, and the problem is due to HSM holding serialization on the dataset, then the use of HSM Exit ARCBDEXT can tell HSM that it does not need to obtain serialization for certain datasets. This exit can be used for Offload datasets but not for Staging datasets.

Source: System Logger (SCLOG)

Detecting Module: MANY

Routing Code: 2

Descriptor Code: 4

IXG269I SYSTEM LOGGER ENCOUNTERED A DATA ERROR WHILE READING DSN= *DSName*

Explanation: System logger encountered a data error while trying to read from the log data set specified.

In the message text:

DSName

The name of the data set.

System action: The request to read the data set fails.

User response: None.

Operator response: Contact the system programmer.

Application Programmer Response: None.

System programmer response: See the MVS Assembler Services Reference and MVS System Codes to check the accompanying return and reason codes. If the problem persists, search IBM's problem reporting databases for a fix for the problem. If no fix exists, contact the IBM support center.

Source: System Logger (SCLOG)

Detecting Module: IXGA1MM

Routing Code: 2

Descriptor Code: 4

IXG270I	SHORTAGE OF DIRECTORY EXTENT RECORDS FOR GROUP: TEST GROUP
	TOTAL: <i>grouptotal</i> IN-USE: <i>groupnuminuse</i> AVAILABLE: <i>groupnumavail</i>

Explanation: System logger has detected a shortage of data set directory extent records in the active primary LOGR couple data set (CDS) for TEST group log streams. This message is issued when a DSEXTENT record is assigned to a TEST group log stream and the number of in-use data set directory extent records exceeds 85% of the total number of data set directory extent records in the LOGR CDS available for TEST group log streams. The message can also be issued when system logger is unable to obtain a DSEXTENT record for a TEST group log stream because all the DSEXTENTS are assigned to PRODUCTION log streams.

TEST group log streams are allowed at most 25% of the total number of DSEXTENT records in the LOGR CDS. The counts in the message are the values that existed when the condition was detected and may not reflect the real time record counts in the current LOGR couple data set.

In the message text:

grouptotal
is the total number of data set directory extent records in the active primary LOGR couple data set that can be used for the TEST group log streams.

groupnuminuse
is the current number of data set directory extent records explicitly in use for TEST group log streams in the active primary LOGR couple data set.

groupnumavail
is the remaining number of data set directory extent records currently available in the active primary LOGR couple data set for TEST group log streams.

System action: The system logger will continue processing. This condition can proceed in one of two directions:

1. Shortage is relieved

This could happen either as a result of system activity resulting in a number of data set directory extent records being freed from log streams, thus increasing the available pool for the TEST group, or because a new LOGR CDS was brought into the sysplex and was formatted with a larger number of data set directory extent records.

The shortage could also be relieved if the activities of TEST group log streams are reduced by deleting TEST group log streams or by reducing the retention period for log data associated with TEST group log streams.

Should this shortage be relieved, this message will be deleted (DOMed).

2. No more data set directory extent records are available
 This means that all of the data set directory extent records for the TEST group are in use in the active primary LOGR CDS. System logger will fail log stream offloads in the TEST group since it is unable to obtain a data set directory extent required to process an offload. If the condition persists, then the log stream writers may eventually receive "log stream interim storage full" error conditions.
- Operator response:** Notify the system programmer.
- User response:** None.
- Application Programmer Response:** None.
- System programmer response:** The pool of available data set directory extent records in the active primary LOGR CDS may need to be increased.
- Freeing data set directory extents from existing log streams:
 You can relieve the shortage by freeing data set directory extent records being consumed by existing log stream definitions. Run a report of the log streams defined in the LOGR couple data set to help you identify candidates for cleanup. The report utility program is IXCMIAPI for DATA TYPE(LOGR) using the LIST LOGSTREAM NAME(*) DETAIL(YES) request. Data set directory extent records can be freed in two different ways:
 - Deleting log stream definitions.
 If you can identify unnecessary log stream definitions that are consuming data set directory extents, deleting the log stream definition will result in the data set directory extent records associated with that log stream being freed and put back into the available pool. As an aid in detecting unnecessary log stream definitions, check the log stream GROUP attribute. It is more likely you will want to delete TEST log streams before you delete PRODUCTION log streams.
 - Reducing the retention period for log data.
 If you can identify log streams that are defined with excessive retention periods and these log streams are consuming data set directory extent records, by reducing the retention period you may free up data set directory extent records, thus increasing the available pool. For TEST group based log streams, you may want to make the retention period small so that the log data can be quickly deleted thus occupying less data set directory extent records.
- Note:** System logger does not necessarily react immediately to reductions in the retention period. The rule for when system logger will process reductions in the retention period is on the next data set switch event for the log stream. Hence, this

- implies that the log stream must be connected and incurring sufficient write activity to force data set switch events.
- Bring in a new primary LOGR couple data set with more data set directory extent records:
 You can format a new LOGR couple data set and increase the number of data set directory extent records through the DSEXTENT keyword on the couple data set format utility. Use the DISPLAY XCF,C,TYPE=LOGR command and use the message IXC358I output to determine the current total number of data set directory extent records that are formatted in the active primary and alternate LOGR couple data sets. After the larger LOGR CDS is formatted, make it the new active primary through the SETXCF COUPLE commands.
- Source:** System Logger (SCLOG)
- Detecting Module:** IXGA1SWT
- Routing Code:** 2,10
- Descriptor Code:** 3

**IXG271I LOGGER DATA SET REQUEST IN
*group**taskname* SERVICE TASK
 DELAYED DURING THE PAST *seconds*
 SECONDS FOR LOGSTREAM *logstream*
staging DSN=*dsname*, DIAG=*diag***

Explanation: The system logger event monitor determined that a system logger service task is not responding while attempting an allocation, deletion, or HSM recall or delete for a log stream data set. Delays in system logger service tasks can impact not only the specific log stream, but also other log streams on the system or in the sysplex.

In the message text:

group
 is the name of the group which the service task belongs to (either PRODUCTION or TEST)

taskname
 is the name of the system logger service task that is not responding. It is either ALLOCATION or MIGRATED DATASET

seconds
 is the number of seconds that the task has not responded.

logstream
 is the log stream name.

staging
 is the word STAGING or null.

dsname
 is the log stream data set name.

diag
 is the internal Diagnostic Data where the following

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hexadecimal ranges followed by the decimal values indicate the type of activity system logger is waiting on to complete:

X'01'-X'0A' (1-10) Dynamic Allocation/
Unallocation
X'0B'-X'14' (11-20) Serialization/Latching
X'15'-X'1E' (21-30) Catalog Accesses
X'1F'-X'32' (31-50) Media Manager
OPEN/CONNECT
X'33'-X'46' (51-70) Media Manager
CLOSE/DISCONNECT
X'47'-X'50' (71-80) Media Manager I/O Accesses
X'51'-X'5A' (81-90) Migrated Data Set Recall
X'5B'-X'64' (91-100) Migrated Data Set Delete

System action: System logger will prompt the operator for action with message IXG272E. If the system makes no response, the data set request might still finish normally. If this occurs, system logger will DOM both IXG271I and IXG272E messages and continue processing. Until the data set request completes, system logger on this system might not be able to process many functions such as log stream connect, disconnect, deletion requests, offloads, browses etc.

Until the data set request completes, system logger on this system might be unable to process many functions such as log stream connect, disconnect, or deletion requests etc.

Operator response: Check for any conditions in the installation that might be preventing the task from proceeding.

1. Check for outstanding WTOs or WTORs.

Check for any outstanding WTORs or WTOs that are awaiting action that might be preventing system logger from being able to allocate a log data set.

2. Check for start pendings.

Check for any start pending conditions against either the DASD device or any devices required to allocate or unallocate log data sets such as the catalog device and any device which a new log data set could be allocated on. If start pending conditions are found on any of these devices, resolve the condition.

3. Check for resource contention.

Issue the DISPLAY GRS,C command to display resource contention. If there is resource contention that is preventing system logger from allocating log data sets, resolve the contention.

4. Check for recall of migrated log data sets.

Resolve any recall requests for migrated log data sets.

If none of the above steps resolves the problem, notify the system programmer.

User response: None.

Application Programmer Response: None.

System programmer response: See also message IXG272E documentation.

Source: System Logger (SCLOG)

Detecting Module: IXGL2MON

Routing Code: 2,10

Descriptor Code: 7,11

**IXG272E LOGGER group taskname TASK
DELAYED, REPLY "MONITOR",
"IGNORE", "FAIL", "EXIT".**

Explanation: The system logger Event Monitor is requesting that an action be specified for a Task in the system logger address space that is not responding.

The actions are as follows:

1. MONITOR—Continue monitoring this delayed request.
2. IGNORE—Stop monitoring this delayed request.
3. FAIL—Fail the current request this task is processing.
4. EXIT—Terminate system logger Service Task Monitoring.

See the system programmer Response for a more complete description of these actions.

In the message text:

group
is the name of the group to which the service task belongs (either PRODUCTION or TEST)

taskname
is the name of system logger service task that is not responding. It is either ALLOCATION or MIGRATED DATASET.

System action: Message IXG271I accompanies this message. System logger waits for the operator to specify an action, or for the request to complete resulting in message IXG272E being DOMed.

Operator response: Contact the system programmer. Then respond to the message.

User response: None.

Application Programmer Response: None.

System programmer response: Message IXG271I accompanies this message. Review IXG271I and its description before proceeding with a response.

This message can also be accompanied by messages IXG311I and IXG312E, which also indicates a possible delay related to a log stream data set request. Review these message descriptions as well. Also refer to Offload and Service Task Monitoring in Chapter 9 of the

book *z/OS MVS Setting Up a Sysplex* for more information about the relationship and considerations for these action messages.

If the system makes no response, the Task might still finish the request normally resulting in message IXG272E being DOMed. If you decide to respond, you can find the explanation of the ramifications of each response as follows.

MONITOR

The system logger Event Monitor continues to Monitor the request and takes no overt action. If the specific request has not made progress after another interval, the system will issue another WTOR at that time.

When you reply MONITOR, any subsequent IXG271I messages issued will show a delay duration. You can use the delay duration to determine if a new delay is being seen, or if the delay is ongoing, that is, the delay value is increasing.

IGNORE

The system logger Event Monitor stops Monitoring this request. It might be that there is no problem with this request, it is simply taking a long time, and this is acceptable to the installation, (e.g. HSM Recalls for data sets).

FAIL

The request will be interrupted on this system. This will most likely cause the request to behave as if it failed (e.g. a data set could not be allocated).

This can also allow other work to continue that was waiting for this system logger service task. Use this option only if you cannot determine why the request is not completed.

Replying FAIL might cause undesirable results, and is meant to keep the rest of the system logger applications running, at the expense of one hung application.

Take note of any other system logger error messages or messages from any exploiter of the affected log stream.

If you reply FAIL, system logger might cause other components such as Allocation to enter their Recovery, take dumps, or issue various messages.

EXIT

The system logger event monitor terminates ALL service task monitoring activity on this system. There will be no messages indicating system logger task processing being delayed, and there will be no mechanism available to quiesce (fail) any delayed system logger tasks. In this case, the system also issues Message IXG275I. This response will not affect offload monitoring. If system logger is ever stopped and restarted, the Task Monitor will be restarted as well.

If it appears there is a persistent problem inhibiting normal system logger operations, get a dump of system logger to obtain diagnostic information, and contact the IBM support center. See Operator Command in IEADMxx Parmlib Member in Chapter 2 and Getting a Dump of System Logger Information in Chapter 11 of *z/OS MVS Diagnosis: Tools and Service Aids* for more information about obtaining system logger dumps.

Source: System Logger (SCLOG)

Detecting Module: IXGL2MON

Routing Code: 2,10

Descriptor Code: 3

IXG273I function COMPLETED SUCCESSFULLY

Explanation: The system logger procedure performed the requested function successfully.

In the message text:

function

is the function that relates to the submitted procedure, such as:

- DELETE ALL BLOCKS (Samplib IXGDELAB)
- DELETE LOGSTREAM (Samplib IXGDELLS)
- OFFLOAD (Samplib IXGOFDLS)

System action: The requested *function* was performed successfully.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System Logger (SCLOG)

Routing Code: 2,10

Descriptor Code: 4

IXG274I subfunction FAILED FOR *function*, RETCODE=*retcode*, RSNCODE=*rsncode*

Explanation: The system logger procedure was attempting to perform the requested *function*, but the *subfunction* failed, preventing the *function* from being successful.

The return and reason codes are documented in macro IXGCON.

In the message text:

subfunction

is the subfunction or IXG-service that was operating when the failure or error was encountered.

function

is the function that relates to the submitted procedure, such as:

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- DELETE ALL BLOCKS (Samplib IXGDELAB)
- DELETE LOGSTREAM (Samplib IXGDELLS)
- OFFLOAD (Samplib IXGOFDLS)

retcode

is the return code from the *subfunction* service.

rsnocode

is the reason code from the *subfunction* service.

System action: The job step terminates and the *function* does not complete successfully.

User response: Correct the error and retry the operation.

Operator response: See *z/OS MVS Programming: Assembler Services Reference IAR-XCT* to review macro IXGCON for information about system logger return and reason codes displayed with this message. Correct the error and retry the operation. If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Application Programmer Response: Correct the error and retry the operation.

System programmer response: None.

Source: System Logger (SCLOG)

Routing Code: 2,10

Descriptor Code: 4

IXG275I SYSTEM LOGGER EVENT MONITORING STOPPED FOR SERVICE TASKS ON SYSTEM *sysname*

Explanation: The system requested system logger service task monitoring to be stopped because of operator response of "EXIT" for message IXG272E. No more system logger service task event monitoring will be performed on this system, unless system logger or the system is restarted.

In the message text:

sysname

is the name of the system where the service task monitor has been stopped.

System action: System logger will no longer monitor service task events, including allocation and recall requests. This response will not affect offload monitoring.

Operator response: Contact the system programmer.

User response: None.

Application Programmer Response: Correct the error and retry the operation.

System programmer response: Make sure that system logger is still functioning normally. If monitoring is essential to installation operations, consider taking

down the IXGLOGR address space (this will not impact any executing system logger applications) and then restarting system logger (through START IXGLOGRS).

Source: System Logger (SCLOG)

Routing Code: 10

Descriptor Code: 4

IXG276I LOGGER RENAMED LOGSTREAM *logstream* STAGING DATA SET *dsnhlq.dsnlqn.dsnlq* TO NEW NAME *dsnhlq.dsnlqn.dsnlq*

Explanation: The system issues this message when system logger is successful renaming an existing log stream staging data set as part of the log stream name update request.

In the message text:

logstream

is the log stream being updated.

dsnhlq

is the high level qualifier of the log stream data set name.

dsnlqn

is the current log stream name qualifier portion of the log stream data set name.

dsnlqn

is the new log stream name qualifier portion of the log stream data set name.

System action: System logger continues with the UPDATE LOGSTREAM NEWSTREAMNAME request.

Operator response: None

User response: None.

Application Programmer Response: None

System programmer response: None

Source: System Logger (SCLOG)

Routing Code: 10

Descriptor Code: 12

IXG277E UNABLE TO RENAME LOGSTREAM *logstream* STAGING DATA SET *dsnhlq.dsnlqn.dsnlq* TO NEW NAME *dsnhlq.dsnlqn.dsnlq* IDCAMS request **SERVICE ERROR RETCODE: *retcode*, RSNCODE: *rsnocode***

Explanation: The system issues this message when system logger is attempting to rename an existing log stream staging data set, but encountered an error. If the RETCODE is 4 and the RSNODE is "D3D6C7D9"X

| ("LOGR"C), IDCAMS returned information about the
| LISTCAT request, but system logger could not identify
| the DATA entry for the staging data set name.

| In the message text:

| *logstream*
| is the log stream being updated.

| *dsnhlq*
| is the high level qualifier of the log stream data set
| name.

| *dsnlsn*
| is the current log stream name qualifier portion of
| the log stream data set name.

| *dsnllq*
| is the low level qualifier of the log stream data set
| name.

| *dsnlsnn*
| is the new log stream name qualifier portion of the
| log stream data set name.

| *request*
| One of the following:

| **ALTER**
| Alter request to update data set name.

| **retcode**
| The return code from the Service

| **rsnocode**
| The reason code from the Service

| **System action:** System logger continues with the
| UPDATE LOGSTREAM NEWSTREAMNAME request
| and will result in a return code 4, reason code "418"
| condition (see `IxgRsnCodeUpdateNewnameWarning` in
| IXGCON macro).

| **Operator response:** Notify the System Programme

| **User response:** None.

| **Application Programmer Response:** None

| **System programmer response:** Check for any
| IXG251I hard-copy messages and see the system
| programmer response for the message identifier that is
| included in message IXG251I. See *z/OS DFSMS
Access Method Services for Catalogs* for the IDCAMS
return code information, and correct the condition that
caused the error. If a staging data set is migrated, the
IXG251I messages might indicate that the data set is a
"NONVSAM" type entry for the cluster. Migrated staging
data sets for the log stream should first be recalled
before submitting the NEWSTREAMNAME update
request as system logger does not attempt to rename
migrated data sets. Because the log stream is already
renamed when this message is issued, the system
programmer will need to rename the migrated staging
data set.

| After correcting the error condition, submit the
| necessary IDCAMS ALTER entryname NEWNAME() job

| to get the existing log stream staging data set name
| updated to match the new stream name change. This
| will need to be done before defining a new instance of a
| log stream that uses the same name as the log stream
| identified in this message. Failure to get the staging
| data set renamed correctly can result in a "loss of data"
| condition when a connection occurs for the log stream
| that was renamed.

| If you cannot identify the problem source or correct the
| error, search problem reporting data bases for a fix for
| the problem. If no fix exists, contact the IBM Support
| Center.

| **Source:** System Logger (SCLOG)

| **Routing Code:** 10

| **Descriptor Code:** 12

IXG3011 **SYSTEM LOGGER FAILED TO
OFFLOAD DATA FOR LOG STREAM
logstream IN STRUCTURE *strname*.**
RETURN CODE:*retcode* **REASON**
CODE:*rsnocode* **DIAG1:***diag1*
DIAG2:*diag2* **DIAG3:***diag3* **DIAG4:***diag4*

Explanation: The system detected a failure during a process to offload data from interim storage (coupling facility for a coupling facility log stream, local storage buffers for a DASD-only log stream) to DASD log data sets for the specified log stream.

In the message text:

logstream
is the name of the log stream.

strname
For a coupling facility log stream, the name of the structure associated with the log stream.

For a non-coupling facility based log stream, the *strname* will be:

NOT APPLICABLE

retcode
The return code from the failing service.

rsnocode
The reason code from the failing service.

diag1, *diag2*, *diag3*, *diag4*
Diagnostic fields (*diag1* - *diag4*) info for the answer area, IXGANSAA.

System action: System logger will continue to accept write requests until the interim storage associated with the specified log stream is full. Once it becomes full, logger will attempt to offload periodically until the problem is resolved or the log stream is disconnected.

User response: None.

Operator response: Notify the system programmer.

Application Programmer Response: None.

System programmer response: Search the IXGCON mapping macro for the return code and take the action suggested. If the error cannot be corrected, contact the IBM Support Center.

Instructions for specific installation environmental errors:

- | • For return code X'08', reason code X'0805', data might still be written to the log stream until the log stream writer receives a return code X'08' on an IXGWRITE with a reason code that indicates that interim storage is full (e.g., X'0860', X'0865', or X'085D'). When the full condition occurs, the error (e.g., out of space on DASD) must be corrected before the offload can complete.
- | • For return code X'08', reason code X'085C', you will still be able to write data to the log stream until you receive an X'085C' reason code from the IXGWRITE service indicating that the interim storage is full. See the explanation for accompanying messages IXG257I, IXG261E, and IXG262A.
- | • For return code X'08', reason code X'085D', applications can continue to write data to the log stream until they receive an X'085D' or similar reason code from the IXGWRITE service indicating that the interim storage is full. The X'085D' reason code may also be included in this message if the response to message IXG312E was to "FAIL" (or "AUTOFAIL") the offload on this system. This reason code may also result if the response to message IXG272E was to "FAIL=*" the allocation or recall request related to the log stream.
- | • For return code X'0C', reason code X'0000', search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Source: System logger (SCLOG)

Detecting Module: IXGF1WOW

Routing Code: 2

Descriptor Code: 4

IXG302E DATA MAY BE LOST FOR LOG STREAM *logstream* IN STRUCTURE *strname* DUE TO I/O ERROR.

Explanation: System logger encountered an I/O error while offloading the log stream data for log stream *logstream*.

The I/O error was encountered while writing the control interval which was not completely written during prior writer offload. The log blocks which were part of the control interval and offloaded previously may be lost.

In the message text:

logstream

is the name of the log stream for which data was being offloaded.

strname

is the name of the structure associated with the log stream.

System action: System logger marks that the log stream has a loss of data condition. This condition is communicated to applications when the application attempts to Browse the log stream and gap condition is detected or when the application attempts to write more blocks to the log stream.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System Logger (SCLOG)

Detecting Module: IXGA1WRT

Routing Code: 10

Descriptor Code: 4

IXG303I DIRECTED OFFLOAD FOR LOG STREAM *logstream* STARTED.

Explanation: An offload that was directed to a specific system, or away from a particular system, was started.

In the message text:

logstream

is the name of the log stream whose offload was started.

System action: The offload continues.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: Monitor completion of the offload. Search for messages IXG304I.

Source: System Logger (SCLOG)

Detecting Module: IXGF1TRX

Routing Code: -

Descriptor Code: 4

IXG304I DIRECTED OFFLOAD FOR LOG STREAM *logstream* IS COMPLETE.

Explanation: An offload that was directed to a specific system has now completed.

In the message text:

logstream

is the name of the log stream whose offload completed.

System action: None.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System Logger (SCLOG)

Detecting Module: IXGF1WOW

Routing Code: -

Descriptor Code: 4

IXG310I SYSTEM LOGGER CURRENT OFFLOAD IS NOT PROGRESSING FOR LOGSTREAM *logstream* STRUCTURE: *strname* request DSN=dsnllq.dslnsn.dsnnlq

Explanation: The system logger Event Monitor determined that an offload data set allocation, deletion, or HSM recall has not been satisfied for the initial monitoring interval. The data set naming convention is included to aid in identifying other potential messages that might be related to this offload activity. The offload function involves reading log data from interim storage and writing it to DASD log data sets. Writing data to DASD log data set(s) involves DASD I/O and the potential need to allocate a new or existing log data set, which can be on primary DASD or archived.

In the message text:

logstream

Name of the log stream whose current offload is not progressing.

strname

For a coupling facility log stream, the name of the structure associated with the log stream.

For a DASD-only based log stream, *strname*:

NOT APPLICABLE.

request

One of the following:

ALLOCATING

Allocating a new or existing log stream offload data set request.

DELETING

System logger is checking for offload data sets that are no longer needed. If any data sets are found that are no longer needed, they will be deleted.

RECALLING

Recalling an existing log stream offload data set request.

dsnllq

is the high level qualifier of the log stream data set name.

dslnsn

is the log stream name qualifier portion of the log stream data set name.

dsnnlq

is the low level qualifier of the log stream data set name or <SEQ#>. If <SEQ#> is seen, this indicates that the log stream is waiting for another log stream that is having a problem. Check the log for an earlier IXG310I message for the name of the other log stream.

System action: System logger will continue to monitor the offload allocation. If the delay persists, system logger might issue IXG311I and prompt the operator for action with message IXG312E.

Until this allocation completes, system logger on this system may be unable to process many functions such as log stream connect requests, log stream disconnect requests, log stream deletion requests, and others.

User response: None.

Operator response: Check for any conditions in the installation that might be preventing the offload from proceeding.

1. Check for outstanding WTOs or WTORs.
Check for any outstanding WTORs or WTOs that are awaiting action and might be preventing system logger from being able to allocate a log data set.
2. Check for start pendings.
Check for any start pending conditions against the offload DASD device or any device required to allocate/unallocate log data sets such as the catalog device or any device that a new log data set could be allocated. If start pending conditions are found for any of these devices, resolve the condition.
3. Check for resource contention.
Issue the DISPLAY GRS,C command to display resource contention. If there is resource contention that is preventing system logger from allocating log data sets, then resolve the contention.
4. Check for recall of migrated log data sets.
Resolve any recall requests for migrated log data sets.

If these steps do not resolve the condition, notify the system programmer.

Application Programmer Response: None.

System programmer response: See also message IXG311I and IXG312E documentation.

Source: System logger (SCLOG)

Detecting Module: IXGL2MON

Routing Code: 10

Descriptor Code: 4

IXG311I SYSTEM LOGGER CURRENT OFFLOAD HAS NOT PROGRESSION DURING THE PAST *seconds* SECONDS FOR LOGSTREAM *logstream* STRUCTURE: *strname request* DSN=dsnhlq.dslnsn.dsnlq

Explanation: The system logger Event Monitor determined that an offload data set allocation, deletion, or HSM recall has not been satisfied for the secondary monitoring interval. The data set naming convention is included to aid in identifying other potential messages that might be related to this offload activity. The offload function involves reading log data from interim storage and writing it to DASD log data sets. Writing data to DASD log data set(s) involves DASD I/O and the potential need to allocate a new or existing log data set, which may be on primary DASD or archived.

In the message text:

seconds

is the number of seconds that the current offload has been delayed.

logstream

is the name of the log stream whose offload has been delayed.

strname

For a coupling facility log stream, the name of the structure associated with the log stream.

For a DASD-only based log stream, *strname*:

NOT APPLICABLE.

request

can be one of the following:

ALLOCATING

Allocating a new or existing log stream offload data set request.

DELETING

Deleting offload data sets that are no longer needed.

RECALLING

Recalling an existing log stream offload data set request.

dsnhlq

is the high level qualifier of the log stream data set name.

dslnsn

is the log stream name qualifier portion of the log stream data set name.

dsnlq

is the low level qualifier of the log stream data set name or <SEQ#>. If <SEQ#> is seen, this indicates that the log stream is waiting for another log stream

that is having a problem. Check the log for an earlier IXG310I message for the name of the other log stream.

System action: System logger will prompt the operator for action with message IXG312E, unless an "AUTOFAIL" response was provided on a previous IXG312E condition, in which case, message IXG313I will be issued.

Until this allocation completes, system logger may be unable to process many functions such as log stream connect requests, log stream disconnect requests, log stream deletion requests, and others.

User response: None.

Operator response: Check for any conditions in the installation that might be preventing the offload from proceeding.

1. Check for outstanding WTOs or WTORs.
Check for any outstanding WTORs or WTOs that are awaiting action and might be preventing system logger from being able to allocate a log data set.
2. Check for start pendings.
Check for any start pending conditions against the offload DASD device or any device required to allocate/unallocate log data sets, such as the catalog device. If start pending conditions are found for any device, then resolve the condition.
3. Check for resource contention.
Issue the DISPLAY GRS,C command to display resource contention. If there is resource contention that is preventing system logger from allocating log data sets, then resolve the contention.
4. Check for recall of migrated log data sets.
Resolve any recall requests for migrated log data sets.

If these steps do not resolve the condition, notify the system programmer.

Application Programmer Response: None.

System programmer response: See also message IXG312E documentation.

Source: System logger (SCLOG)

Detecting Module: IXGL2MON, IXGXMMSG

Routing Code: 2,10

Descriptor Code: 7,11

IXG312E OFFLOAD DELAYED FOR *logstream*, REPLY "MONITOR", "IGNORE", "FAIL", "AUTOFAIL", OR "EXIT".

Explanation: The system logger Event Monitor is requesting that an action be specified for an offload allocation or migration recall that is still not complete.

The responses are as follows:

1. MONITOR - Continue monitoring this offload.
2. IGNORE - Stop monitoring this offload.
3. FAIL - Fail the offload on this system.
4. AUTOFAIL - Fail the offload on this system and continue this action for this log stream for the duration of this connection.
5. EXIT - Terminate system logger offload event monitor.

See the system programmer response for a more complete description of these actions.

In the message text:

logstream

Name of the log stream whose offload allocation needs action.

System action: This message is accompanied by message IXG311I. System logger waits for the operator to specify an action, or for the allocation to complete by itself. If the offload attempt is successful, message IXG311I and IXG312E will be DOMed.

User response: None.

Operator response: Contact system programmer. Then respond to the message.

Application Programmer Response: None.

System programmer response: This message is accompanied by message IXG311I. Review IXG311I and its description before proceeding with a response.

This message may also be accompanied by messages IXG271I and IXG272E, which also indicates a possible delay related to a log stream data set request. Review these message descriptions as well. Also refer to *z/OS MVS Setting Up a Sysplex*, Chapter 9, "Offload and Service Task Monitoring", for more information about the relationship and considerations for these action messages.

If no response is made, the offload allocation may still finish normally. If you decide to respond, the ramifications of each response are explained here.

MONITOR

The system logger Event Monitor continues to monitor the offload and takes no overt action. If the offload allocation is still not complete after another interval, another WTOR will be issued at that time.

If you reply MONITOR, it is possible that subsequent messages issued may contain different data set names than the previous set of messages, as system logger goes through offload processing such as HSM recalls, data set switches, and deleting old data sets that are no longer needed. This indicates that while progress is being made internally, the original

offload activity still may be delayed until all the internal processes are complete.

When you reply MONITOR, any subsequent IXG311I messages issued will show an offload delay duration. The delay duration can be used to determine if a new delay is being seen, or if the delay is ongoing, i.e., the delay value is increasing.

IGNORE

The system logger Event Monitor stops monitoring this offload allocation. It may be that there is no problem with this offload allocation, it is simply taking a long time.

FAIL

The offload will be cancelled on this system. This may allow other work to continue that was waiting for system logger allocation resources. System logger will attempt to restart the offload on another system, if there is another system in the sysplex that is connected to the same structure as this log stream. If another system cannot be found, the offload will be restarted on the same system.

AUTOFAIL

This response has the same effect as FAIL for the current log stream offload activity, plus the response affects future offload delay conditions for the same log stream while it is connected on this system.

For the current log stream offload, the offload will be cancelled on this system. This may allow other work to continue that was waiting for system logger allocation resources. System logger will attempt to restart the offload on another system, if there is another system in the sysplex that is connected to the same structure as this log stream. If another system cannot be found, the offload will be restarted on the same system.

When future offload delays occur for this log stream on this system which would normally result in message IXG312E being issued, system logger will automatically handle the condition as if a "FAIL" reply was specified. This automatic action will occur for the log stream specified in the IXG312E message while the connection is maintained on this system.

Message IXG313I will be issued when AUTOFAIL is specified.

EXIT

The system logger Event Monitor terminates ALL monitoring activity on this system. There will be no messages indicating log stream offload activity being delayed, and there will be no mechanism available to quiesce (fail) any delayed log stream offloads. In this case, the system also issues message IXG314I. System logger service task monitoring will be

unaffected by this response. If system logger is ever stopped and restarted, the offload monitor will be restarted as well.

If it appears there is a persistent problem inhibiting normal system logger operations, a dump of system logger may be necessary to obtain diagnostic information. The IBM Support Center will need this information to diagnose the condition that caused this message to be issued. Refer to *z/OS MVS Diagnosis: Tools and Service Aids*, Chapter 2, "Operator Commands in an IEADMCxx Parmlib Member", and Chapter 11, "Getting a Dump of System Logger Information", for more information about obtaining system logger dumps.

Source: System logger (SCLOG)

Detecting Module: IXGL2MON

Routing Code: 2,10

Descriptor Code: 3

**IXG313I DELAYED OFFLOAD FOR
LOGSTREAM *logstream* CANCELLED
BY INSTALLATION POLICY.**

Explanation: The system logger Event Monitor detected that the offload for this log stream was delayed for longer than the value in the installation defined policy applicable to this log stream. Therefore it initiated a quiesce of the offload that was in progress.

In the message text:

logstream

Name of the log stream whose offload was quiesced.

System action: This message is preceded by message IXG311I and possibly message IXG312E. System logger quiesces the offload on this system. System logger will attempt to restart the offload either on another system or this system if no other systems are acceptable candidates to attempt the offload.

User response: None.

Operator response: Contact system programmer.

Application Programmer Response: None.

System programmer response: Make sure that the offload completes. Message IXG304I will be issued when it does.

Source: System logger (SCLOG)

Detecting Module: IXGL2MON

Routing Code: -

Descriptor Code: -

**IXG314I SYSTEM LOGGER EVENT
MONITORING STOPPED FOR
LOGSTREAM OFFLOADS ON SYSTEM
*sysname***

Explanation: System logger log stream offload monitoring was requested to be stopped due to operator response of "EXIT" for message IXG312E. No more system logger offload event monitoring will be performed on this system, unless system logger or the system is restarted.

In the message text:

sysname

is the name of the system where the offload monitoring has been stopped.

System action: System logger will no longer monitor offload activity on this system. System logger service task monitoring will be unaffected by this response.

User response: None.

Operator response: Contact system programmer.

Application Programmer Response: None.

System programmer response: If monitoring is essential to installation operations, consider taking down the IXGLOGR address space (this will impact any executing system logger applications) and then restarting system logger (through START IXGLOGRS).

Source: System logger (SCLOG)

Detecting Module: IXGL2MON

Routing Code: 10

Descriptor Code: 4

**IXG351E RESOURCE MANAGER EXIT *rmname*
DISABLED ON SYSTEM *sysname* FOR
LOG STREAM *logstream***

Explanation: The system logger has disabled the Resource Manager Exit because it abended and did not properly recover.

In the message text:

rmname

is the name of the resource manager connected to the log stream.

sysname

is the name of the effected system.

logstream

is the name of the log stream that the resource manager was connected to.

System action: The resource manager exit is no longer called on the identified system.

User response: None.

Operator response: Cancel the resource manager application.

Application Programmer Response: None.

System programmer response: You should correct the error in the resource manager exit and then restart the resource manager application.

Source: System Logger (SCLOG)

Detecting Module: IXGF2WRT, IXGF2DEL

Routing Code: 2

Descriptor Code: 4

IXG352I RESOURCE MANAGER *rmname* FOR LOG STREAM *logstream* NOT CONNECTED TO LOG STREAM ON SYSTEM *sysname*

Explanation: A log stream defined as resource manager managed has active connections but the resource manager is not connected to the log stream.

In the message text:

rmname

is the name of the resource manager associated with the log stream.

logstream

is the name of the log stream.

sysname

is the name of the system where the log stream is not connected.

System action: Log block delete requests issued by the active connections are not processed.

User response: None.

Operator response: Start the resource manager application so that it connects to the log stream.

Application Programmer Response: None.

System programmer response: Determine why the resource manager is not executing on the identified system.

Source: System Logger (SCLOG)

Detecting Module: IXGF1TRX

Routing Code: 2

Descriptor Code: 4

IXG353I RESOURCE MANAGER *rmname* FOR LOG STREAM *logstream* CONNECTED TO LOG STREAM ON SYSTEM *sysname*

Explanation: A log stream is defined as resource manager managed. The resource manager has connected to the log stream on the system identified.

In the message text:

rmname

is the name of the resource manager associated with the log stream.

logstream

is the name of the log stream.

sysname

is the name of the system.

System action: Processing continues.

User response: None.

Operator response: None. Informational message only.

Application Programmer Response: None.

System programmer response: None. Informational message only.

Source: System Logger (SCLOG)

Detecting Module: IXGC4CON

Routing Code: 2

Descriptor Code: 4

IXG354I RESOURCE MANAGER *rmname* FOR LOG STREAM *logstream* DISCONNECTED FROM LOG STREAM ON SYSTEM *sysname*

Explanation: A log stream is defined as resource manager managed. The resource manager has disconnected from the log stream on the system identified.

In the message text:

rmname

is the name of the resource manager associated with the log stream.

logstream

is the name of the log stream.

sysname

is the name of the system.

System action: Processing continues.

User response: None.

Operator response: None. Informational message only.

Application Programmer Response: None.

System programmer response: None. Informational message only.

Source: System Logger (SCLOG)

Detecting Module: IXGC4DIS

Routing Code: 2

IXG405I • IXG434E

Descriptor Code: 4

IXG405I NO recordtype RECORDS FOUND THAT MATCH PATTERN name

Explanation: The LOGR Policy Processing successfully completed processing of a LIST control statement, however, no records of type *recordtype* were found that match the pattern *name*.

In the message text:

recordtype

One of the following:

LOGSTREAM

Log stream record type.

STRUCTURE

Structure record type.

name

is the naming pattern used to search for matching records of type *recordtype*.

System action: The LOGR Policy Processing processes the next control statement if more exist.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: If you expect to find a match, consider making the *name* pattern more generic (example NAME(*)) and then rerun the job.

Source: System logger (SCLOG)

Detecting Module: IXGI3RLS

Routing Code: -

Descriptor Code: -

IXG432E DSN/DSNAME AND VOLSER KEYWORDS FOR TYPE(LOGR) ARE NOT SUPPORTED ON THE CURRENT LEVEL OF THE SYSTEM.

Explanation: The IXCMIAPI utility processing ended because either DSN/DSNAME or VOLSER was specified for DATA TYPE(LOGR). IXCMIAPI does not support DSN/DSNAME or VOLSER for DATA TYPE(LOGR) because system logger supports only one active LOGR policy data set.

System action: The IXCMIAPI utility processing for the LOGR policy ends.

Operator response: None.

User response: None.

Application Programmer Response: None.

System programmer response: If necessary, resubmit the IXCMIAPI utility without specifying DSN/DSNAME or VOLSER.

Source: System logger (SCLOG)

Detecting Module: Many

Routing Code: -

Descriptor Code: -

IXG433E IXG433E SYNTAX ERROR: WHEN parameter IS SPECIFIED, THE FOLLOWING MAY NOT BE SPECIFIED: parameter_list ONE OF THE FOLLOWING MUST ALSO BE SPECIFIED: parameter parameter_list

Explanation: The IXCMIAPI utility processing ended because of an incorrect combination of parameters specified on the statement identified in the preceding IXG005I message. This message shows parameters that may not be specified with parameter *parameter* and ones that must be specified with *parameter*.

In the message text:

parameter

The parameter that has been specified with the wrong combination of other parameters.

parameter_list

Lists of parameters that may not be or must be specified with *parameter*.

System action: The IXCMIAPI utility processing for the LOGR policy ends.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: Specify a valid parameter combination and resubmit the IXCMIAPI job.

Source: System logger (SCLOG)

Detecting Module: IXGI1PPI

Routing Code: -

Descriptor Code: -

IXG434E parameter_list

Explanation: The IXCMIAPI utility processing ended because of an incorrect combination of parameters. This message continues the list of parameters from message IXG433E.

In the message text:

parameter_list

Lists of parameters that either may not be or must be specified with the parameter displayed in message IXG433E.

System action: The IXCMIAPI utility processing for the LOGR policy ends.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: Specify a valid parameter combination and resubmit the IXCMIAPIU job.

Source: System logger (SCLOG)

Detecting Module: IXGI1PPI

Routing Code: -

Descriptor Code: -

IXG440E *ehlq* IS NOT VALID FOR THE EHLQ PARAMETER

Explanation: The extended high level qualifier for the log stream data sets specified on the EHLQ parameter was not valid. This could be caused by a syntax error or from specifying EHLQ and HLQ on the same request.

In the message text:

ehlq

The value specified for the EHLQ parameter.

System action: The log stream is not defined.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: Specify a valid extended high level qualifier (EHLQ) or a high level qualifier (HLQ) and reissue the request.

Source: System logger (SCLOG)

Detecting Module: Many

Routing Code: -

Descriptor Code: -

IXG441E EHLQ VALUE *ehlq* COMBINED WITH LOGSTREAM NAME IS LONGER THAN 35 CHARACTERS

Explanation: The combined length of the extended high level qualifier (EHLQ value) and the log stream name (with a period delimiter) exceeds 35 characters. The combined length of the EHLQ value, the log stream name, and the logger suffix (with period delimiters) cannot exceed 44 characters.

In the message text:

ehlq

The value specified for the EHLQ parameter.

System action: The log stream is not defined.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: Specify a valid number of characters for the extended high level qualifier (EHLQ) or a high level qualifier (HLQ) for the log stream and reissue the request.

Source: System logger (SCLOG)

Detecting Module: Many

Routing Code: -

Descriptor Code: -

IXG442E THE SPECIFIED OR PENDING HIGH OFFLOAD VALUE MUST BE GREATER THAN THE SPECIFIED OR PENDING LOW OFFLOAD VALUE.

Explanation: The value specified for the LOWOFFLOAD or HIGHOFFLOAD keyword is not within the acceptable value range. The resulting low offload value must be less than the resulting high offload value.

System action: The log stream is not defined to the LOGR Inventory.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: Change either the LOWOFFLOAD parameter or the HIGHOFFLOAD parameter so that the low offload value is less than the high offload value.

Source: System logger (SCLOG)

Detecting Module: IXGI3INV

Routing Code: -

Descriptor Code: -

IXG445W UPDATE WARNING - LOGSTREAM RENAMED TO NEW NAME, BUT AN ERROR OCCURRED RENAMING AT LEAST ONE STAGING DATA SET.

Explanation: The system issues this message after a log stream is renamed and an existing log stream staging data set could not be renamed using the new log stream name.

System action: System logger continues with the UPDATE LOGSTREAM NEWSTREAMNAME request and will result in a return code 4, reason code "418" condition (see IxgRsnCodeUpdateNewnameWarning in IXGCON macro).

Operator response: Notify the system programmer.

User response: None.

Application Programmer Response: None.

System programmer response: Check for any IXG277E and IXG251I hard-copy messages and see

IXG501I • IXG504I

- | the system programmer response for the message identifier that is included in message IXG251I. See z/OS DFSMS Access Method Services for Catalogs for the IDCAMS return code information, and correct the condition that caused the error.
- | After correcting the error condition, submit the necessary IDCAMS ALTER entryname NEWNAME() job to get the existing log stream staging data set name updated to match the new stream name change. This will need to be done before defining a new instance of a log stream that uses the same name as the log stream identified in this message. Failure to get the staging data set renamed correctly can result in a "loss of data" condition when a connection occurs for the log stream that was renamed.
- | If you cannot identify the problem source or correct the error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.
- | **Source:** System logger (SCLOG)
- | **Detecting Module:** MANY
- | **Routing Code:** -
- | **Descriptor Code:** -

IXG501I SYSTEM LOGGER SUBSYSTEM (*ssname*) IS ACTIVE

Explanation: The system logger subsystem functions are active and available for use on this system.

In the message text:

ssname
is the installation defined subsystem name for system logger.

System action: None.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGSSINT

Routing Code: 2

Descriptor Code: 4

IXG502I SYSTEM LOGGER SUBSYSTEM (*ssname*) INITIALIZATION FAILED **SERVICE:** *ssiservice* - **RETURN/REASON CODE:** *retcode/rnocode*

Explanation: The system logger subsystem functions are not active and are unavailable on this system

because of the error received from the *ssiservice* service.

In the message text:

ssname

is the installation defined subsystem name for system logger.

ssiservice

is the name of the failing SSI service used during system logger subsystem initialization.

retcode

Return code for the *ssiservice*.

rnocode

Reason code for the *ssiservice*.

System action: None.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGSSINT

Routing Code: 2,10

Descriptor Code: 4

IXG503I LOGGER SUBSYSTEM DATA SET LOAD ERROR FOR EXIT *exitname*

Explanation: The system logger subsystem data set interface could not load the *exitname* routine.

In the message text:

exitname
is the name of the exit that could not be loaded.

System action: None.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: MANY

Routing Code: 11

Descriptor Code: 6

IXG504I LOGGER SUBSYSTEM (*ssname*) EXIT PROVIDED AN ERROR RETURN *DD=ddname EXIT=exitname FUNCTION={CONVERTER|ALLOCATION|OPEN|CLOSE|UNALLOCATION} RETCODE=return-code*

Explanation: The system logger subsystem exit routine provided a return code that indicates the job or job step be terminated.

In the message text:

ssname

is the installation defined subsystem name for system logger.

ddname

is the name of the DD statement or equivalent dynamic allocation DD name with the SUBSYS= specification. The name will be blanks for the converter function or for the allocation function and a concatenated DD.

exitname

is the name of the exit (or defaulted) on the SUBSYS= specification.

CONVERTER

Indicates that the subsystem converter function encountered the error.

ALLOCATION

Indicates that the subsystem allocation function encountered the error.

OPEN

Indicates that the subsystem open function encountered the error.

CLOSE

Indicates that the subsystem close function encountered the error.

UNALLOCATION

Indicates that the subsystem unallocation function encountered the error.

retcode

The return code from the exit routine.

System action: The job terminates for CONVERTER requests. The job step terminates for ALLOCATION requests of JCL DD SUBSYS= statements. Dynamic Allocation requests return with an error and the request is rejected.

User response: Check the return code with the provider of the exit routine that was specified on the SUBSYS= keyword and make the appropriate corrections.

Operator response: None.

Application Programmer Response: Check the return code with the provider of the exit routine that was specified on the SUBSYS= keyword and make the appropriate corrections.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: MANY

Routing Code: 11

Descriptor Code: 6

IXG505I	SYSTEM LOGGER SUBSYSTEM (<i>ssname</i>) INITPARM ERROR, INPUT IGNORED
----------------	--

Explanation: The system logger subsystem initialization routine (IXGSSINT) detected that the specified INITPARM value is not valid. The input is ignored.

If the INITPARM keyword is used for the system logger subsystem, then the valid input option is:

IXGLOGR=NOSTART

Only the above input is valid for this parameter and all other input is ignored.

In the message text:

ssname

The installation defined subsystem name for system logger.

System action: System logger subsystem initialization will continue as if no INITPARM value was specified. The system logger subsystem (*ssname*) will become active, and the system service IXGLOGR address space will also be initialized following Master Scheduler Initialization.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: Correct the error in the INITPARM keyword of the IEFSSNxx parmlib member that was used for the system logger subsystem initialization specification. The changes will not be able to take effect until the next IPL of the system with the updated specification.

Source: System Logger (SCLOG)

Detecting Module: IXGSSINT

Routing Code: 2,10

Descriptor Code: 4

IXG510I	<i>ssname</i> {CONVERTER ALLOCATION} PARSE ERROR - <i>text</i>
----------------	---

Explanation: The system logger subsystem function encountered a parse error for the SUBSYS= parameter.

In the message text:

ssname

is the installation defined subsystem name for system logger.

CONVERTER

indicates that the subsystem Converter function identified the parse error.

ALLOCATION

indicates that the subsystem allocation function identified the parse error.

SEVERE ERROR

indicates that a severe processing error was encountered during the parsing of the SUBSYS= parameters.

SYNTAX ERROR

indicates that a syntax error was encountered during the parsing of the SUBSYS= parameters.

INVALID EXIT NAME

indicates that the exit name specified as the second positional parameter of the SUBSYS= specification was not valid.

MUTUAL EXCLUSION FAILURE

indicates that a mutual exclusion error was detected in the subsys-options1 parameters.

FROM= GREATER THAN TO=

indicates that the FROM= value resolved to a date and time more recent (younger) than the TO= resolved value.

System action: The job terminates for CONVERTER requests. The job step terminates for ALLOCATION requests of JCL DD SUBSYS= statements. Dynamic Allocation requests return with an error and the request is rejected.

User response: Correct the SUBSYS= specification and resubmit the job.

Operator response: None.

Application Programmer Response: Correct the SUBSYS= specification and resubmit the job or the dynamic allocation request.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGSDPIR

Routing Code: 11

Descriptor Code: 6

IXG511I **LOGGER SUBSYSTEM (*ssname*) EXIT**
SYSTEM LOGGER SERVICE ERROR
DD=*ddname* EXIT=*exitname* FUNCTION={OPEN|GET|CLOSE|IUNALLOCATION}
SERVICE=n RETCODE=*retcode*
RSNCODE=*rsncode* ANSDIAG=*diagfld1*,
diagfld2, *diagfld3*, *diagfld4*

Explanation: The system logger subsystem exit function encountered an error condition from the ixgservice service.

In the message text:

ssname

is the installation defined subsystem name for system logger.

ddname

is the name of the DD JCL statement or the equivalent dynamic allocation DD name with the SUBSYS= specification. The name will be blanks for a concatenated DD.

exitname

is the name of the logger exit, IXGSEXIT.

OPEN

Indicates that the subsystem open exit function encountered the error.

GET

Indicates that the subsystem get or read exit access method function encountered the error.

CLOSE

Indicates that the subsystem close exit function encountered the error.

UNALLOCATION

Indicates that the subsystem unallocation exit function encountered the error.

retcode

is the return code from the ixgservice.

rsncode

is the reason code from the ixgservice.

diagfld1, *diagfld2*, *diagfld3*, *diagfld4*

The answer area, IXGANSAA, diagnostic fields 1–4.

System action: The job terminates for CONVERTER requests. The job step terminates for ALLOCATION requests of JCL DD SUBSYS= statements. Dynamic Allocation requests return with an error and the request is rejected.

User response: See z/OS MVS Programming: Assembler Services Reference IAR-XCT for information about system logger return and reason codes displayed in this message. Check the SUBSYS= specification and, if necessary, correct it and resubmit the job. If the problem persists, search problem reporting databases for a fix for the problem. If no fix exists, contact the IBM support center.

Operator response: None.

Application Programmer Response: Correct the SUBSYS= specification and resubmit the job or the dynamic allocation request.

System programmer response: Correct the SUBSYS= specification and resubmit the job or the dynamic allocation request.

Source: System logger (SCLOG)

Detecting Module: MANY

Routing Code: 11**Descriptor Code:** 6

**IXG513I LOGGER SUBSYSTEM (ssname) EXIT
ENCOUNTERED POSSIBLE LOSS OF
DATA DD=ddname
LOGSTREAM=logstream EXIT=exitname
SERVICE=n RSNCODE=rsncode**

Explanation: The system logger subsystem exit function encountered a response from the *ixgservice* service that indicates a loss of data occurred or a gap exists in the log stream.

In the message text:

ssname

is the name of the installation defined subsystem name for system logger.

ddname

is the name of the DD JCL statement or equivalent dynamic allocation DD name with the SUBSYS= specification. The name will be blanks for a concatenated DD.

logstream

is the name of the log stream where the possible loss of data or gap condition was encountered.

exitname

is the name of the system logger service subsystem name.

rsncode

is the reason code from the *ixgservice*.

System action: Processing continues.

User response: Take the possible loss of data condition into account when making use of the returned record. See *z/OS MVS Programming: Assembler Services Reference IAR-XCT*, SA22-7607 for information about the system logger service and the associated reason code displayed in this message.

Operator response: None.**Application Programmer Response:** None.**System programmer response:** None.**Source:** System logger (SCLOG)**Detecting Module:** MANY**Routing Code:** 11**Descriptor Code:** 6

IXG601I hh.mm.ss LOGGER DISPLAY [id]

Explanation: When the operator enters the DISPLAY LOGGER command, this message displays information about system logger.

The first line of the message always appears in each variation of the display message to be shown.

In the message text:

hh.mm.ss

The hour, minute and second at which the system processed the display command. 00.00.00 appears in this field if the time-of-day (TOD) clock is not working.

id A decimal identifier used with the CONTROL C,D command to cancel status displays that are written on typewriter or printer consoles or displayed inline on a display console. The identifier does not appear when the display appears in a display area on a display console.

System action: The system continues processing.**User response:** None.**Operator response:** None.**Application Programmer Response:** None.**System programmer response:** None.**Source:** System logger (SCLOG)**Detecting Module:** IXGP1DSP**Routing Code:** 2,10**Descriptor Code:** 5,8,9

IXG601I hh.mm.ss LOGGER DISPLAY [id]

Explanation:

SYSTEM LOGGER STATUS:	SYSTEM SYSTEM LOGGER STATUS
sysname1	status reason1 reason2
sysname2	status reason1 reason2

The operator issued the DISPLAY LOGGER,STATUS command. The output includes the operational status of system logger.

In the message text:

sysname

The system name.

status

The IXGLOGR address space status. Possible values can be:

NOT AVAILABLE FOR IPL

The system logger will not be available for the life of this IPL.

INITIALIZING

The system logger is in progress of initializing.

ACTIVE

The system logger is up and running.

NOT ACTIVE

The system logger has terminated.

IXG601I

<i>reason</i>	
	An optional line, that gives further detail about the status. Possible values can be:
XCFLOCAL MODE	Indicates the system was IPLed with PLEXCFG=XCFLOCAL.
NOSTART SPECIFIED	Indicates IXGLOGR=NOSTART was specified on the INITPARM keyword for the LOGR subsystem.
LOGR CDS IS NOT AVAILABLE	Indicates that system logger does not have access to the LOGR Couple Data Set that is necessary for its operation.
DRXRC CONVERSION NOT DONE	Indicates that system logger has not completed converting all DRXRC-type resources in response to DRMODE=YES IPL option. Refer to messages IXG068D and IXG070D.
LOGGER SERVICES DISABLED FOR GROUP: TEST	Indicates that logger is not able to perform work on TEST group log streams.

System action: The system continues processing.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGP1DSP

Routing Code: 2,10

Descriptor Code: 5,8,9

IXG601I *hh.mm.ss* LOGGER DISPLAY [*id*]

Explanation:

```
CONNECTION INFORMATION BY LOGSTREAM FOR SYSTEM sysname
LOGSTREAM      STRUCTURE    #CONN     STATUS
logstreamname   strname    num_conn  status
```

NUMBER OF LOGSTREAMS: *nnnnnn*

The operator issued the DISPLAY LOGGER,CONN command. The output includes information pertaining to a log stream with one or more connections on the system that the command was issued from.

In the message text:

sysname
The system name.

logstreamname
The log stream name.

strname

The CFRM structure name.

Note: For all displays, when a DASD only configured log stream is displayed, the STRUCTURE field of the display will contain the text ***DASDONLY***.

num_conn

The number of active connections from this system to this log stream by that job. The number of the connections field is 6 bytes in length.

status

The log stream status. Possible values can be:

AVAILABLE

The log stream is available for connects.

IN USE

The log stream is available and has a current connection.

CONNECT PENDING

The system logger needed to perform recovery operations asynchronous to the application's connect request and will remain in this state until recovery is done. The system logger will then complete the connect request on behalf of the application.

OFFLOAD IN PROGRESS

The system logger is in the process of offloading data from the coupling facility structure to DASD.

DISCONNECT PENDING

The system logger is completing the applications disconnect request asynchronously. When complete, the application is disconnected from the log stream.

STRUCTURE FULL

The coupling facility structure space allocated for this log stream is full.

LOSS OF DATA

There is a loss of data condition present in the log stream.

REBUILD IN PROGRESS

The coupling facility structure is temporarily unavailable and a rebuild of the structure is in progress.

DUPLEXING REBUILD

The coupling facility structure is temporarily unavailable because a duplexing rebuild of the structure is in progress.

DUPLEX TO SIMPLEX

The coupling facility structure has transitioned from duplex-mode to simplex-mode and system logger is processing the transition.

REBUILD FAILED

The coupling facility structure is unavailable and will remain so until a successful rebuild is completed.

LOST CONNECTIVITY

No connectivity exists to the coupling facility associated with the log stream. The system logger will either attempt to rebuild the log stream in another coupling facility or the log stream will be disconnected.

DS DIRECTORY FULL

The log stream's DASD data set directory is full. The system logger cannot offload any further data from the coupling facility structure to DASD.

DELETE IN PROGRESS

Deletion of the log stream is in progress.

nnnnnnn

The number of log streams included in the view for the display output.

System action: The system continues processing.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGP1DSP

Routing Code: 2,10

Descriptor Code: 5,8,9

IXG6011 hh.mm.ss LOGGER DISPLAY [id]**Explanation:**

CONNECTION INFORMATION BY LOGSTREAM FOR SYSTEM *sysname*

LOGSTREAM	STRUCTURE	#CONN	STATUS
<i>logstreamname1</i>	<i>strname</i>	<i>num_conn</i>	<i>status</i>
<i>logstreamname2</i>	<i>strname</i>	<i>num_conn</i>	<i>status</i>
<i>logstreamname3</i>	<i>strname</i>	<i>num_conn</i>	<i>status</i>

NUMBER OF LOGSTREAMS: *nnnnnnn*

The operator issued the DISPLAY LOGGER,CONN,LSN=*logstreamname**,SUMM command. The output includes information pertaining to a log stream with one or more connections on the system that the command was issued from. Only output pertaining to log streams that match the filter will be displayed.

In the message text:

sysname

The system name.

logstreamname

The log stream name.

strname

The CFRM structure name.

Note: For all displays, when a DASD only configured log stream is displayed, the STRUCTURE field of the display will contain the text ***DASDONLY***.

num_conn

The number of active connections from this system to this log stream by that job. The number of the connections field is 6 bytes in length.

status

The log stream status. Possible values can be:

AVAILABLE

The log stream is available for connects.

IN USE

The log stream is available and has a current connection.

CONNECT PENDING

The system logger needed to perform recovery operations asynchronous to the application's connect request and will remain in this state until recovery is done. The system logger will then complete the connect request on behalf of the application.

OFFLOAD IN PROGRESS

The system logger is in the process of offloading data from the coupling facility structure to DASD.

DISCONNECT PENDING

The system logger is completing the applications disconnect request asynchronously. When complete, the application is disconnected from the log stream.

STRUCTURE FULL

The coupling facility structure space allocated for this log stream is full.

LOSS OF DATA

There is a loss of data condition present in the log stream.

REBUILD IN PROGRESS

The coupling facility structure is temporarily unavailable and a rebuild of the structure is in progress.

DUPLEXING REBUILD

The coupling facility structure is temporarily unavailable because a duplexing rebuild of the structure is in progress.

DUPLEX TO SIMPLEX

The coupling facility structure has transitioned from duplex-mode to simplex-mode and system logger is processing the transition.

IXG601I

REBUILD FAILED

The coupling facility structure is unavailable and will remain so until a successful rebuild is completed.

LOST CONNECTIVITY

No connectivity exists to the coupling facility associated with the log stream. The system logger will either attempt to rebuild the log stream in another coupling facility or the log stream will be disconnected.

DS DIRECTORY FULL

The log stream's DASD data set directory is full. The system logger cannot offload any further data from the coupling facility structure to DASD.

DELETE IN PROGRESS

Deletion of the log stream is in progress.

nnnnnn

The number of log streams included in the view for the display output.

System action: The system continues processing.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGP1DSP

Routing Code: 2,10

Descriptor Code: 5,8,9

IXG601I *hh.mm.ss* LOGGER DISPLAY [*id*]

Explanation:

```
CONNECTION INFORMATION BY LOGSTREAM FOR SYSTEM sysname
LOGSTREAM      STRUCTURE    #CONN      STATUS
logstreamname   strname     num_conn   status
DUPLEXING: duplexing-method
                STGDSN: datasetname
                VOLUME=volume   SIZE=nnnnn % IN-USE=used
| GROUP: groupname
DISCONNECT PENDING FOR xxxx MINUTES
FORCE DISCONNECT IN PROGRESS
JOBNAME: mvs_jobname1 ASID: mvs_asid1
R/W CONN: read-conn-count | write-conn-count
RES MGR./CONNECTED: resource-mgr-name / yesno
IMPORT CONNECT: yesno
JOBNAME: mvs_jobname2 ASID: mvs_asid2
R/W CONN: read-conn-count | write-conn-count
RES MGR./CONNECTED: resource-mgr-name / yesno
IMPORT CONNECT: yesno

NUMBER OF LOGSTREAMS: nnnnnn
```

The operator issued the DISPLAY LOGGER,CONN,LSN=*logstreamname*,DETAIL, or the DISPLAY LOGGER,CONN,LSN=*logstreamname*,JOB=*mvsjobname*,DETAIL command. The output includes detailed information for a specified connected log stream(s) if filters were used. The display shows the

connected log stream(s) that match the filters on the system that the DISPLAY LOGGER command was issued.

In the message text:

sysname

The system name.

| *groupname*

| The name of the group that the log stream belongs to.

| *mvs_jobname*

| The jobname.

| *mvs_asid*

| The ASID.

| *logstreamname*

| The log stream name.

| *strname*

| The CFRM structure name.

Note: For all displays, when a DASD only configured log stream is displayed, the STRUCTURE field of the display will contain the text ***DASDONLY***.

num_conn

The number of active connections from this system to this log stream by that job. The number of the connections field is 6 bytes in length.

status

The log stream status. Possible values can be:

AVAILABLE

The log stream is available for connects.

IN USE

The log stream is available and has a current connection.

CONNECT PENDING

The system logger needed to perform recovery operations asynchronous to the application's connect request and will remain in this state until recovery is done. The system logger will then complete the connect request on behalf of the application.

OFFLOAD IN PROGRESS

The system logger is in the process of offloading data from the coupling facility structure to DASD.

DISCONNECT PENDING

The system logger is completing the applications disconnect request asynchronously. When complete, the application is disconnected from the log stream.

STRUCTURE FULL

The coupling facility structure space allocated for this log stream is full.

LOSS OF DATA

There is a loss of data condition present in the log stream.

REBUILD IN PROGRESS

The coupling facility structure is temporarily unavailable and a rebuild of the structure is in progress.

DUPLEXING REBUILD

The coupling facility structure is temporarily unavailable because a duplexing rebuild of the structure is in progress.

DUPLEX TO SIMPLEX

The coupling facility structure has transitioned from duplex-mode to simplex-mode and system logger is processing the transition.

REBUILD FAILED

The coupling facility structure is unavailable and will remain so until a successful rebuild is completed.

LOST CONNECTIVITY

No connectivity exists to the coupling facility associated with the log stream. The system logger will either attempt to rebuild the log stream in another coupling facility or the log stream will be disconnected.

DS DIRECTORY FULL

The log stream's DASD data set directory is full. The system logger cannot offload any further data from the coupling facility structure to DASD.

DELETE IN PROGRESS

Deletion of the log stream is in progress.

duplexing-method

One of the following:

LOCAL BUFFERS

Indicates system logger is duplexing the log data in the data spaces associated with the IXGLOGR address space.

LOCAL BUFFERS, STAGING DRXRC

Indicates logger is duplexing the log data in the data spaces associated with the IXGLOGR address space, and logger is also duplexing the log data in a staging data set but it is only used for log stream recovery when the recovery system was IPL'd with DRMODE=YES.

STAGING DATA SET

Indicates system logger is duplexing the log data in a staging data set associated with the system's connection to the log stream and structure.

STRUCTURE, LOCAL BUFFERS

Indicates the log data is being duplexed in a second copy of the coupling facility structure (by XES), and system logger is duplexing the

log data in data spaces associated with the IXGLOGR address space.

STRUCTURE, LOCAL BUFFERS, STAGING DRXRC

Indicates the log data is being duplexed in a second copy of the coupling facility structure (by XES), and logger is duplexing the log data in data spaces associated with the IXGLOGR address space, and logger is also duplexing the log data in a staging data set but it is only used for log stream recovery when the recovery system was IPL'd with DRMODE=YES.

STRUCTURE, STAGING DATA SETS

Indicates the log data is being duplexed in a second copy of the coupling facility structure (by XES), and system logger is duplexing the log data in a staging data set associated with the system's connection to the log stream and structure.

STRUCTURE, STAGING DRXRC

Indicates the log data is being duplexed in a second copy of the coupling facility structure (by XES), and logger is also duplexing the log data in a staging data set but it is only used for log stream recovery when recovery system was IPL'd with DRMODE=YES.

STRUCTURE

Indicates the log data is being duplexed in a second copy of the coupling facility structure (by XES), and system logger is not explicitly duplexing the log data using its own means.

IN TRANSITION

Indicates system logger is transitioning because of a duplexing rebuild or because the structure has changed from duplex-mode to simplex-mode.

STGDSN information:*datasetname*

Name of the staging data set where logger data is being duplexed.

volume

Name of the volume where the staging data set resides.

nnnn

Represents the size of the staging data set in 4K increments.

used

Indicates the percentage usage for the staging data set.

R/W CONN

Displayed after the jobname that connected to the log stream. Lists the number of read and/or write connections made to this log stream by this job.

RES MGR./CONNECTED

The name of the remote site recovery resource manager that is associated with the log stream and its connection status. If there is no resource manager defined, then the field will display ***NONE*** for the resource manager name and NO for whether or not it is connected.

IMPORT CONNECT

Displays if there is an import connect active for this log stream on this system.

nnnnnn

The number of log streams included in the view for the display output.

Disconnect Pending Line:

When the log stream is being disconnected from the system, the 'DISCONNECT PENDING FOR xxxxMINUTES' line will be displayed if the log stream was in that state for over 2 minutes. The *status* text for the log stream could be one of the following: 'DISCONNECT PENDING', 'DS DIRECTORY FULL' or 'OFFLOAD IN PROGRESS'.

xxxx

Number of minutes the log stream has been in the disconnect Pending state.

Force Disconnect Line:

When a force disconnect command has been entered against the log stream, the line 'FORCE DISCONNECT IN PROGRESS' will be shown until the log stream is disconnected from the system. If the first force disconnect attempt does not proceed, and this display command shows this line, a second force disconnect should be issued. The second force disconnect attempt will cause current quiesce activity for existing connectors to cease, and the log stream disconnect from the system to continue.

System action: The system continues processing.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGP1DSP

Routing Code: 2,10

Descriptor Code: 5,8,9

IXG601I *hh.mm.ss* **LOGGER DISPLAY** [*id*]

Explanation:

CONNECTION INFORMATION BY JOBNAMES FOR SYSTEM <i>sysname</i>			
JOBNAME	STRUCTURE	#CONN	STATUS
<i>mvs_jobname1</i>	<i>strname1</i>	<i>num_conn1</i>	<i>status1</i>
<i>logstreamname1</i>	<i>strname2</i>	<i>num_conn2</i>	<i>status2</i>
<i>logstreamname3</i>	<i>strname3</i>	<i>num_conn3</i>	<i>status3</i>
JOBNAME: <i>mvs_jobname2</i>	ASID: <i>mvs_asid2</i>	STRUCTURE	#CONN STATUS
<i>logstreamname1</i>	<i>strname1</i>	<i>num_conn1</i>	<i>status1</i>
<i>logstreamname2</i>	<i>strname2</i>	<i>num_conn2</i>	<i>status2</i>
JOBNAME: <i>mvs_jobname3</i>	ASID: <i>mvs_asid3</i>	STRUCTURE	#CONN STATUS
<i>logstreamname1</i>	<i>strname1</i>	<i>num_conn1</i>	<i>status1</i>
<i>logstreamname2</i>	<i>strname2</i>	<i>num_conn2</i>	<i>status2</i>

NUMBER OF LOGSTREAMS: *nnnnnn*

The operator issued the DISPLAY LOGGER,CONN,JOBNAME=*jobname*,SUMM command. The output will show all log streams that the specified jobname has connected to.

In the message text:

sysname
The system name.

mvs_jobname
The jobname.

mvs_asid
The ASID.

logstreamname
The log stream name.

strname
The CFRM structure name.

Note: For all displays, when a DASD only configured log stream is displayed, the STRUCTURE field of the display will contain the text ***DASDONLY***.

num_conn
The number of active connections from this system to this log stream by that job. The number of the connections field is 6 bytes in length.

status
The log stream status. Possible values can be:

AVAILABLE
The log stream is available for connects.

IN USE

The log stream is available and has a current connection.

CONNECT PENDING

The system logger needed to perform recovery operations asynchronous to the application's connect request and will remain in this state until recovery is done. The system logger will then complete the connect request on behalf of the application.

OFFLOAD IN PROGRESS

The system logger is in the process of offloading data from the coupling facility structure to DASD.

DISCONNECT PENDING

The system logger is completing the applications disconnect request asynchronously. When complete, the application is disconnected from the log stream.

STRUCTURE FULL

The coupling facility structure space allocated for this log stream is full.

LOSS OF DATA

There is a loss of data condition present in the log stream.

REBUILD IN PROGRESS

The coupling facility structure is temporarily unavailable and a rebuild of the structure is in progress.

DUPLEXING REBUILD

The coupling facility structure is temporarily unavailable because a duplexing rebuild of the structure is in progress.

DUPLEX TO SIMPLEX

The coupling facility structure has transitioned from duplex-mode to simplex-mode and system logger is processing the transition.

REBUILD FAILED

The coupling facility structure is unavailable and will remain so until a successful rebuild is completed.

LOST CONNECTIVITY

No connectivity exists to the coupling facility associated with the log stream. The system logger will either attempt to rebuild the log stream in another coupling facility or the log stream will be disconnected.

DS DIRECTORY FULL

The log stream's DASD data set directory is full. The system logger cannot offload any further data from the coupling facility structure to DASD.

DELETE IN PROGRESS

Deletion of the log stream is in progress.

nnnnnn

The number of log streams included in the view for the display output.

System action: The system continues processing.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGP1DSP

Routing Code: 2,10

Descriptor Code: 5,8,9

IXG6011 hh.mm.ss LOGGER DISPLAY [id]**Explanation:**

```
CONNECTION INFORMATION BY LOGSTREAM FOR SYSTEM SY1
LOGSTREAM      STRUCTURE      #CONN      STATUS
-----          -----          -----      -----
NICKJ.TEST.LOGSTREAM   LIST01    00002    DISCONNECT PENDING
DUPLEXING: STAGING DATA SET
  STGDSN: IXGLOGR.NICKJ.TEST.LOGSTREAM.PLEX1
    VOLUME=ALL001  SIZE=0040000 % IN-USE=30
  GROUP: PRODUCTION
  DISCONNECT PENDING FOR 0003 MINUTES
  FORCE DISCONNECT IN PROGRESS
  JOBNAM: LOGTEST1 ASID: LOGTAS1
    R/W CONN: 0003
    RES MGR./CONNECTED: no
    IMPORT CONNECT: no
  JOBNAM: LOGTEST2 ASID: LOGTAS2
    R/W CONN: 0003
    RES MGR./CONNECTED: no
    IMPORT CONNECT: no
NUMBER OF LOGSTREAMS: 000001

CONNECTION INFORMATION BY JOBNAME FOR SYSTEM sysname
JOBNAME: mvs_jobname1 ASID: mvs_asid1
LOGSTREAM      STRUCTURE      #CONN      STATUS
logstreamname  strname      num_conn  status
DUPLEXING: duplexing-method
  STGDSN: datasetname
    VOLUME=volume  SIZE=nnnnn % IN-USE=used
    R/W CONN: read-conn-count | write-conn-count
    RES MGR./CONNECTED: resource-mgr-name / yes/no
    IMPORT CONNECT: yes/no
    DISCONNECT PENDING FOR xxxx MINUTES
    FORCE DISCONNECT IN PROGRESS
logstreamname2  strname      num_conn  status
DUPLEXING: duplexing-method
  R/W CONN: read-conn-count | write-conn-count
  RES MGR./CONNECTED: resource-mgr-name / yes/no
  IMPORT CONNECT: yes/no
JOBNAME: mvs_jobname2 ASID: mvs_asid2
LOGSTREAM      STRUCTURE      #CONN      STATUS
logstreamname  strname      num_conn  status
DUPLEXING: duplexing-method
  R/W CONN: read-conn-count | write-conn-count
  RES MGR./CONNECTED: resource-mgr-name / yes/no
  IMPORT CONNECT: yes/no
NUMBER OF LOGSTREAMS: nnnnnn
```

The operator issued the DISPLAY LOGGER,CONN,JOBNAME=*mvsjobname*,DETAIL command. For this jobname output, the *num_conn* field is the number of connections on that system made to that log stream by that job.

In the message text:

sysname

The system name.

mvs_jobname

The jobname.

mvs_asid

The ASID.

logstreamname

The log stream name.

strname

The CFRM structure name.

Note: For all displays, when a DASD only configured log stream is displayed, the STRUCTURE field of the display will contain the text ***DASDONLY***.

num_conn

The number of active connections from this system to this log stream by that job. The number of the connections field is 6 bytes in length.

status

The log stream status. Possible values can be:

AVAILABLE

The log stream is available for connects.

IN USE

The log stream is available and has a current connection.

CONNECT PENDING

The system logger needed to perform recovery operations asynchronous to the application's connect request and will remain in this state until recovery is done. The system logger will then complete the connect request on behalf of the application.

OFFLOAD IN PROGRESS

The system logger is in the process of offloading data from the coupling facility structure to DASD.

DISCONNECT PENDING

The system logger is completing the applications disconnect request asynchronously. When complete, the application is disconnected from the log stream.

STRUCTURE FULL

The coupling facility structure space allocated for this log stream is full.

LOSS OF DATA

There is a loss of data condition present in the log stream.

REBUILD IN PROGRESS

The coupling facility structure is temporarily unavailable and a rebuild of the structure is in progress.

DUPLEXING REBUILD

The coupling facility structure is temporarily unavailable because a duplexing rebuild of the structure is in progress.

DUPLEX TO SIMPLEX

The coupling facility structure has transitioned

from duplex-mode to simplex-mode and system logger is processing the transition.

REBUILD FAILED

The coupling facility structure is unavailable and will remain so until a successful rebuild is completed.

LOST CONNECTIVITY

No connectivity exists to the coupling facility associated with the log stream. The system logger will either attempt to rebuild the log stream in another coupling facility or the log stream will be disconnected.

DS DIRECTORY FULL

The log stream's DASD data set directory is full. The system logger cannot offload any further data from the coupling facility structure to DASD.

DELETE IN PROGRESS

Deletion of the log stream is in progress.

duplexing-method

One of the following:

LOCAL BUFFERS

Indicates system logger is duplexing the log data in the data spaces associated with the IXGLOGR address space.

LOCAL BUFFERS, STAGING DRXRC

Indicates logger is duplexing the log data in the data spaces associated with the IXGLOGR address space, and logger is also duplexing the log data in a staging data set but it is only used for log stream recovery when the recovery system was IPL'd with DRMODE=YES.

STAGING DATA SET

Indicates system logger is duplexing the log data in a staging data set associated with the system's connection to the log stream and structure.

STRUCTURE, LOCAL BUFFERS

Indicates the log data is being duplexed in a second copy of the coupling facility structure (by XES), and system logger is duplexing the log data in data spaces associated with the IXGLOGR address space.

STRUCTURE, LOCAL BUFFERS, STAGING DRXRC

Indicates the log data is being duplexed in a second copy of the coupling facility structure (by XES), and logger is duplexing the log data in data spaces associated with the IXGLOGR address space, and logger is also duplexing the log data in a staging data set but it is only used for log stream recovery when the recovery system was IPL'd with DRMODE=YES.

STRUCTURE, STAGING DATA SETS

Indicates the log data is being duplexed in a second copy of the coupling facility structure (by XES), and system logger is duplexing the log data in a staging data set associated with the system's connection to the log stream and structure.

STRUCTURE, STAGING DRXRC

Indicates the log data is being duplexed in a second copy of the coupling facility structure (by XES), and logger is also duplexing the log data in a staging data set but it is only used for log stream recovery when the recovery system was IPL'd with DRMODE=YES.

STRUCTURE

Indicates the log data is being duplexed in a second copy of the coupling facility structure (by XES), and system logger is not explicitly duplexing the log data using its own means.

IN TRANSITION

Indicates system logger is transitioning because of a duplexing rebuild or because the structure has changed from duplex-mode to simplex-mode.

STGDSN information:*datasetname*

Name of the staging data set where logger data is being duplexed.

volume

Name of the volume where the staging data set resides.

nnnn

Represents the size of the staging data set in 4K increments.

used

Indicates the percentage usage for the staging data set.

R/W CONN

Displayed after the jobname that connected to the log stream. Lists the number of read and/or write connections made to this log stream by this job.

RES MGR./CONNECTED

The name of the remote site recovery resource manager that is associated with the log stream and its connection status. If there is no resource manager defined, then the field will display *NONE* for the resource manager name and NO for whether or not it's connected.

IMPORT CONNECT

Displays if there is an import connect active for this log stream on this system.

nnnnnnn

The number of log streams included in the view for the display output.

Disconnect Pending Line:

When the log stream is being disconnected from the system, the 'DISCONNECT PENDING FOR xxxx MINUTES' line will be displayed if the log stream was in that state for over 2 minutes. The *status* text for the log stream could be one of the following: 'DISCONNECT PENDING', 'DS DIRECTORY FULL' or 'OFFLOAD IN PROGRESS'.

xxxx

Number of minutes the log stream has been in the disconnect Pending state.

Force Disconnect Line:

When a force disconnect command has been entered against the log stream, the line 'FORCE DISCONNECT IN PROGRESS' will be shown until the log stream is disconnected from the system. If the first force disconnect attempt does not proceed, and this display command shows this line, a second force disconnect should be issued. The second force disconnect attempt will cause current quiesce activity for existing connectors to cease, and the log stream disconnect from the system to continue.

System action: The system continues processing.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGP1DSP

Routing Code: 2,10

Descriptor Code: 5,8,9

IXG601I hh.mm.ss LOGGER DISPLAY [id]**Explanation:**

CONNECTION INFORMATION BY LOGSTREAM FOR SYSTEM *sysname*
LOGSTREAM STRUCTURE #CONN STATUS
logstreamname1 *strname1* *num_conn1* *status1*
JOBNAMES: *mvs_jobname1* ASID: *mvs_asid1*
JOBNAMES: *mvs_jobname2* ASID: *mvs_asid2*
JOBNAMES: *mvs_jobname3* ASID: *mvs_asid3*
JOBNAMES: *mvs_jobname4* ASID: *mvs_asid4*
logstreamname2 *strname2* *num_conn2* *status2*
JOBNAMES: *mvs_jobname1* ASID: *mvs_asid1*
JOBNAMES: *mvs_jobname2* ASID: *mvs_asid2*
logstreamname3 *strname3* *num_conn3* *status3*
JOBNAMES: *mvs_jobname1* ASID: *mvs_asid1*

NUMBER OF LOGSTREAMS: *nnnnnn*

The operator issued the DISPLAY LOGGER,CONN,LSN=*,JOB=*,SUMM command. The output will show all log streams that match filtering and all jobs that are connected to each log stream.

In the message text:

sysname
The system name.

mvs_jobname
The jobname.

mvs_asid
The ASID.

logstreamname
The log stream name.

strname
The CFRM structure name.

Note: For all displays, when a DASD only configured log stream is displayed, the STRUCTURE field of the display will contain the text ***DASDONLY***.

num_conn
The number of active connections from this system to this log stream by that job. The number of the connections field is 6 bytes in length.

status
The log stream status. Possible values can be:

AVAILABLE

The log stream is available for connects.

IN USE

The log stream is available and has a current connection.

CONNECT PENDING

The system logger needed to perform recovery operations asynchronous to the application's connect request and will remain in this state until recovery is done. The system logger will then complete the connect request on behalf of the application.

OFFLOAD IN PROGRESS

The system logger is in the process of offloading data from the coupling facility structure to DASD.

DISCONNECT PENDING

The system logger is completing the applications disconnect request asynchronously. When complete, the application is disconnected from the log stream.

STRUCTURE FULL

The coupling facility structure space allocated for this log stream is full.

LOSS OF DATA

There is a loss of data condition present in the log stream.

REBUILD IN PROGRESS

The coupling facility structure is temporarily unavailable and a rebuild of the structure is in progress.

DUPLEXING REBUILD

The coupling facility structure is temporarily unavailable because a duplexing rebuild of the structure is in progress.

DUPLEX TO SIMPLEX

The coupling facility structure has transitioned from duplex-mode to simplex-mode and system logger is processing the transition.

REBUILD FAILED

The coupling facility structure is unavailable and will remain so until a successful rebuild is completed.

LOST CONNECTIVITY

No connectivity exists to the coupling facility associated with the log stream. The system logger will either attempt to rebuild the log stream in another coupling facility or the log stream will be disconnected.

DS DIRECTORY FULL

The log stream's DASD data set directory is full. The system logger cannot offload any further data from the coupling facility structure to DASD.

DELETE IN PROGRESS

Deletion of the log stream is in progress.

nnnnnn

The number of log streams included in the view for the display output.

Note: When the log stream is being disconnected from the system, then the new line will be displayed if the log stream was in that state for over 2 minutes. The *status* text for the log stream could be one of the following: 'DISCONNECT PENDING', 'DS DIRECTORY FULL' or 'OFFLOAD IN PROGRESS'.

System action: The system continues processing.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGP1DSP

Routing Code: 2,10

Descriptor Code: 5,8,9

IXG601I hh.mm.ss LOGGER DISPLAY [id]

Explanation:

```

CONNECTION INFORMATION FOR SYSPLEX plexname
LOGSTREAM      STRUCTURE    #CONN     STATUS
logstreamname1  strname1      num_conn   status
  SYSNAME: sysname1
  DUPLEXING: duplexing-method
  SYSNAME: sysname2
  DUPLEXING: duplexing-method
  SYSNAME: sysname3
  DUPLEXING: duplexing-method
logstreamname2  strname1      num_conn   status
  SYSNAME: sysname1
  DUPLEXING: duplexing-method
  SYSNAME: sysname2
  DUPLEXING: duplexing-method

NUMBER OF LOGSTREAMS: nnnnnn

```

The operator issued the DISPLAY LOGGER,CONN,SYSPLEX command.

In the message text:

sysname

The system name.

plexname

The sysplex name.

logstreamname

The log stream name.

strname

The CFRM structure name.

num_conn

The number of active connections from this system to this log stream by that job.

status

The log stream status. Possible values are:

AVAILABLE

The log stream is available for connects.

IN USE

The log stream is available and has a current connection.

LOSS OF DATA

There is a loss of data present in the log stream.

DELETE IN PROGRESS

Deletion of the log stream is in progress.

duplicating-method

One of the following:

LOCAL BUFFERS

Indicates system logger is duplexing the log data in the data spaces associated with the IXGLOGR address space.

LOCAL BUFFERS, STAGING DRXRC

Indicates logger is duplexing the log data in the data spaces associated with the IXGLOGR address space, and logger is also duplexing the log data in a staging data set but it is only used for log stream recovery when the recovery system was IPLed with DRMODE=YES.

STAGING DATA SET

Indicates system logger is duplexing the log data in a staging data set associated with the system's connection to the log stream and structure.

STRUCTURE, LOCAL BUFFERS

Indicates the log data is being duplexed in a second copy of the coupling facility structure (by XES), and system logger is duplexing the log data in data spaces associated with the IXGLOGR address space.

STRUCTURE, LOCAL BUFFERS, STAGING DRXRC

Indicates the log data is being duplexed in a second copy of the coupling facility structure (by XES), and logger is duplexing the log data in data spaces associated with the IXGLOGR address space, and logger is also duplexing the log data in a staging data set but it is only used for log stream recovery when the recovery system was IPL'd with DRMODE=YES.

STRUCTURE, STAGING DATA SETS

Indicates the log data is being duplexed in a second copy of the coupling facility structure (by XES), and system logger is duplexing the log data in a staging data set associated with the system's connection to the log stream and structure.

STRUCTURE, STAGING DRXRC

Indicates the log data is being duplexed in a second copy of the coupling facility structure (by XES), and logger is also duplexing the log data in a staging data set but it is only used for log stream recovery when the recovery system was IPL'd with DRMODE=YES.

STRUCTURE

Indicates the log data is being duplexed in a second copy of the coupling facility structure (by XES), and system logger is not explicitly duplexing the log data using its own means.

IN TRANSITION

Indicates system logger is transitioning because of a duplexing rebuild or because the structure has changed from duplex-mode to simplex-mode.

nnnnnn

The number of log streams included in the view for the display output.

Note: The filter LSNAME may be used to curtail the display to show only specific log streams. If the LSNAME filter is specified, only the log streams that match the filter will be displayed. The log streams that are displayed are defined and have one or more active connections.

System action: The system continues processing.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGP1DSP

Routing Code: 2,10

Descriptor Code: 5,8,9

IXG601I *hh.mm.ss* LOGGER DISPLAY [*id*]

Explanation:

INVENTORY INFORMATION BY LOGSTREAM
LOGSTREAM STRUCTURE #CONN

STATUS
logstreamname1 *strname1* *num_conn*
status
logstreamname2 *strname1* *num_conn*
status
 SYSNAME: *sysname1*
 DUPLEXING: *duplexing-method*
 SYSNAME: *sysname2*
 DUPLEXING: *duplexing-method*
 SYSNAME: *sysname3*
 DUPLEXING: *duplexing-method*
 GROUP: *groupname2*
logstreamname3 *strname1* *num_conn*
status
 SYSNAME: *sysname1*
 DUPLEXING: *duplexing-method*
 GROUP: *groupname3*

NUMBER OF LOGSTREAMS: *nnnnnn*

The operator issued the DISPLAY LOGGER,LOGSTREAM command.

In the message text:

sysname
The system name.

| **groupname**
| The name of the group that the log stream belongs
| to. Can be PRODUCTION or TEST. This line is
| shown when *num_conn* is greater than 0.

logstreamname
The log stream name.

strname
The CFRM structure name.

num_conn
Represents the total number of systems connected
to this log stream by that job. If this field contains
zero, then this is a defined log stream that has no
active connection to it.

status
The log stream status. Possible values are:

AVAILABLE
The log stream is available for connects.

IN USE

The log stream is available and has a current
connection.

LOSS OF DATA

There is a loss of data present in the log
stream.

DELETE IN PROGRESS

Deletion of the log stream is in progress.

duplexing-method

One of the following:

LOCAL BUFFERS

Indicates system logger is duplexing the log
data in the data spaces associated with the
IXGLOGR address space.

LOCAL BUFFERS, STAGING DRXRC

Indicates logger is duplexing the log data in the
data spaces associated with the IXGLOGR
address space, and logger is also duplexing
the log data in a staging data set but it is only
used for log stream recovery when the
recovery system was IPL'd with
DRMODE=YES.

STAGING DATA SET

Indicates system logger is duplexing the log
data in a staging data set associated with the
system's connection to the log stream and
structure.

STRUCTURE, LOCAL BUFFERS

Indicates the log data is being duplexed in a
second copy of the coupling facility structure
(by XES), and system logger is duplexing the
log data in data spaces associated with the
IXGLOGR address space.

STRUCTURE, LOCAL BUFFERS, STAGING DRXRC

Indicates the log data is being duplexed in a
second copy of the coupling facility structure
(by XES), and logger is duplexing the log data
in data spaces associated with the IXGLOGR
address space, and logger is also duplexing
the log data in a staging data set but it is only
used for log stream recovery when the
recovery system was IPL'd with
DRMODE=YES.

STRUCTURE, STAGING DATA SETS

Indicates the log data is being duplexed in a
second copy of the coupling facility structure
(by XES), and system logger is duplexing the
log data in a staging data set associated with
the system's connection to the log stream and
structure.

STRUCTURE, STAGING DRXRC

Indicates the log data is being duplexed in a
second copy of the coupling facility structure
(by XES), and logger is also duplexing the log
data in a staging data set but it is only used for

log stream recovery when the recovery system was IPL'd with DRMODE=YES.

STRUCTURE

Indicates the log data is being duplexed in a second copy of the coupling facility structure (by XES), and system logger is not explicitly duplexing the log data using its own means.

IN TRANSITION

Indicates system logger is transitioning because of a duplexing rebuild or because the structure has changed from duplex-mode to simplex-mode.

nnnnnn

The number of log streams included in the view for the display output.

Note: The system name and duplexing information will only be displayed if the log stream has at least one active connection. For model log streams, the *num_conn* field will always contain 0 for the number of connections. Also, the STRUCTURE field may contain a name or can possibly be blanks. Therefore, for model log streams, the additional system name and staging data set information will not be seen since there can be no active connection on a model log stream. For a model log stream, the status field will contain the text ***MODEL***.

The filters LSNAMEILSN and/or STRNAMEISTRN may be used to curtail the display to show only specific log streams or structures.

System action: The system continues processing.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGP1DSP

Routing Code: 2,10

Descriptor Code: 5,8,9

IXG601I *hh.mm.ss* LOGGER DISPLAY [*id*]

INVENTORY INFORMATION BY STRUCTURE

STRUCTURE	GROUP	CONNECTED
<i>strname1</i>	<i>groupname1</i>	
<i>logstreamname1</i>		yes/no
<i>logstreamname2</i>		yes/no
<i>logstreamname3</i>		yes/no
<i>strname2</i>	<i>groupname2</i>	
<i>logstreamname1</i>		yes/no
<i>logstreamname2</i>		yes/no

NUMBER OF STRUCTURES: *nnnnnn*

Explanation: The operator issued the DISPLAY LOGGER,STRUCTURE command. The CDS structure information is retrieved from the system logger inventory, and represents all log streams defined or all log streams defined to a specific structure if the STRNAME filter is used. An indication of whether the log stream has an active connection is also displayed.

If there are no log streams defined to a structure, then the text ***NO LOGSTREAMS DEFINED*** will be displayed where a log stream name would be displayed and the text N/A will be displayed where the connection status would be displayed.

In the message text:

logstreamname

The log stream name.

strname

The CFRM structure name.

| *groupname*

| The group that the structure belongs to. Can be PRODUCTION or TEST. Set to blanks if the structure does not have any log streams defined to it.

yes/no

Indicates whether the log stream has an active connection or not.

nnnnnn

The number of logger structures included in the view for the display output.

System action: The system continues processing.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGP1DSP

Routing Code: 2,10

Descriptor Code: 5,8,9

IXG602I DISPLAY LOGGER COMMAND NOT PROCESSED, THE SYSTEM LOGGER IS NOT ACTIVE

Explanation: The display logger command was successfully processed. No information was displayed because the system logger address space was not available.

System action: The system continues processing. System logger output is not shown.

User response: Activate system logger and reissue

the display logger command.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGP1DSP

Routing Code: 2

Descriptor Code: 4

IXG603I DISPLAY LOGGER FAILURE DUE TO INTERNAL ERROR DIAGNOSTIC INFORMATION: *diag1 diag2 diag3 diag4*

Explanation: An internal error has occurred while processing the display logger command.

In the message text:

diag1, diag2, diag3, diag4

is diagnostic information relating to the failure.

System action: Processing continues.

User response: Provide IBM with the diagnostic information provided.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGP1DSP

Routing Code: 2

Descriptor Code: 4

IXG604I DISPLAY LOGGER COMMAND NOT PROCESSED, THE SYSTEM LOGGER COUPLE DATASET IS NOT AVAILABLE

Explanation: The display logger command was successfully processed. There was no information displayed because the couple data set was unavailable.

System action: Processing continues.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGP1DSP

Routing Code: 2

Descriptor Code: 4

IXG605I DISPLAY LOGGER COMMAND NOT PROCESSED, *reason*

Explanation: This message is displayed when the display command was not processed. The possible reasons are also displayed. For the inventory internal error reason additional diagnostic information is provided in message IXG606I which will follow:

In the message text:

reason

One of the following:

THE COUPLE DATASET IS TEMPORARILY UNAVAILABLE
CDS unavailable.

A PREVIOUS DISPLAY LOGGER COMMAND IS OUTSTANDING
Previous display outstanding.

AN INVENTORY INTERNAL ERROR WAS ENCOUNTERED

Inventory internal error.

Note: Message IXG606I is issued along with message IXG605I to the hardcopy log when an internal error in an inventory service is encountered. IXG606I contains diagnostic information pertaining to the error.

System action: Processing continues.

User response: Correct the error and reissue the display command.

Operator response: None.

Application Programmer Response: None.

System programmer response: None

Source: System logger (SCLOG)

Detecting Module: IXGP1DSP

Routing Code: 2

Descriptor Code: 4

IXG606I DISPLAY LOGGER COMMAND FAILURE DUE TO INTERNAL ERROR FROM AN INVENTORY SERVICE, RETURN CODE: *retcode* AND REASON CODE: *rsnocode*, DIAGNOSTIC INFORMATION: *diag1 diag2 diag3 diag4*

Explanation: This message will only be displayed if the display command was invoked to display sysplex information. This variation on the display logger command was unsuccessful.

In the message text:

retcode

System logger internal return code.

rsncode
System logger internal reason code.

diag1-diag4
is diagnostic information relating to the failure.

System action: Processing continues.

User response: Correct the error and reissue the display command.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGP1DSP

Routing Code: 2

Descriptor Code: 4

**IXG651I SETLOGR FORCE *action* COMMAND
ACCEPTED FOR
LOGSTREAM=*logstream***

Explanation: The SETLOGR FORCE command was accepted.

In the message text:

action
One of the following:
DISCONNECT
The type of SETLOGR FORCE operation.
DELETE
The type of SETLOGR FORCE operation.

logstream
The name of the log stream that was acted on.

System action: The command has been sent to system logger and it will be processed.

User response: None.

Operator response: Check the log for messages IXG661I, IXG662I or related messages to determine the success or failure of the force operation, you can also issue a display command to check the status: For a DELETE operation issue DISPLAY,LOGGER,L to check if the force delete was completed. For a DISCONNECT operation issue DISPLAY,LOGGER,C to check if the force disconnect was completed.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGSETLG

Routing Code: 2

Descriptor Code: 5

**IXG652I SETLOGR FORCE *action* COMMAND
NOT PROCESSED, FOR
LOGSTREAM=*logstream* DUE TO: *text***

Explanation: The SETLOGR FORCE command was not successfully processed. The action failed due to the given reason.

In the message text:

action
One of the following:
DISCONNECT
The type of SETLOGR FORCE operation.
DELETE
The type of SETLOGR FORCE operation.

logstream
The name of the log stream that was acted on.

text
One of the following:
THE SPECIFIED LOGSTREAM IS NOT CONNECTED ON THIS SYSTEM
The log stream resource specified by the *lsn=* parameter is not connected to the system.
THE REQUEST FAILED FOR AN UNEXPECTED REASON
System logger returned an unexpected error code.

LOGR COUPLE DATA SET NOT AVAILABLE
System logger indicated there is no LOGR Couple data set currently in use.

THE SYSTEM LOGGER IS NOT AVAILABLE
System logger address space is not yet available for function requests on this system.

System action: Processing of command request was not completed.

User response: None.

Operator response: Check message IXG653I in the system log for more information. If the log stream is not connected then a force disconnect is not necessary, the log stream may not be defined. If the request failed for an unexpected reason, the system logger component encountered an error, contact the System programmer. If system logger is not active, ask the System programmer to activate system logger and reissue desired commands.

Application Programmer Response: None.

System programmer response: Determine if additional action can be taken by consulting message IXG653I. If the problem persists contact IBM Support.

Source: System logger (SCLOG)

Detecting Module: IXGSETLG

Routing Code: 2

Descriptor Code: 5

IXG653I SETLOGR FORCE COMMAND NOT PROCESSED FOR LOGSTREAM=*logstream* RETCODE=*retcode*, RSNCODE=*rsnocode* DIAGNOSTIC INFORMATION: *diag1 diag2 diag3 diag4*

Explanation: Extra diagnostic information to message IXG652 is shown in the system log.

In the message text:

logstream
The name of the log stream that was acted on.

retcode
Return code from the ixgservice.

rsnocode
Reason code from the ixgservice.

diag1 diag 2 diag3 diag4
These four diagnostic fields (diag1–diag4) are diagnostic information relating to the failure.

System action: See response to message IXG652I.

User response: None.

Operator response: Check message IXG653I in the system log for more information. If the log stream is not connected then a force disconnect is not necessary, the log stream may not be defined. If the request failed for an unexpected reason, the system logger component encountered an error, contact the System programmer. If system logger is not active, ask the System programmer to activate system logger and reissue desired commands.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGSETLG

Routing Code: 10

Descriptor Code: 12,5

IXG661I SETLOGR FORCE *action* PROCESSED SUCCESSFULLY FOR LOGSTREAM=*logstream*

Explanation: The SETLOGR FORCE command processing completed successfully.

In the message text:

action
One of the following:

DISCONNECT
The type of SETLOGR FORCE operation.

DELETE

The type of SETLOGR FORCE operation.

logstream

The name of the log stream acted on.

System action: The system continues processing.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: MANY

Routing Code: 2

Descriptor Code: 4

IXG662I SETLOGR FORCE *action* FAILED

**FOR LOGSTREAM=*logstream*
DUE TO: *text*
DIAG1=*retcode*, DIAG2=*rsnocode***

Explanation: The SETLOGR FORCE command failed during processing.

In the message text:

action
One of the following:

DISCONNECT
The type of SETLOGR FORCE operation.

DELETE
The type of SETLOGR FORCE operation.

logstream
The name of the log stream acted on.

retcode
Diagnostic return code from the SETLOGR request.

rsnocode
Diagnostic reason code from the SETLOGR request.

text
One of the following:

THE SPECIFIED LOGSTREAM IS NOT DEFINED
The log stream resource specified by the Isn= parameter does not exist.

THE LOGSTREAM HAS ACTIVE CONNECTIONS
System logger is unable to delete the log stream because it has action connections.

THE REQUEST FAILED FOR AN UNEXPECTED REASON

The request failed for an unexpected reason, with the given return and reason codes.

System action: The system continues processing.

User response: None.

Operator response: Consult the reason text: if the log stream is not defined the force operation is unnecessary, issue a D

LOGGER,L,LSN=*logstream_name* to confirm that the log stream is no longer defined to the LOGR CDS. If a delete operation is specified and the log stream has active connections, disconnect from the log stream and retry the delete operation.

If the information in the message contains DIAG1=00000008,DIAG2=000008B0, then system logger is unable to connect to the structure as part of the log stream delete operation because a structure rebuild is in progress. There are two courses of action to continue with the log stream delete request for this case:

1. Wait for the structure rebuild activity to complete. Look for XES (IXL- and IXC-) and system logger (IXG-) messages indicating the structure rebuild is done or at least stopped.
2. If the log stream has a zero connect count, meaning an IXG601I message in response to a D Logger,L command shows #CONN and STATUS as '000000 AVAILABLE', you can update the log stream to name a new structure. For a description of the IXCMIAPI utility refer to Administrative Data Utility of z/OS MVS *Setting Up a Sysplex*. In this case, the new structure name for the log stream can be a dummy structure, meaning it does not have to be an existing structure or even have to be defined in the CFRM policy. After the log stream is mapped to the new structure, then issue the SETLOGR FORCE,DEL command to delete the log stream.

If the failure is due to an unexpected reason, issue a D LOGGER,C or D LOGGER,L to check the log stream status, and consult the diag fields. The diag fields may correspond to existing return and reason codes in IXGCON. Contact IBM support if further assistance is necessary.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: MANY

Routing Code: 2

Descriptor Code: 4

**IXG663I STRUCTURE LIST CLEANUP ERROR
ENCOUNTERED FOR
STRUCTURE=*structname*, CONTINUING
FORCE DELETE OF
LOGSTREAM=*logstream***

Explanation: Clean up of list entries in the structure for the log stream failed during a force deletion operation. Structure lists will be left as is, and may be

cleaned up during the first connection of a new log stream to the structure.

In the message text:

structname

The name of the structure.

logstream

The name of the log stream.

System action: The force delete operation continues processing.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: None.

Source: System Logger (SCLOG)

Detecting Module: IXGC4DIS

Routing Code: 10

Descriptor Code: 12

**IXG701I NO TRACING IN EFFECT FOR SYSTEM
LOGGER - SYSLOGR COMPONENT
TRACE DEFINE FAILED. DIAG1: *n*
DIAG2: *diag2n***

Explanation: System logger tried to initialize component tracing for SYSLOGR but failed to define tracing to MVS component trace. System logger is running without component tracing active.

In the message text:

diag1, diag2

Return code from a CTRACE DEFINE request, used by IBM Support Center for problem determination.

System action: System logger initialization continues without component tracing for SYSLOGR. The system issues other messages explaining the problem.

User response: None.

Operator response: See the operator response for the component trace messages (prefix ITT) accompanying this message.

Application Programmer Response: None.

System programmer response: See the system programmer response for component trace messages (prefix ITT) accompanying this message.

Source: System logger (SCLOG)

Detecting Module: IXGV1CTI

Routing Code: 1,2

Descriptor Code: 12

IXG702I	NO TRACING IN EFFECT FOR SYSTEM LOGGER - SYSLOGR COMPONENT TRACE RESOURCE INITIALIZATION FAILED. DIAG: <i>diag1</i>
----------------	--

Explanation: System logger tried to initialize component tracing for SYSLOGR, but failed to obtain the required storage needed to store the component trace data. System logger is running without component tracing active.

In the message text:

diag1

Return code received from the STORAGE macro when system logger Initialization attempted to obtain storage for use by SYSLOGR component tracing.

System action: System logger initialization continues without component tracing for SYSLOGR.

User response: None.

Operator response: Notify system programmer.

Application Programmer Response: None.

System programmer response: See *z/OS MVS Programming: Authorized Assembler Services Reference SET-WTO* for the action to take when return code *diag1* is issued by the STORAGE OBTAIN macro.

Source: System logger (SCLOG)

Detecting Module: IXGBLF01

Routing Code: 1,2

Descriptor Code: 12

IXG703I	THE NUMBER OF LOGSTREAMS SPECIFIED EXCEEDS THE MAXIMUM.
----------------	--

Explanation: While processing the TRACE CT™ command, the system found more than eight log stream names specified on the STRMNAME component trace option for SYSLOGR. Only eight log stream names can be specified on the STRMNAME option.

System action: The system rejects the TRACE CT command.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: Enter the TRACE CT command again with eight or less log stream names specified on the STRMNAME option.

Source: System logger (SCLOG)

Detecting Module: IXGV1SSE

Routing Code: 1,2

Descriptor Code: 12

IXG704I	SYNTAX ERROR IN THE STRMNAME OPTION. <i>name</i> IS NOT A VALID LOGSTREAM NAME VALUE. RE-ENTER THE COMMAND WITH A VALID STRMNAME OPTION.
----------------	---

Explanation: While processing the TRACE CT command, a syntax error was found in a log stream name specified on the STRMNAME component trace option for SYSLOGR. *name* contains a syntax error.

In the message text:

name

is the log stream name in the STRMNAME options that contains a syntax error.

System action: The system rejects the TRACE CT command.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: Enter the TRACE CT command again with valid log stream names in the STRMNAME option.

Source: System logger (SCLOG)

Detecting Module: IXGV1SSE

Routing Code: 1,2

Descriptor Code: 12

IXG705I	A LOGSTREAM NAME SPECIFIED IN THE STRMNAME OPTION IS NOT VALID.
----------------	--

Explanation: A string found after STRMNAME= and before the closing right parenthesis is not a valid log stream name. It either contains more than 26 characters or contains unacceptable characters.

System action: The system rejects the TRACE CT command.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: Verify that all log stream names that are specified in the STRMNAME option are less than 26 characters in length and do not contain invalid characters. Enter the TRACE CT command again with valid log stream names.

Source: System logger (SCLOG)

Detecting Module: IXGV1SSE

Routing Code: 1,2

Descriptor Code: 12

IXG706I **traceoptn IS NOT A VALID TRACE OPTION FOR SYSLOGR. ALLOWABLE OPTIONS ARE ALL, CONNECT, LOGSTRM, INVENTORY, MISC, DATASET, STORAGE, LOCBUFF, SERIAL, RECOVERY AND STRMNAME.**

Explanation: The string *traceoptn* was received as part of the trace options. This string does not represent a valid SYSLOGR trace option.

In the message text:

traceoptn

is the value of the incorrect trace option specified.

System action: The system rejects the TRACE CT command.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: Issue the TRACE CT command again and supply valid SYSLOGR trace options.

Source: System logger (SCLOG)

Detecting Module: IXGV1SSE

Routing Code: 1,2

Descriptor Code: 12

IXG707I **THE NUMBER OF ASIDS SPECIFIED EXCEEDS THE MAXIMUM.**

Explanation: While processing the TRACE CT command, the system found more than eight ASIDs specified on the component trace options for SYSLOGR. Only eight ASIDs can be specified for SYSLOGR.

System action: The system rejects the TRACE CT command.

User response: None.

Operator response: None.

Application Programmer Response: None.

System programmer response: Enter the TRACE CT command again with eight or less ASIDs specified for SYSLOGR tracing.

Source: System logger (SCLOG)

Detecting Module: IXGV1SSE

Routing Code: 1,2

Descriptor Code: 12

IXG708I **SYSLOGR COMPONENT TRACE IS UNAVAILABLE. REASON: *text***

Explanation: System logger component tracing is unavailable due to internal errors that have occurred in the system logger address space.

In the message text:

SYSTEM LOGGER ADDRESS SPACE NOT AVAILABLE

The system logger address space is currently unavailable.

The system programmer should determine why the system logger address space is not available and insure that it is available before attempting to start, modify or stop SYSLOGR component tracing.

SYSLOGR COMPONENT TRACE RESOURCES NOT AVAILABLE

The SYSLOGR internal trace buffers are not available at this time.

Try issuing the TRACE CT command again if this reason is the cause of the unavailability..

System action: The TRACE CT command is not processed by SYSLOGR component trace.

User response: None.

Operator response: Report this message to the system programmer.

Application Programmer Response: None.

System programmer response: None.

Source: System logger (SCLOG)

Detecting Module: IXGV1SSE

Routing Code: 1,2

Descriptor Code: 12

IXG709I **SYSLOGR COMPONENT TRACE IS UNAVAILABLE. A FAILURE OCCURRED DURING OPTIONS PROCESSING.**

DIAG: *diaginfo*

Explanation: System logger component tracing is unavailable due to internal errors that have occurred during the processing of the TRACE CT operator command.

In the message text:

diaginfo

is diagnostic information returned when an unexpected error occurs during trace options processing. Save this value and provide it to the IBM support center.

System action: The TRACE CT command is not processed by SYSLOGR component trace.

User response: None.

IXGH001E

Operator response: Report this message to the system programmer.

Application Programmer Response: None.

System programmer response: Correct any syntax errors on the TRACE CT command or in the parmlib member referenced in the command and re-issue 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. Provide the *diaginfo* value returned in the message text to the IBM Support Center.

Source: System logger (SCLOG)

Detecting Module: IXGV1SSE

Routing Code: 1,2

Descriptor Code: 12

IXG710I NO TRACING IN EFFECT FOR SYSTEM LOGGER - UNEXPECTED ERROR IN SYSLOGR COMPONENT TRACE.

Explanation: System logger tried to initialize or perform component tracing for SYSLOGR but failed with an unexpected error. System logger is running without component tracing active.

System action: System logger continues without component tracing for SYSLOGR.

User response: None.

Operator response: Report this message to the system programmer.

Application Programmer Response: None.

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

Source: System logger (SCLOG)

Detecting Module: MANY

Routing Code: 1,2

Descriptor Code: 12

IXGH messages

| IXGH001E System Logger is not active.

| **Explanation:** System Logger is not active on this system. This check cannot be run.

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

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

| **System programmer response:** System Logger must be activated to run the checks.

| **Problem determination:** n/a

| **Source:** System Logger

| **Reference Documentation:** z/OS MVS Setting Up a Sysplex

IXG711I LIMITED TRACING IN EFFECT FOR SYSTEM LOGGER - SYSLOGR COMPONENT TRACE DATA SPACE INITIALIZATION FAILED. DIAG1: *diag1* DIAG2: *diag2*

Explanation: System logger tried to initialize component tracing SYSLOGR, but either failed to obtain the data space needed to store component trace data, or was unable to add the data space to system logger access list. System logger is running without a component trace data space available.

diag1

Return code received from the DSPSERV macro or the ALESERV macro when system logger attempted to create a data space for use by SYSLOGR component tracing and add it to the system logger access list.

diag2

If DIAG2 is X'04X' then DIAG1 is the return code from DSPSERV. If DIAG2 is X'08X' then DIAG1 is the return code from ALESERV.

System action: System logger initialization continues with limited component tracing for SYSLOGR.

User response: None.

Operator response: Notify the system programmer.

Application Programmer Response: None.

System programmer response: See z/OS MVS Programming: Authorized Assembler Services Reference ALE-DYN for the action to take when return code *diag1* is issued by the DSPSERV CREATE or the ALESERV ADD macros.

Source: System logger (SCLOG)

Detecting Module: IXGBLF01

Routing Code: 1,2

Descriptor Code: 12

- | **Automation:** n/a
 - | **Detecting Module:** IXGHC1CK
 - | **Routing Code:** -
 - | **Descriptor Code:** 3
-

| **IXGH002E The control block(s) required to run this check were not located.**

- | **Explanation:** The control block(s) required to run this check were not located. The check cannot be run.
 - | **System action:** The check is not run at this time, the system continues processing.
 - | **Operator response:** Report this problem to the system programmer.
 - | **System programmer response:** Schedule a time to recycle the System Logger address space so Logger can obtain the required control blocks.
 - | **Problem determination:** The most likely reason is because Logger failed obtain storage for the required control blocks. Logger may have issued IXG077I the last time it initialized. Review syslog and Logrec for any Logger errors around the last time Logger initialized. Search for storage obtain failure records.
 - | **Source:** System Logger
 - | **Reference Documentation:**
 - *z/OS MVS Diagnosis: Reference*
 - *z/OS MVS System Messages, Vol 10 (IXC-IZP)*
 - *IBM Health Checker for z/OS: User's Guide*
 - | **Automation:** n/a
 - | **Detecting Module:** IXGHC1CK
 - | **Routing Code:** -
 - | **Descriptor Code:** 3
-

| **IXGH003E Unable to obtain the required working storage to process the check at this time.**

- | **Explanation:** System Logger's check exit failed to obtain working storage. This check cannot be processed at this time.
 - | **System action:** The system continues processing.
 - | **Operator response:** Report this problem to the system programmer.
 - | **System programmer response:** Review IBM Health Checker for z/OS address space private storage consumption.
 - | **Problem determination:** Review IBM Health Checker for z/OS address space private storage consumption. Review Logrec for any storage obtain failures. If the problem cannot be determined, contact the IBM support center for further assistance.
 - | **Source:** System Logger
 - | **Reference Documentation:**
 - *z/OS MVS Diagnosis: Reference*
 - *IBM Health Checker for z/OS: User's Guide*
 - | **Automation:** n/a
 - | **Detecting Module:** IXGHC1CK
 - | **Routing Code:** -
 - | **Descriptor Code:** 3
-

IXGH004I • IXGH006I

| **IXGH004I This system has not encountered any log stream structure element full conditions.**

| **Explanation:** No log stream on this system has utilized 100% of the elements allotted to it by System Logger since
| Logger initialized the reporting area.

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

| **Operator response:** n/a

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

| **Problem determination:** Ensure SMF recording is active on this system.

| **Source:** n/a

| **Reference Documentation:**

- | • *z/OS MVS System Management Facilities (SMF)*
- | • *z/OS MVS Diagnosis: Reference*
- | • *IBM Health Checker for z/OS: User's Guide*

| **Automation:** n/a

| **Detecting Module:** IXGHC1CK

| **Routing Code:** n/a

| **Descriptor Code:** n/a

| **IXGH005I This system has not encountered any log stream staging data set full conditions.**

| **Explanation:** This system has not encountered any log stream staging data set full conditions since System Logger
| initialized the reporting area.

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

| **Operator response:** n/a

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

| **Problem determination:** Ensure SMF recording is active on this system.

| **Source:** n/a

| **Reference Documentation:**

- | • *z/OS MVS Setting Up a Sysplex*
- | • *z/OS MVS System Management Facilities (SMF)*
- | • *IBM Health Checker for z/OS: User's Guide*

| **Automation:** n/a

| **Detecting Module:** IXGHC1CK

| **Routing Code:** n/a

| **Descriptor Code:** n/a

| **IXGH006I This system has not encountered any structure entry threshold conditions.**

| **Explanation:** This system has not encountered any structure entry threshold reached conditions since System
| Logger initialized the reporting area. System Logger defines the entry threshold to be 90% of the entries for any
| Logger structure.

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

| **Operator response:** n/a

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

| **Problem determination:** Ensure SMF recording is active on this system.

| **Source:** n/a

- | **Reference Documentation:**
 - | • *z/OS MVS Setting Up a Sysplex*
 - | • *z/OS MVS System Management Facilities (SMF)*
 - | • *IBM Health Checker for z/OS: User's Guide*
- | **Automation:** n/a
- | **Detecting Module:** IXGHC1CK
- | **Routing Code:** n/a
- | **Descriptor Code:** n/a

- | **IXGH007E One or more log streams encountered a structure element full condition.**

Log Stream <i>report line</i>	Structure	Time of Last Count Condition
---	------------------	---

- | **Explanation:** One or more log streams defined to a structure have encountered a structure element full condition. This means that the log stream used all of the elements in its portion of the structure. Additional log streams writes to the structure will fail until the full condition is relieved. Applications using the affected log streams may experience a slow down or possibly an outage if the condition is not resolved in a timely fashion.
- | For each affected log stream, the report details are: the log stream, the structure the log stream resides in, the count of the number of structure element full conditions encountered for this log stream on this system, and the timestamp of the last structure full encounter per log stream.

- | The report keeps track of the most recent 16 structure element full conditions that occurred. A log stream is reported only once in the list for structure full conditions, but might also have staging data set full or entry threshold conditions.

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

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

- | **System programmer response:** Consider taking one or more of the following actions:

- | • Resolve any log stream offload constraints.
- | • Use the CFSizer to determine an appropriate size for the structure. Update the CFRM policy accordingly.
- | • Decrease the HIGHOFFLOAD for the affected log stream(s).
- | • Increase the LOWOFFLOAD for the affected log stream(s).
- | • If there are multiple log streams in the structure, consider moving some log streams to a new structure.
- | • Ensure log streams in the structure have a similar entry to element ratio. If they do not, consider moving the *odd* log stream to another structure.

- | **Problem determination:** n/a

- | **Source:** System Logger

- | **Reference Documentation:**

- | • *z/OS MVS Setting Up a Sysplex*
- | • *z/OS MVS System Management Facilities (SMF)*
- | • *z/OS MVS Initialization and Tuning Reference*
- | • *z/OS MVS System Messages, Vol 10 (IXC-IZP)*
- | • *z/OS MVS Programming: Assembler Services Reference IAR-XCT*
- | • *z/OS MVS System Commands*
- | • *IBM Health Checker for z/OS: User's Guide*

- | **Automation:** n/a

- | **Detecting Module:** IXGHC1CK

- | **Routing Code:** -

- | **Descriptor Code:** 12

IXGH008E • IXGH009E

I IXGH008E One or more log streams encountered a staging data set full condition.

Log Stream report line	Structure	Time of Last Count Condition
---------------------------	-----------	---------------------------------

| **Explanation:** One or more log stream using a staging data set to duplex data encountered a staging data set full condition. New writes to the log stream will fail while the staging data set is full. Applications using the log streams may experience a slow down or an outage if the condition is not resolved in a timely fashion.

| For each affected log stream, the report details are: the log stream, the structure the log stream resides in, the count of the number of staging data set full conditions encountered for this log stream on this system, and the timestamp of the last staging data set full condition for the log stream.

| The report keeps track of the most recent 16 staging data set full conditions that occurred. A log stream is reported only once in the list for staging data set full conditions, but might also have structure element full or entry threshold conditions.

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

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

| **System programmer response:** Consider taking one or more of the following actions:

- | • Resolve any log stream offload constraints.
- | • Increase the size of the staging data set.
- | • Decrease the HIGHOFFLOAD for the affected log stream(s).
- | • Increase the LOWOFFLOAD for the affected log stream(s).
- | • If the log stream is structure based, consider using the CFSizer to obtain an appropriate size for the structure.

| **Problem determination:** n/a

| **Source:** System Logger

| **Reference Documentation:**

- | • *z/OS MVS Setting Up a Sysplex*
- | • *z/OS MVS System Management Facilities (SMF)*
- | • *z/OS MVS Initialization and Tuning Reference*
- | • *z/OS MVS System Messages, Vol 10 (IXC-IZP)*
- | • *z/OS MVS Programming: Assembler Services Reference IAR-XCT*
- | • *z/OS MVS System Commands*
- | • *z/OS MVS Planning: Operations*
- | • *IBM Health Checker for z/OS: User's Guide*

| **Automation:** n/a

| **Detecting Module:** IXGHC1CK

| **Routing Code:** -

| **Descriptor Code:** 12

I IXGH009E One or more log streams encountered a structure entry threshold condition.

Log Stream report line	Structure	Time of Last Count Condition
---------------------------	-----------	---------------------------------

| **Explanation:** A log stream defined to a structure has encountered a structure entry threshold condition. This means that the structure had 90% of the entries in use at one time. Once the entries reach 100% writes to all of the log streams in the structure will fail until the full condition is resolved. Applications using the affected log streams may experience a slow down or possibly an outage if the condition is not resolved in a timely fashion.

| For each affected log stream, the report details are: the log stream, the structure the log stream resides in, the count

- | of the number of entry threshold conditions encountered for this log stream on this system, and the timestamp of the last entry threshold reached for the log stream.
- | The report keeps track of the most recent 16 entry threshold conditions that occurred. A log stream is reported only once in the list for entry threshold conditions, but might also have structure element full or staging data set full conditions.
- | **System action:** The system continues processing.
- | **Operator response:** Report this problem to the system programmer.
- | **System programmer response:** Consider taking one or more of the following actions:
 - | • Resolve any log stream offload constraints.
 - | • Use the CFSizer to determine an appropriate size for the structure. Update the CFRM policy accordingly.
 - | • Decrease the HIGHOFFLOAD for the affected log stream(s).
 - | • Increase the LOWOFFLOAD for the affected log stream(s).
 - | • If there are multiple log streams in the structure, consider moving some log streams to a new structure.
 - | • Ensure log streams in the structure have a similar entry to element ratio. If they do not, consider moving the *odd* log stream to another structure.
- | **Problem determination:** n/a
- | **Source:** System Logger
- | **Reference Documentation:**
 - | • *z/OS MVS Setting Up a Sysplex*
 - | • *z/OS MVS System Management Facilities (SMF)*
 - | • *z/OS MVS Initialization and Tuning Reference*
 - | • *z/OS MVS System Messages, Vol 10 (IXC-IZP)*
 - | • *z/OS MVS Programming: Assembler Services Reference IAR-XCT*
 - | • *z/OS MVS System Commands*
 - | • *z/OS MVS Planning: Operations*
 - | • *IBM Health Checker for z/OS: User's Guide*
- | **Automation:** n/a
- | **Detecting Module:** IXGHC1CK
- | **Routing Code:** -
- | **Descriptor Code:** 12

Chapter 5. IXL Messages

IXL001W XES TIMER DIE COULD NOT BE ESTABLISHED

Explanation: XES was unable to establish the timer DIE routine that is used to periodically monitor certain XES functions.

System action: The system is placed in a nonrestartable wait state.

Operator response: Not applicable.

System programmer response: Determine why the system was unable to establish a timer DIE routine for XES.

Source: Cross System Extended Services (XES)

Detecting Module: IXLM2DIE

Routing Code: 1,2,10

Descriptor Code: 1

IXL002I SYNTAX ERROR IN SYSXES COMPONENT TRACE OPTIONS. keyword IS AN UNKNOWN KEYWORD.

Explanation: A syntax error was found in the SYSXES component trace option specification.

In the message text:

keyword

Keyword that the system could not process.

System action: The system continues processing. The change in component trace options is rejected.

Operator response: Correct the indicated syntax error and re-enter the command. For information on changing trace options see *z/OS MVS System Commands*.

System programmer response: Not applicable.

Source: Cross System Extended Services (XES)

Detecting Module: IXLC2EM1

Routing Code: #

Descriptor Code: 5

IXL003I SYNTAX ERROR IN SYSXES COMPONENT TRACE OPTIONS. *option* WAS SEEN WHERE ONE OF: *optiona* *optionb* *optionc* *optiond* *optione* *optionf* *optiong* *optionh* *optionj* *optionk* WAS EXPECTED.

Explanation: A syntax error was found in the SYSXES component trace option specification.

In the message text:

option

The specified trace option that the system could not process.

optiona

A valid choice for a SYSXES CTRACE option.

optionb

A valid choice for a SYSXES CTRACE option.

optionc

A valid choice for a SYSXES CTRACE option.

optiond

A valid choice for a SYSXES CTRACE option.

optione

A valid choice for a SYSXES CTRACE option.

optionf

A valid choice for a SYSXES CTRACE option.

optiong

A valid choice for a SYSXES CTRACE option.

optionh

A valid choice for a SYSXES CTRACE option.

optionj

A valid choice for a SYSXES CTRACE option.

optionk

A valid choice for a SYSXES CTRACE option.

System action: The system continues processing. The change in component trace options is rejected.

Operator response: Correct the indicated syntax error and re-enter the command. For information on changing trace options, see *z/OS MVS System Commands*.

System programmer response: Not applicable.

Source: Cross System Extended Services (XES)

Detecting Module: IXLC2EM1, IXLR3LOP

Routing Code: #

Descriptor Code: 5

IXL004W CHANNEL SUBSYSTEM HAS BEEN ISOLATED

Explanation: The system has been isolated from all I/O resources as part of the sysplex partitioning process.

System action: The system is placed in a nonrestartable wait state.

Operator response: Determine the reason why the system was removed from the sysplex. If it was the result of an error then it may be desirable to take a stand-alone dump of the system, or take other actions to diagnose or correct the error. Then re-IPL the system.

IXL005I • IXL008I

System programmer response: Not applicable.

Source: Cross System Extended Services (XES)

Detecting Module: IXLE2REC, IXLR3LOP

Routing Code: #

Descriptor Code: 5

IXL005I SYSXES COMPONENT TRACE FAILED FOR PARMLIB MEMBER *n*. DIAG1: *n n* DIAG2: *n* TRACING WILL BE INITIALIZED USING {CTIXES00.IDEFAULT TRACE OPTIONS.}

Explanation: The SYSXES component encountered an error during initialization while defining component trace for SYSXES. This can occur when an error is found while reading the component trace parmlib member, CTIXESxx, or in component trace processing.

In the message text:

CTIXES00.

XCF will continue processing with parmlib CTIXES00.

DEFAULT TRACE OPTIONS.

SYSXES will continue processing with default trace options.

System action: The SYSXES component continues component tracing with the options defined in the default component trace parmlib member, CTIXES00, or default trace options, depending on the action specified in message IXL005I. The system issues component trace messages explaining the error.

Operator response: See the operator response for message ITT010I, if the system issues it, or other component trace messages.

System programmer response: See the system programmer response for message ITT010I, if the system issues it, or other component trace messages.

Source: Cross System Extended Services (XES)

Detecting Module: IXLC2DEF, IXLR3LOP

Routing Code: 1,2

Descriptor Code: 12

IXL006I SYSXES COMPONENT TRACE FAILED FOR DEFAULT TRACE OPTIONS. DIAG1: *n n* DIAG2: *n* NO TRACING IN EFFECT.

Explanation: The SYSXES component tried to initialize component tracing using default options. The system is now running without component tracing for SYSXES.

System action: Initialization continues without component tracing for SYSXES. The system issues

component trace messages (prefix ITT) explaining the problem.

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 component trace messages (prefix ITT) accompanying this message.

Source: Cross System Extended Services (XES)

Detecting Module: IXLC2DEF, IXLR3LOP

Routing Code: 1,2

Descriptor Code: 12

IXL007I THE SYSXES GLOBAL SUBTRACE COULD NOT BE DEFINED. DIAG1: *n n* DIAG2: *n*

Explanation: The SYSXES component failed to define the global subtrace. This system, is now running without a global subtrace for the SYSXES component.

System action: Initialization continues without a global subtrace for SYSXES. The system issues component trace messages (prefix ITT) explaining the problem.

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 component trace messages (prefix ITT) accompanying this message.

Source: Cross System Extended Services (XES)

Detecting Module: IXLC2DEF

Routing Code: 1,2

Descriptor Code: 12

IXL008I PATH *chpid* HAS BEEN INVALIDATED TO CUID: *cuid* COUPLING FACILITY *type.mfg.plant.sequence* PARTITION: *partition* side CPCID: *cpcid*

Explanation: A sender path has been found to have been miscabled. The path has been marked invalid and will not be used by the system. The coupling facility is identified by the node descriptor. See mapping IXLYNDE.

In the message text:

chpid

Coupling facility sender CHPID.

cuid

Control unit number of the facility.

type

Node type (See ndetype in IXLYNDE).

mfg

Node manufacturer ID (See ndemfg in IXLYNDE).

plant

Node manufacturer plant ID (See ndeplant in IXLYNDE).

sequence

Node sequence number (See ndesequence in IXLYNDE).

partition

Node LPAR partition number (See ndepartition in IXLYNDE).

side

The node PP/SI mode indicator and configuration code from the IXLYNDE are used to determine the value for *side*. Value and meaning are:

- **SIDE: 0** means the coupling facility is on SIDE 0 of a partitionable CPC.
- **SIDE: 1** means the coupling facility is on SIDE 1 of a partitionable CPC.
- blank means the coupling facility is in a non-partitionable CPC.

cpcid

Node Central Processor Complex (CPC) ID (See ndecpcid in IXLYNDE).

System action: The system will discontinue any use of the path and the path will be deactivated if possible.

Operator response: Contact the system programmer if connectivity to the coupling facility is desired and cannot be established.

System programmer response: Determine why the path has not been connected correctly. To correct the problem, use the following procedure:

1. Use the MVS (CONFIG CHP) command for each path to configure all the miscabled links offline.
2. Reconnect the miscabled links to their correct place, and use the MVS (CONFIG CHP) command to configure the sender links back online.

If a problem still exists, use the following procedure:

1. Use the MVS (CONFIG CHP) command for each path to configure ALL the sender links on this system offline. (This will cause a loss of connectivity to ALL CFs.)
2. Reconnect the miscabled links to their correct place, and use the MVS (CONFIG CHP) command to configure the sender links back online.

If a problem still exists after performing the two previously detailed procedures:

1. Take the system down and make sure the miscabled links are connected to their correct place.
2. Re-IPL the system.

Source: Cross System Extended Services (XES)

Detecting Module: IXLC3VSC

Routing Code: 1,2,10

Descriptor Code: 11

IXL009W HSA Shortage

Explanation: The system did not have enough HSA storage to define a vector for the processing of asynchronous operations to the coupling facility.

System action: The system is placed in a nonrestartable wait state.

Operator response: Determine the reason for the shortage. Correct the problem to relieve the constraint and re-IPL the system.

System programmer response: Not Applicable.

Source: Cross System Extended Services (XES)

Detecting Module: IXLI1SIN

Routing Code: 1,2,10

Descriptor Code: 11

IXL010E NOTIFICATION RECEIVED FROM COUPLING FACILITY

*type.mfg.plant.sequence PARTITION:
partition side CPCID: cpcid NAMED
cname cservrecord*

Explanation: A notification has been received from the coupling facility. The reporting coupling facility is identified by its node descriptor (see IXLYNDE) and coupling facility name. A notification generated by the coupling facility may result in this message to the operator, a logrec entry, or both. Each such notification will be processed by one and only one system in the sysplex, unpredictably, so that a sequence of notifications from the CF may appear as messages and/or logrec entries on multiple systems. The format and content of the notification are entirely at the discretion of the CF.

In the message text:

type

Node type (See ndetype in IXLYNDE).

mfg

Node manufacturer ID (See ndemfg in IXLYNDE).

plant

Node manufacturer plant ID (See ndeplant in IXLYNDE).

sequence

Node sequence number (See ndesequence in IXLYNDE).

partition

Node LPAR partition number (See ndepartition in IXLYNDE).

side

The node PP/SI mode indicator and configuration

IXL011I • IXL012I

code from the IXLYNDE are used to determine the value for *side*. Value and meaning are:

- **SIDE: 0** means the coupling facility is on SIDE 0 of a partitionable CPC.
- **SIDE: 1** means the coupling facility is on SIDE 1 of a partitionable CPC.
- blank means the coupling facility is in a non-partitionable CPC.

cpcid

Node Central Processor Complex (CPC) ID (See ndecpcid in IXLYNDE).

cfname

Name of the coupling facility from the CFRM active policy.

cfservrecord

Coupling facility service record.

System action: The system continues normal processing. The system takes no actions based on the content of the notification, which is not interpreted nor understood by the system.

Operator response: Notify the system programmer.

System programmer response: Analyze the contents of the notification (message and/or logrec information) to determine what actions, if any, need to be taken. The notification may pertain to hardware problems detected by the CF, in which case the content of the notification message and/or logrec entry should be made available to hardware service personnel for analysis.

Source: Cross System Extended Services (XES)

Detecting Module: IXLE1LOG, IXLI1SIN

Routing Code: 1,2,10

Descriptor Code: 11

IXL011I XES HARDWARE SUPPORT IS NOT INSTALLED. REASON: *hdwreas*

Explanation: XES was unable to initialize coupling facility related functions because the required hardware support is not installed on this system.

In the message text:

hdwreas

Reason code describing which particular component of coupling facility hardware support was not present.

- 1 Neither XES (Message Facility)-support instructions nor channel subsystem call support are installed.
- 2 XES (Message Facility)-support instructions are not installed.
- 3 Channel subsystem call support is not installed.

4 Channel subsystem call has failed.

System action: The system continues without the ability to use XES services.

Operator response: Not applicable.

System programmer response: If you are trying to use a coupling facility, record the reason code (*hdwreas*) and contact hardware support. If you are not trying to use a coupling facility, you can ignore this message. (The system checks to see if coupling facility hardware is present and issues this message whenever the hardware support is not installed.)

Source: Cross System Extended Services (XES)

Detecting Module: IXLI1SIN

Routing Code: 1,2,10

Descriptor Code: 12

IXL012I IXLCCONN REQUEST FAILED, RETCODE: *return-code*, RSNCODE: *reason-code*

Explanation: An attempt to connect to a coupling facility structure via the IXLCCONN macro failed.

In the message text:

return-code
IXLCCONN return code.

reason-code
IXLCCONN reason code.

System action: The system continues. The program which issued the IXLCCONN will not be able to use the structure.

Operator response: Notify the system programmer of this failure.

System programmer response: Determine the reason why the connect request could not be satisfied.

- *z/OS MVS Programming: Sysplex Services Reference* contains the IXLCCONN return and reason codes.
- The system logrec symptom record contains detailed information in the form of the IXLCCONN parameter list and the Connect Answer Area.

Make the appropriate corrections. If needed, restart or reinitialize the program so that the IXLCCONN request is attempted again.

Source: Cross System Extended Services (XES)

Detecting Module: IXLC1CON

Routing Code: 10

Descriptor Code: 12

IXL013I <i>requesttype REQUEST FOR STRUCTURE structure-name FAILED. JOBNAME: jobname ASID: asid CONNECTOR NAME: connector-name IXLCONN RETURN CODE: return-code, REASON CODE: reason-code errortype CONADIAGdiagn: diagvalue</i>	STRUCTURE HAS THE MAXIMUM NUMBER OF PERMITTED CONNECTORS The structure has the maximum number of permitted connections.
	IXCJOIN FAILED IXCJOIN return and reason codes are in ConaDiag1 and ConaDiag2.
	ALL SYSPLEX COUPLE DATA SET GROUP RECORDS IN USE The maximum number of groups already exist.
	ALL SYSPLEX COUPLE DATA SET MEMBER RECORDS FOR GROUP IN USE The maximum number of members in the group already exist.
	STRUCTURE NOT DEFINED IN THE CFRM ACTIVE POLICY The CFRM active policy for the installation does not specify the structure.
	NO CONNECTIVITY TO THE STRUCTURE The system does not have connectivity to the coupling facility containing the specified structure.
	NO CONNECTIVITY TO THE DUPLEXING REBUILD OLD STRUCTURE There is no connectivity to the coupling facility containing the specified duplex old structure.
	NO SUITABLE COUPLING FACILITY IN PREFERENCE LIST Structure allocation failed because no suitable coupling facility was found in the structure's preference list.
	NO CONNECTIVITY TO THE DUPLEXING REBUILD NEW STRUCTURE There is no connectivity to the coupling facility containing the specified duplex new structure.
	FAILURE DEFINING LOCAL VECTOR The local vector requested on the connect could not be defined.
	FAILURE CREATING DATA SPACE Storage management could not create a data space.
	THE MAXIMUM NUMBER OF CONNECTORS IN THIS ADDRESS SPACE EXIST The maximum number of serialized connections for this address space are already active.
	FAILURE ADDING ENTRY TO PASN ACCESS LIST There was an error adding a dataspace to the PASN access list.
	MORE CONNECT RECORDS REQUIRED IN CFRM COUPLE DATA SET There is a failed-persistent connection with the

same connection name that has not been reconciled into the policy.

STRUCTURE FAILURE

Structure failure has occurred.

COUPLE DATA SET FOR CFRM NOT AVAILABLE

XES function is not active or the CFRM couple data set is not available to this system.

REBUILD CONNECT NOT SUCCESSFUL BECAUSE REBUILD STOP OCCURRED

The IXLCNN REBUILD request was not successful because a rebuild stop occurred.

STRUCTURE HAS NO INFORMATION IN THE CFRM ACTIVE POLICY

The IXLCNN REBUILD request was not successful because there is no policy information for this structure in the CFRM active policy. Start a CFRM policy that includes the definition for this structure.

CONNECTOR DOES NOT SUPPORT THE CURRENTLY ACTIVE REBUILD PROCESS

The connect request was not successful because either the connector specified ALLOWREBLD=NO and a rebuild is in progress, or the connector specified ALLOWDUPREBLD=NO and a duplexing rebuild is in progress.

CFLEVEL REQUESTED EXCEEDS MAX SUPPORTED CFLEVEL

The user specified a CFLEVEL that is greater than what is supported by this system.

ALLOCATED STRUCTURE DOES NOT MEET MINCFLEVEL REQUIREMENT

The minimum CFLEVEL requested is greater than the level of the coupling facility where the structure is allocated.

XES FUNCTION NOT AVAILABLE

XES functions are not available. This can be because the hardware necessary to provide XES functions is not present.

XES COMPONENT ERROR

Failure has occurred in XES processing. If the conditions that caused the error cannot be determined, contact the IBM support center. Supply the error data included in the message, along with other data from the system log including the IXLYCONA from the LOGREC symptom record, if any.

CONNECTIONS TO THE STRUCTURE ARE BEING PREVENTED AT THIS TIME

Connections to the requested structure are being prevented at this time.

IXLCNN ENVIRONMENTAL ERROR

The IXLCNN request had an environmental error.

CONADIAG_{diagn}

diagn specifies the number used to determine the specific diagnostic field form the IXLYCONA. The diagnostic field name is CONADIAG*n* when *diagn* is concatenated to the end of the string CONADIAG. For example, if *diagn* is 9 then the diagnostic field from the IXLYCONA is CONADIAG9.

diagvalue

Optional diagnostic information. Based on the IXLCNN return and reason codes additional diagnostic information from the IXLYCONA is provided. See the explanation in IXLCNN of the specified return and reason codes in order to analyze the value provided by *diagvalue* which is from IXLYCONA field CONADIAG*n* when *n* is obtained from *diagn*.

I See *z/OS MVS Programming: Sysplex Services Reference* for a detailed explanation of the return and reason codes for IXLCNN failures.

System action: The system continues. The program that issued the IXLCNN will not be able to use this structure.

Operator response: Notify the system programmer of this failure.

System programmer response: Examine the system LOGREC symptom record which contains detailed information in the form of the IXLCNN parameter list and the Connect Answer Area (IXLYCONA). Based on the return code from the IXLCNN macro service, additional information from diagnostic fields in IXLYCONA may also be provided in the message text to aid in problem determination. Determine the reason why the connect request could not be satisfied. Make the appropriate corrections. If needed, restart or reinitialize the program so that the IXLCNN request is attempted again.

Source: Cross System Extended Services (XES)

Detecting Module: IXLC1CON

Routing Code: 10

Descriptor Code: -

IXL014I *requesttype REQUEST FOR
STRUCTURE structure-name WAS
SUCCESSFUL. JOBNAME: jobname
ASID: asid CONNECTOR NAME:
connector name CFNAME: cname*

Explanation: A connect to a coupling facility structure via the IXLCNN macro was successful.

In the message text:

requesttype

One of the following request types:

IXLCNN

IXLCNN macro service

IXLCONN REBUILD

IXLCONN macro service for a REBUILD connect

structure-name

Name of the structure for which information is recorded.

jobname

Jobname of the application issuing the IXLCONN.

asid

ASID of the application issuing the IXLCONN.

connector-name

Connection name specified by the application issuing the IXLCONN or generated by XES.

cfname

Name of the coupling facility in which the structure was allocated.

System action: The system continues. The program that issued the IXLCONN is now able to use the structure.

The system writes this message to the system hardcopy log.

System programmer response: None. However, please note that one or more IXL013I messages may have been issued prior to this success message. This is due to the program attempting several IXLCONNs in an attempt to maximize the available resources. This message negates the errors displayed in those related IXL013I messages.

Also note that an IXL message might have been issued prior to this message, providing additional information about where the system allocated the structure and why.

Source: Cross System Extended Services (XES)

Detecting Module: IXLC1CON

Routing Code: 10

Descriptor Code: 12

IXL015I	strtype ALLOCATION INFORMATION FOR STRUCTURE <i>structure-name</i> CONNECTOR NAME <i>connector-name</i> CFNAME ALLOCATION STATUS/FAILURE REASON
----------------	--

cfname text [diag]

Explanation: A program attempted to connect to a coupling facility structure. The IXLCONN returned allocation information to the program in the IXLYCONA. This information is recorded in the hardcopy log for debugging if the results are unexpected. The actual disposition of the IXLCONN invocation can be found by examining message IXL013I (for IXLCONN failures) or message IXL014I (for successful IXLCONN connects).

In the message text:

strtype

One of the following:

- STRUCTURE
- REBUILD NEW STRUCTURE

structure-name

Name of the structure for which information is recorded.

connector-name

Connection name specified by the application issuing the IXLCONN or generated by XES, if applicable.

cfname

Name of the coupling facility for which information is recorded.

text

Describes the status of the structure or the reason for the allocation failure. *text* can be one of the following:

STRUCTURE ALLOCATED

Structure is successfully allocated in the coupling facility. (Text corresponds to IXLCONN reason code CONARSNSUCCESS.)

NO CONNECTIVITY

The active CFRM policy indicates that this system does not have connectivity to the coupling facility. You must re-establish physical connectivity to the coupling facility and then reissue the connect request. (Text corresponds to IXLCONN reason code CONARSNNOCNNPOLICY.)

FACILITY NOT IN ACTIVE POLICY

The coupling facility is not defined in the active CFRM policy. Verify that the set of coupling facilities currently in use in the sysplex is correct and matches the CFRM administrative policy most recently activated. (Text corresponds to IXLCONN reason code CONARSNFACILITYNOTINPOLICY.)

CONNECTIVITY LOST

Connectivity to the coupling facility has been lost. Reestablish physical connectivity to the coupling facility and then reissue the connect request. (Text corresponds to IXLCONN reason code CONARSNNOCONN.)

FACILITY FAILURE

The coupling facility has failed. (Text corresponds to IXLCONN reason code CONARSNFACILITYFAILURE.)

STRUCTURE FAILURE

The structure failed during the allocate process. (Text corresponds to IXLCONN reason code CONARSNSTRFAILURE.)

PARAMETER ERROR

The structure attributes are inconsistent with the model-dependent attributes of the coupling facility. Change the attributes of the structure based on the model-dependent limits returned for each coupling facility. (Text corresponds to IXLCNN reason code CONAPARAMETERERROR.)

INVALID STRUCTURE SIZE

The structure size specified was too small to allocate the structure with the attributes specified. CONAFACILITYMINREQSIZE is set to the minimum storage required to allocate the structure in this coupling facility with the requested attributes. Increase the structure size either on the IXLCNN invocation or in the CFRM policy. (Text corresponds to IXLCNN reason code CONARSNINVALIDSTRUCTURESIZE.)

Ensure that you do not define SIZE substantially larger than INITSIZE. The amount of storage allocated for a structure is dependent on the CFLEVEL of the coupling facility in which the structure is allocated. Different CFLEVELs may specify that different amounts of fixed control storage be allocated for the same structure, even when the user-requested attributes remain the same.

ALLOCATION NOT PERMITTED

New structures cannot be allocated the coupling facility according to the active CFRM policy. Either the coupling facility is being removed from the active policy, the coupling facility has failed, or the coupling facility is in the policy reconciliation process. (Text corresponds to IXLCNN reason code CONARSNALLOCNOTPERMITTED.)

XCF COMPONENT ERROR

An XCF component error has occurred. Call IBM Service. (Text corresponds to IXLCNN reason code CONARSNXCFCOMPERROR.)

UNKNOWN HARDWARE ERROR

An unknown hardware error has occurred. Call IBM Service. (Text corresponds to IXLCNN reason code CONARSNUNKNOWN.)

INSUFFICIENT SPACE

There was not sufficient space in the coupling facility to allocate the structure. There may be enough space in the coupling facility to allocate the structure, but the allocated structure size would be smaller than MINSIZE as specified or defaulted to in the CFRM policy. CONAFACILITYMINREQSIZE is set to the minimum storage required to allocate the structure in this coupling facility with the requested attributes. Make sure there is a coupling facility in the preference list with sufficient space. (Text corresponds to

IXLCNN reason code CONARSNINSUFFICIENTSPACE.)

RESTRICTED BY REBUILD OTHER

LOCATION=OTHER was either specified on the rebuild request or defaulted to for a STARTREASON=LOSSCONN request. Since the original structure was allocated in this coupling facility, the system did not use this coupling facility when trying to allocate the new structure for rebuild. Make sure there is another suitable coupling facility in the CFRM policy preference list. (Text corresponds to IXLCNN reason code CONARSNREBLDOOTHER.)

RESTRICTED BY REBUILD USERS

The system did not select the coupling facility for a rebuild connect request because the coupling facility does not support a number of users greater than or equal to the highest connection ID for the original structure. (Text corresponds to IXLCNN reason code CONARSNREBLDUSERSTOOOSMALL.)

INSUFFICIENT CONNECTIVITY

The system did not select the coupling facility because the coupling facility id not provide the required connectivity, as specified by the CONNECTIVITY= specification. (Text corresponds to IXLCNN reason code CONARSNINSUFFCONNECTIVITY.)

The text is followed by eight characters of hexadecimal data, which is additional diagnostic information for "INSUFFICIENT CONNECTIVITY".

PREFERRED CF ALREADY SELECTED

The system did not select the coupling facility because a more preferable coupling facility was already selected. (Text corresponds to IXLCNN reason code CONARSNPREFERREDCFSELECTED.)

RESTRICTED BY OPERATOR STOP OF DUPLEXING REBUILD

The system did not select the coupling facility because the operator had previously stopped the duplexing rebuild and the structure that was not kept was allocated in this coupling facility. (Text corresponds to IXLCNN reason code CONARSNREBLDDUPLEXOTHER.)

POPULATECF NOT SUITABLE

Facility was not selected because it was not as suitable a location for the structure as its current location.

INSUFFICIENT CFLEVEL FOR CONNECTOR EXPLOITATION

The coupling facility CFLEVEL was not at or above the minimum required for an original connector or for the current set of active and failed-persistent connectors.

diag

Additional diagnostic information from ConaDiag4 that can be used when a nonzero value is returned that can be used by IBM Service Personnel to diagnose the reason for the failure. For example, this data could be helpful in determining why a particular coupling facility was selected rather than another.

System action: The system continues normal processing.

Source: Cross System Extended Services (XES)

Detecting Module: IXLC1CON

Routing Code: 10

Descriptor Code: 12

IXL020I CLEANUP FOR LOCK STRUCTURE
structure-name, CONNECTION ID conid,
STARTED BY CONNECTOR
connector-name INFO: n

Explanation: XES is starting to perform lock structure cleanup on behalf of the recovering connector. This is due to the failure or disconnection of another connector to the lock structure.

In the message text:

structure-name
Structure name.

conid
Connection identifier of the failing connector.

connector-name
Connection name of the recovering connector.

n Diagnostic data that is provided to assist IBM service personnel with problem determination.

System action: The system continues. Note that until lock structure cleanup is complete, any new IXLOCK requests submitted by the recovering connector might be delayed.

Operator response: If the failure or disconnection of the lock structure connector was unexpected, notify the system programmer.

System programmer response: Determine the reason why the lock structure connector unexpectedly failed or disconnected.

Source: Cross System Extended Services (XES)

Detecting Module: IXLR2SSD

Routing Code: 10

Descriptor Code:

IXL021I GLOBAL CLEANUP FOR LOCK STRUCTURE
structure-name,
CONNECTION ID conid, BY
CONNECTOR connector-name HAS
COMPLETED. INFO:n

Explanation: XES has completed the global phase of lock structure cleanup on behalf of the recovering connector.

In the message text:

structure-name
Structure name.

conid
Connection identifier of the failing connector.

connector-name
Connection name of the recovering connector.

n Diagnostic data that is provided to assist IBM service personnel with problem determination.

System action: Lock structure cleanup continues.

Source: Cross System Extended Services (XES)

Detecting Module: IXLR2SSD

Routing Code: 10

Descriptor Code:

IXL022I LOCAL CLEANUP FOR LOCK STRUCTURE
structure-name,
CONNECTION ID conid, BY
CONNECTOR connector-name HAS
COMPLETED. INFO: n

Explanation: XES has completed the local phase of lock structure cleanup on behalf of the recovering connector.

In the message text:

structure-name
Structure name.

conid
Connector identifier of the failing connector.

connector-name
Connection name of the recovering connector.

n Diagnostic data that is provided to assist IBM service personnel with problem determination.

System action: Lock structure cleanup continues.

Source: Cross System Extended Services (XES)

Detecting Module: IXLR2SSD

Routing Code: 10

Descriptor Code:

IXL023I	CLEANUP FOR LOCK STRUCTURE <i>structure-name</i> , CONNECTION ID <i>conid</i> , BY CONNECTOR <i>connname</i> HAS COMPLETED. INFO: <i>n</i>
----------------	--

Explanation: XES has completed lock structure cleanup on behalf of the recovering connector.

In the message text:

structure-name
Structure name.

conid
Connector identifier of the failing connector.

connname
Connection name of the recovering connector.

n Diagnostic data that is provided to assist IBM service personnel with problem determination.

System action: The system will process requests that were delayed during cleanup. New IXLOCK requests submitted by the recovering connector will be processed normally.

Source: Cross System Extended Services (XES)

Detecting Module: IXLR2SSD

Routing Code: 10

Descriptor Code:

IXL030I	CONNECTOR STATISTICS FOR LOCK STRUCTURE <i>structure-name</i> , CONNECTOR <i>connector-name</i> : <i>n</i>
----------------	---

Explanation: XES is reporting connector statistical information for a connector who has terminated, disconnected, rebuilt, or is recovering for another connection.

In the message text:

structure-name
Structure name.

connector-name
Connection name of the connector.

n Statistical information that is provided to assist IBM service personnel with problem determination.

System action: The system continues.

Source: Cross System Extended Services (XES)

Detecting Module: IXLR2SSF, IXLR2SSD

Routing Code: 10

Descriptor Code:

IXL031I	CONNECTOR CLEANUP FOR LOCK STRUCTURE <i>structure-name</i> , CONNECTOR <i>connector-name</i> , HAS COMPLETED. INFO: <i>n</i>
----------------	--

Explanation: XES has completed connector cleanup processing for a connector who has terminated, disconnected, or rebuilt.

In the message text:

structure-name
Structure name.

connector-name
Connection name of the connector.

n Diagnostic data that is provided to assist IBM service personnel with problem determination.

System action: The system continues.

Source: XES

Detecting Module: IXLR2SSR

Routing Code: 10

Descriptor Code:

IXL040E	CONNECTOR NAME: <i>connector-name</i> , JOBNAME: <i>jobname</i> , ASID: <i>asid</i> HAS <i>text</i> . process FOR STRUCTURE <i>structure-name</i> CANNOT CONTINUE. MONITORING FOR RESPONSE STARTED: <i>mm/dd/yyyy hh:mm:ss. DIAG:</i> <i>x</i>
----------------	--

Explanation: An XES process is in a possible hang condition because the identified connector did not provide a required response to an event.

In the message text:

connector-name
Connection name of the connector failing to provide the required response.

jobname
Jobname of the connector failing to provide the required response.

asid
Hexadecimal ASID of the connector failing to provide the required response.

text
One of the following:

NOT RESPONDED TO THE REBUILD QUIESCE EVENT.

The specified connector is not responding to the rebuild quiesce event.

NOT RESPONDED TO THE REBUILD CONNECT EVENT, IXLCNN REBUILD EXPECTED.

The specified connector has not responded to the rebuild connect event.

NOT RESPONDED TO THE REBUILD CONNECT EVENT, IXLREBLD REQUEST=COMPLETE EXPECTED.

The specified connector has not responded with the IXLREBLD REQUEST=COMPLETE request.

NOT RESPONDED TO THE REBUILD SWITCH EVENT.

The specified connector is not responding to the rebuild switch event of a duplexing rebuild.

NOT RESPONDED TO THE REBUILD CLEANUP EVENT.

The specified connector is not responding to the rebuild cleanup event.

NOT RESPONDED TO THE REBUILD STOP EVENT.

The specified connector is not responding to the rebuild stop event.

NOT RESPONDED TO THE USER SYNC POINT EVENT.

The specified connector is not responding to the user sync point event.

NOT RESPONDED AFTER CONNECTING DURING THE REBUILD QUIESCE PHASE.

The specified connector has connected during the rebuild quiesce phase and has not provided the required response.

NOT RESPONDED AFTER CONNECTING DURING THE REBUILD CONNECT PHASE, IXLCONN REBUILD EXPECTED.

The specified connector has connected during the rebuild connect phase of a duplexing rebuild and has not provided the required IXLCONN REBUILD request.

NOT RESPONDED AFTER CONNECTING DURING THE REBUILD CONNECT PHASE, IXLREBLD REQUEST=COMPLETE EXPECTED.

The specified connector has connected during the rebuild connect phase of a duplexing rebuild and has not provided the required IXLREBLD REQUEST=COMPLETE request.

NOT RESPONDED AFTER CONNECTING DURING THE DUPLEX ESTABLISHED PHASE.

The specified connector has connected during the duplex established phase of a duplexing rebuild and has not provided the required response.

NOT RESPONDED AFTER CONNECTING DURING THE REBUILD SWITCH PROCESS, IXLCONN REBUILD EXPECTED.

The specified connector has connected during the rebuild switch processing of a duplexing rebuild and has not provided the required response.

NOT RESPONDED AFTER CONNECTING DURING THE REBUILD SWITCH PROCESS,

IXLREBLD REQUEST=DUPLEXCOMPLETE EXPECTED.

The specified connector has connected during the rebuild switch processing of a duplexing rebuild and has not provided the required response.

NOT RESPONDED AFTER CONNECTING DURING A USER SYNC POINT.

The specified connector has connected to the structure when a user sync point was established and has not provided the required response.

NOT RESPONDED AFTER CONNECTING DURING THE REBUILD STOP PROCESS.

The specified connector has connected during the rebuild stop process and has not provided the required response.

process

XES process that can not continue until the specified connector provides the required response.

- REBUILD PROCESSING
- DUPLEXING REBUILD PROCESSING
- SYSTEM-MANAGED REBUILD PROCESSING
- SYSTEM-MANAGED DUPLEXING REBUILD PROCESSING
- USER SYNC POINT PROCESSING

structure-name

The name of the structure.

mm/dd/yyyy

The date when the system started waiting for a response. The date is in months (01–12), days (01–31), and year.

hh:mm:ss

The time when the system started waiting for a response. The time is in hours (00–23), minutes (00–59), and seconds (00–59).

x Diagnostic data

System action: The XES process cannot continue until all the necessary responses are received from all active connectors.

Operator response: Notify the system programmer.

System programmer response: Check on the status of the indicated connector and the system on which the connector is running. Take appropriate action to correct the situation or cancel/terminate the connector if necessary. If it is necessary to terminate the connector, first collect diagnostic information for the application causing the hang condition. The following information should be collected: system log, application log, and an appropriate dump. Then, using the application's instructions, end the connection not providing the required response.

Source: Cross System Extended Services (XES)

IXL041E • IXL042I

Detecting Module: IXLM1TMR

Routing Code: 2,10

Descriptor Code: 7,11

IXL041E **CONNECTOR NAME:** *connector-name*,
 JOBNAME: *jobname*, **ASID:** *asid* **HAS**
NOT RESPONDED TO THE *event* **FOR**
SUBJECT CONNECTION:
subject-connector-name. **process** **FOR**
STRUCTURE *structure-name* **CANNOT**
CONTINUE. MONITORING FOR
RESPONSE STARTED: *mm/dd/yyyy*
hh:ss:mm. **DIAG:** *x*

Explanation: An XES process is in a possible hang condition because the indicated connector did not provide a required response to an event.

In the message text:

connector-name

Connection name of the connector failing to provide the required response.

jobname

Jobname of the connector failing to provide the required response.

asid

ASID of the connector failing to provide the required response.

event

The event to which the connector has not responded.

- DISCONNECTED/FAILED CONNECTION EVENT
- REBUILD CONNECT FAILURE EVENT

subject-connector-name

Connection name of the connector that disconnected from the structure or suffered a rebuild connect failure.

process

XES process that cannot continue until the specified connector provides the required response.

- REBUILD PROCESSING
- DUPLEXING REBUILD PROCESSING
- DISCONNECT/FAILURE PROCESSING

structure-name

The name of the structure.

mm/dd/yyyy

The date when the system started waiting for a response. The date is in months (01–12), days (01–31), and year.

hh:mm:ss

The time when the system started waiting for a response. The time is in hours (00–23), minutes (00–59), and seconds (00–59).

x Diagnostic data

System action: The XES process cannot continue until all the necessary responses are received from all active connectors.

Operator response: Notify the system programmer.

System programmer response: Check on the status of the indicated connector and the system on which the connector is running. Take appropriate action to correct the situation or cancel/terminate the connector if necessary. If it is necessary to terminate the connector, first collect diagnostic information for the application causing the hang condition. The following information should be collected: system log, application log, and an appropriate dump. Then, using the application's instructions, end the connection not providing the desired response.

Source: Cross System Extended Services (XES)

Detecting Module: IXLM1TMR

Routing Code: 2,10

Descriptor Code: 7,11

IXL042I **CONNECTOR NAME:** *connector-name*,
 JOBNAME: *jobname*, **ASID:** *asid* **HAS**
action. THE REQUIRED RESPONSE
event **FOR STRUCTURE** *structure-name*
IS NO LONGER EXPECTED.

Explanation: An XES process is no longer waiting for the indicated connector's response because the connector has provided the required response or the connector's connection has been terminated.

In the message text:

connector-name

Connection name of the connector no longer required to provide a response.

jobname

Jobname of the connector no longer required to provide a response.

asid

Hexadecimal ASID of the connector no longer required to provide a response.

action

The reason why the response is no longer expected.

- PROVIDED THE REQUIRED RESPONSE
- DISCONNECTED/FAILED

event

The event or XES process that was being processed when the connector provided the required response or the connector's connection was terminated.

- TO THE REBUILD QUIESCE EVENT

- TO THE REBUILD CONNECT EVENT, IXLCNN REBUILD
- TO THE REBUILD CONNECT EVENT, IXLRBLD REQUEST=COMPLETE
- TO THE REBUILD SWITCH EVENT
- TO THE REBUILD CLEANUP EVENT
- TO THE REBUILD STOP EVENT
- TO THE USER SYNC POINT EVENT
- AFTER CONNECTING DURING THE REBUILD QUIESCE PHASE
- AFTER CONNECTING DURING THE REBUILD CONNECT PHASE, IXLCNN REBUILD
- AFTER CONNECTING DURING THE REBUILD CONNECT PHASE, IXLRBLD REQUEST=COMPLETE
- AFTER CONNECTING DURING THE DUPLEX ESTABLISHED PHASE
- AFTER CONNECTING DURING THE REBUILD SWITCH PROCESS, IXLCNN REBUILD
- AFTER CONNECTING DURING THE REBUILD SWITCH PROCESS, IXLRBLD REQUEST=DUPLEXCOMPLETE
- AFTER CONNECTING DURING A USER SYNC POINT
- AFTER CONNECTING DURING THE REBUILD STOP PROCESS

structure-name

The name of the structure that the XES process is working with.

System action: The system will continue with the XES process. Message IXL040E will be deleted using the DOM macro.

Source: Cross System Extended Services (XES)

Detecting Module: IXLM1TMR

Routing Code: 2,10

Descriptor Code: 12

IXL043I **CONNECTOR NAME:** *connector-name*
JOBNAME: *jobname* **ASID:** *asid* **HAS**
action. **THE REQUIRED RESPONSE**
FOR THE event FOR SUBJECT
CONNECTION *subject-connector-name*,
STRUCTURE *structure-name* **IS NO**
LONGER EXPECTED.

Explanation: An XES process is no longer in a possible hang condition because the connector has provided the required response to an event or the connector's connection has been terminated.

In the message text:

connector-name

Connection name of the connector no longer required to provide a response.

jobname

Jobname of the connector no longer required to provide a response.

asid

Hexadecimal ASID of the connector no longer required to provide a response.

action

The reason the response is no longer expected.

- PROVIDED THE REQUIRED RESPONSE
- DISCONNECTED/FAILED

event

The event that was being processed when the connector provided the required response or the connector's connection was terminated.

- DISCONNECTED/FAILED CONNECTION EVENT
- REBUILD CONNECT FAILURE EVENT

subject-connector-name

Connection name of the connector that disconnected, failed, or suffered a rebuild connect failure.

structure-name

The name of the structure that the XES process is working with.

System action: The system will continue with the XES process only if this is the last outstanding expected response. If there are other outstanding responses, the XES processing will continue to wait. Message IXL041E will be deleted using the DOM macro.

Source: Cross System Extended Services (XES)

Detecting Module: IXLM1TMR

IXL044I **COUPLING FACILITY** *cfname* **HAS**
EXPERIENCED *IfccCount* **INTERFACE**
CONTROL CHECKS ON CHPID *chpid*
DURING THE LAST *interval* **SECONDS.**

Explanation: The indicated coupling facility has experienced the indicated number of Interface Control Checks (IFCCs) on the indicated coupling facility CHPID over the indicated period of time preceding the issuance of this message. Note that this count only reflects IFCCs on requests from this system, not all systems in the sysplex.

In the message text:

cfname

Name of the coupling facility from the CFRM active policy.

IfccCount

Count of Interface Control Checks during interval.

chpid

Coupling facility CHPID which experienced IFCCs.

interval

Number of seconds in the interval.

System action: The system continues operation. Normally, Interface Control Checks are fully recoverable by the system. If the IFCC resulted from a more serious failure condition (for example, the failure of a CF or of a coupling facility CHPID), other messages will be issued to describe those conditions.

Operator response: Notify the system programmer.

System programmer response: If the indicated coupling facility CHPID, or the coupling facility as a whole, is experiencing small numbers of IFCCs on a sporadic basis, generally no action is needed. Such sporadic IFCCs may be caused by events such as a temporary CF link problem, a workload spike or temporary delay in the CFF image, a system joining or leaving the sysplex, structure rebuild or other structure recovery actions, and the like. However, larger numbers of IFCCs occurring on a frequent or continual basis may indicate a hardware problem that requires further analysis or action. More detailed information on each IFCC is recorded in LOGREC for analysis, and hardware logging may also be taking place for these errors. Frequent or continual IFCCs may indicate that the CF is running with degraded performance due to a hardware or microcode problem. Consult IBM service personnel if the IFCCs cannot be understood in terms of normal events taking place in the configuration.

Source: Cross System Coupling

Detecting Module: IXLM2TAM

Routing Code: 2,10

Descriptor Code: 12

IXL101I PATH(*cfname, chpid*) text

Explanation: The path specified on the VARY PATH operator command has been varied online or offline as requested.

In the message text:

cfname

Name of the coupling facility from the CFRM active policy.

chpid

Coupling facility sender CHPID.

ONLINE

In response to a VARY PATH online command, the path *chpid* to the coupling facility *cfname* has been placed online.

OFFLINE

In response to a VARY PATH offline command, the path *chpid* to the coupling facility *cfname* has been placed offline.

System action: The system continues normal processing.

Operator response: Not applicable.

System programmer response: Not applicable.

Source: Cross System Extended Services (XES)

Detecting Module: IXLR3LOP

**IXL103I VARY REJECTED, COUPLING FACILITY
cfname IS NOT ACCESSIBLE**

Explanation: The operator entered a VARY PATH command for a path to the coupling facility *cfname*. However, the coupling facility is not accessible by this system.

In the message text:

cfname

Name of the coupling facility from the CFRM active policy.

System action: Processing for the coupling facility *cfname* terminates. The system continues processing.

Operator response: If *cfname* does not indicate the desired coupling facility name, enter the command again with the desired name.

System programmer response: Not Applicable.

Source: Cross System Extended Services (XES)

Routing Code: 5

Descriptor Code: _

**IXL104I VARY REJECTED, PATH(*cfname, chpid*)
DOES NOT EXIST**

Explanation: A VARY PATH command requested that a path to the coupling facility *cfname* through channel path *chpid* be varied online or offline. However, the path does not exist.

In the message text:

cfname

Name of the coupling facility from the CFRM active policy.

chpid

Coupling facility sender CHPID.

System action: Processing for the coupling facility *cfname* is terminated. The system continues processing.

Operator response: If *chpid* does not indicate the desired channel path, enter the command again with the desired path.

System programmer response: Not Applicable.

Source: Cross System Extended Services (XES)

Routing Code: #

Descriptor Code: 5

IXL105I VARY REJECTED, PATH(*cfname, chpid*) LAST PATH TO FACILITY

Explanation: A VARY PATH command requested that the last path *chpid* to the coupling facility *cfname* be varied offline. However, varying the last path to a coupling facility offline is not allowed.

In the message text:

cfname

Name of the coupling facility from the CFRM active policy.

chpid

Coupling facility sender CHPID.

System action: Processing for the coupling facility *cfname* is terminated. The system continues processing.

Operator response: If the path is to be varied offline unconditionally, enter the command again with UNCOND parameter.

System programmer response: Not Applicable.

Source: Cross System Extended Services (XES)

Routing Code: #

Descriptor Code: 5

IXL106I VARY REJECTED, PATH(*cfname, chpid*) LAST PATH TO ACTIVE FACILITY

Explanation: A VARY PATH command requested that the last path *chpid* to the coupling facility *cfname* be varied offline. However, the coupling facility is in use by connectors on this system and the last path to it may not be varied offline.

In the message text:

cfname

Name of the coupling facility from the CFRM active policy.

chpid

Coupling facility sender CHPID.

System action: Processing for the coupling facility *cfname* is terminated. The system continues processing.

Operator response: If *cfname* does not indicate the desired coupling facility name, enter the command again with the desired name.

System programmer response: Not Applicable.

Source: Cross System Extended Services (XES)

Routing Code: #

Descriptor Code: 5

IXL124I CONFIG REJECTED, CHP(*chpid*) LAST PATH TO COUPLING FACILITY *cfname*

Explanation: A CONFIG CHP command requested that the last path *chpid* to a coupling facility be configured offline. However, the last path to coupling facility *cfname* may not be configured offline.

In the message text:

chpid

Coupling facility sender CHPID.

cfname

Name of the coupling facility from the CFRM active policy.

System action: Processing for the path *chpid* is terminated. The system continues processing.

Operator response: If the path is to be configured offline unconditionally, enter the command again with UNCOND parameter.

System programmer response: Not Applicable.

Source: Cross System Extended Services (XES)

Detecting Module: IXLR3POP

Routing Code: #

Descriptor Code: 5

IXL125I CONFIG REJECTED, CHP(*chpid*) LAST PATH TO ACTIVE COUPLING FACILITY *cfname*

Explanation: A CONFIG CHP command with UNCOND parameter requested that the last path *chpid* to coupling facility *cfname* be configured offline. However, the coupling facility is in use by connectors on this system hence the last path may not be configured offline.

In the message text:

chpid

Coupling facility sender CHPID.

cfname

Name of the coupling facility from the CFRM active policy.

System action: Processing for the path *chpid* is terminated. The system continues processing.

Operator response: If *chpid* does not indicate the desired path, enter the command again with the desired path.

System programmer response: Not Applicable.

Source: Cross System Extended Services (XES)

Detecting Module: IXLR3POP

Routing Code: #M

Descriptor Code: 5

**IXL126I CONFIG WILL FORCE OFFLINE LAST
 CHP(*chpid*) TO COUPLING FACILITY
 *cfname***

Explanation: A CONFIG CHP command with FORCE parameter requested that the last path *chpid* to coupling facility *cfname* be configured offline. The operator will be asked to confirm this action.

In the message text:

chpid

Coupling facility sender CHPID.

cfname

Name of the coupling facility from the CFRM active policy.

System action: System processing stops until the operator replies to message IXL127A.

Operator response: Reply to message IXL127A.

System programmer response: Not Applicable.

Source: Cross System Extended Services (XES)

Detecting Module: IXLR3POP

Routing Code: 1

Descriptor Code: 2

IXL127A REPLY CANCEL OR CONTINUE

Explanation: A CONFIG CHP command with FORCE parameter requested that the last path *chpid* to coupling facility *cfname* be configured offline. The operator has been asked to confirm or cancel this action.

System action: System processing stops until the operator replies to message IXL127A.

Operator response: Choose either CANCEL to cancel the offline request or CONTINUE to continue processing the offline request.

System programmer response: Not Applicable.

Source: Cross System Extended Services (XES)

Detecting Module: IXLR3POP

Routing Code: #

Descriptor Code: 5

IXL128I SYNTAX NOT VALID

Explanation: A syntax error was found in the response to message IXL127A.

System action: System processing remains stopped until the operator replies correctly to message IXL127A.

Operator response: Correct the syntax error and re-enter the command. Choose either CANCEL to cancel the command or CONTINUE to continue processing the command.

System programmer response: Not Applicable.

Source: Cross System Extended Services (XES)

Detecting Module: IXLR3POP

Routing Code: 1

Descriptor Code: 2

**IXL129I CONFIG CHP(*chpid*) CANCELLED BY
 THE OPERATOR**

Explanation: A CONFIG CHP command with FORCE parameter requested that the last path *chpid* to a coupling facility be configured offline. The operator has been asked to confirm or cancel this action. The operator replied CANCEL.

In the message text:

chpid

Coupling facility sender CHPID.

System action: Processing for the path *chpid* is terminated. The system continues processing.

Operator response: Not Applicable.

System programmer response: Not Applicable.

Source: Cross System Extended Services (XES)

Detecting Module: IXLR3POP

Routing Code: #

Descriptor Code: 5

**IXL140I GETMAIN FAILED, INSUFFICIENT
 STORAGE**

Explanation: Getmain failed to obtain storage to process the display command.

System action: The system continues processing.

Operator response: Determine the cause of the storage shortage to try to relieve the constraint. Enter the display command again.

System programmer response: Not Applicable.

Source: Cross System Extended Services (XES)

Detecting Module: IXLR3DCH

Routing Code: #

Descriptor Code: 5

**IXL141I COUPLING FACILITY
 *type.mfg.plant.sequence***

text

Explanation: In the message, *text* is:

PARTITION: partition side CPCID: cpcid
NAMED *cfname* CONTROL UNIT ID: cuiid

SENDER PATH PHYSICAL LOGICAL CHANNEL TYPE
chpid[/pchid] phystatus logstatus
{CFS|CBS|ICS}

COUPLING FACILITY DEVICE SUBCHANNEL STATUS
device subchannel chanstatus

Information about the paths through one or more Sender CHPIPs was requested by a D M=CHP command. The information displayed includes the coupling facility connected to this path, the status of the path and the devices connected to the coupling facility through this path. The coupling facility is identified by the node descriptor. See mapping IXLYNDE.

In the message text:

- type*
Node type (See ndetype in IXLYNDE).
- mfg*
Node manufacturer ID (See ndemfg in IXLYNDE).
- plant*
Node manufacturer plant ID (See ndeplant in IXLYNDE).
- sequence*
Node sequence number (See ndesequence in IXLYNDE).
- partition*
Node LPAR partition number (See ndepartition in IXLYNDE).
- side*
The node PP/SI mode indicator and configuration code from the IXLYNDE are used to determine the value for *side*. Value and meaning are:
 - **SIDE: 0** means the coupling facility is on SIDE 0 of a partitionable CPC.
 - **SIDE: 1** means the coupling facility is on SIDE 1 of a partitionable CPC.
 - blank means the coupling facility is in a non-partitionable CPC.
- cpcid*
Node Central Processor Complex (CPC) ID (See ndecpcid in IXLYNDE).
- cfname*
Name of the coupling facility from the CFRM active policy.
- cuid*
Control unit number of the coupling facility.
- chpid*
Coupling facility sender chpid.
- pchid*
Coupling facility sender pchid.
- phystatus*
One of the following:

ONLINE

The path, *chpid* to the coupling facility *cfname* is physically available for use. The *chpid* is configured online and is operational.

OFFLINE

The path, *chpid* to the coupling facility *cfname* is configured offline.

MISCABLED

The path, *chpid* to the coupling facility *cfname* is not connected to the correct facility.

NOT OPERATIONAL

The path, *chpid* to the coupling facility *cfname* is not operational.

FACILITY PAUSED

The path, *chpid* to the coupling facility *cfname* is not operational. The most recent path validation operation attempted for this path received a facility paused status condition.

PATH NOT AVAILABLE

The path, *chpid* to the coupling facility *cfname* is not operational. The most recent path validation operation attempted for this path received a path not available status condition. A path not available status is reported when the CF is not responding. One reason for this may be due to low LPAR weight assigned to the CF LPAR.

PATH NOT ACCESSIBLE

The path, *chpid* to the coupling facility *cfname* is defined to a control unit that is accessible by this partition, however the channel path is not accessible by the partition (the channel path is not in the access list nor the candidate list for this partition). The partition cannot access this channel path.

logstatus

One of the following:

CFS

The channel path type description of path *chpid* is a coupling facility sender channel.

CBS

The channel path type description of path *chpid* is a cluster bus sender channel.

ICS

The channel path type description of path *chpid* is an internal coupling sender channel.

device

Coupling facility device.

subchannel

Coupling facility subchannel.

chanstatus

One of the following:

OPERATIONAL

The coupling facility subchannel *subchannel* to the coupling facility *cfname* is operational and available for operations.

NOT OPERATIONAL

The coupling facility subchannel *subchannel* to the coupling facility *cfname* is not operational and not available for operations.

System action: The system continues processing.

Operator response: Not Applicable.

System programmer response: Not Applicable.

Source: Cross System Extended Services (XES)

Detecting Module: IXLR3DCH

Routing Code: #

Descriptor Code: 5,8,9

IXL150I hh.mm.ss DISPLAY CF

text

Explanation: In the message, *text* is:

```
COUPLING FACILITY type.mfg.plant.sequence
PARTITION: partition side CPCID: cpcid
CONTROL UNIT ID: cwid
NAMED cfname
COUPLING FACILITY SPACE UTILIZATION
    ALLOCATED SPACE          DUMP SPACE UTILIZATION
        STRUCTURES: strspace K  STRUCTURES DUMP TABLES: strdumpsspace K
        DUMP SPACE: dumpspace K  TABLE COUNT:         tablecount
        FREE SPACE: freespace K  FREE DUMP SPACE: freedumpspace K
        TOTAL SPACE: totalspace K  TOTAL DUMP SPACE: totaldumpspace K
            MAX REQUESTED DUMP SPACE: maxreqdumpspace K
        VOLATILE: {YES|NO}  STORAGE INCREMENT SIZE: stgincrement K
        CFLEVEL: cflevel
        CFCC RELEASE release1.release2, SERVICE LEVEL service1.service2

        BUILT ON mm/dd/yyyy AT hh:mm:ss
COUPLING FACILITY HAS ONLY ONE ONLINE SENDER PATH
CF REQUEST TIME ORDERING: REQUIRED AND ENABLED
CF REQUEST TIME ORDERING: NOT-REQUIRED AND ENABLED
CF REQUEST TIME ORDERING: NOT-REQUIRED AND NOT-ENABLED
CF REQUEST TIME ORDERING: REQUIRED AND NOT-ENABLED
    REASON: FUNCTION NOT INSTALLED ON THIS SYSTEM
    REASON: ETR NOT CONNECTED TO COUPLING FACILITY
    REASON: REQUEST TIME ORDERING FUNCTION FAILURE
    REASON: ETR NETID MISMATCH - CF ETR NETID: etr netid

COUPLING FACILITY HAS ONLY SHARED PROCESSORS
COUPLING FACILITY HAS ONE OR MORE DEDICATED PROCESSORS

COUPLING FACILITY SPACE CONFIGURATION
    IN USE           FREE           TOTAL
    CONTROL SPACE:  inusespace K  cfreeespace K  ctotalspace K
    NONCONTROL SPACE: ncinusespace K  ncfreeespace K  nctotalspace K

    SENDER PATH      PHYSICAL      LOGICAL      CHANNEL TYPE
    chpid[/pcpid]   phystatus   logstatus   channeltype

COUPLING FACILITY SUBCHANNEL STATUS
    TOTAL: 4  IN USE: 2  NOT USING: 0  NOT USABLE: 2
    DEVICE      SUBCHANNEL      STATUS
    CF00       0054      OPERATIONAL
    CF01       0055      OPERATIONAL
    CF02       0056      OPERATIONAL
    CF03       0057      OPERATIONAL
    CF04       0058      NOTOPERATIONAL
```

```
REMOTELY CONNECTED COUPLING FACILITIES
    CFNAME          COUPLING FACILITY
    -----
    rfcfname        rftype.rfmfg.rfplant.rfsequence
    PARTITION: partition rfside CPCID: rfcpcid
    CHIPDS ON cfname CONNECTED TO REMOTE FACILITY
    RECEIVER:      CHIPID      TYPE
                  rfchipid  rfrchanpathtype
```

SENDER:	CHIPID	TYPE
	rfchipid	rfschanpathtype

[NO REMOTELY CONNECTED COUPLING FACILITY DATA AVAILABLE]
[THE SIGNALLING VECTOR WAS NOT CREATED IN THIS CF]
NOT OPERATIONAL CHIPIDS ON cfname
rfinochipid rfinochipid rfinochipid rfinochipid
rfinochipid rfinochipid rfinochipid rfinochipid

Coupling Facility space data will not be available if either this system is not physically connected to the Coupling Facility at the time the DISPLAY CF command was executed, or this system is physically connected to the Coupling Facility, but the Coupling Facility is not defined in the active CFRM policy. In either case, the **COUPLING FACILITY SPACE UTILIZATION** and the **COUPLING FACILITY SPACE CONFIGURATION** sections will be replaced with **NO COUPLING FACILITY SPACE DATA AVAILABLE**.

Sender Path data will not be available if no channel paths are currently defined to the Coupling Facility control unit. In this case, the **SENDER PATH** section is replaced with **NO PATH STATUS AVAILABLE**.

Coupling Facility Subchannel data will not be available if no subchannels/devices are currently defined for this Coupling Facility control unit. In this case, the **COUPLING FACILITY DEVICE** section is replaced with **NO COUPLING FACILITY DEVICE STATUS AVAILABLE**.

Information about one or more coupling facilities was requested by a D CF command. Information displayed will contain space utilization and configuration data of the requested facility or all coupling facilities. Sender CHPIDs and coupling facility subchannels are also displayed with their status for each coupling facility. If the coupling facility is level 10 or higher, then available information is also displayed about any remotely connected coupling facilities and the CHPIDs that may be used to connect them.

The Display CF command also displays information on the CF Request Time Ordering function:

CF REQUEST TIME ORDERING: REQUIRED AND ENABLED

The CF Request Time Ordering function is required for operations to the CF, and the required hardware (CF Request Time Ordering function installed on both the CECs where the CF and z/OS systems are running), and the required connectivity (ETR connected to both the systems where the CF and z/OS systems are running) are available for the CF Request Time Ordering function.

CF REQUEST TIME ORDERING: NOT-REQUIRED AND ENABLED

The CF Request Time Ordering function is not required for operations to the CF, and the required hardware (CF Request Time Ordering function installed on both the CECs where the CF and z/OS systems are running), and the required connectivity

(ETR connected to both the systems where the CF and z/OS systems are running) are available for the CF Request Time Ordering function.

CF REQUEST TIME ORDERING: NOT-REQUIRED AND NOT-ENABLED

The message time ordering function is not required for operations to the CF, and the required hardware (CF Request time Ordering function installed on both the CECs where the CF and z/OS systems are running), and the required connectivity (ETR connected to both the system where the CF and z/OS systems are running) are not available for the CF Request time ordering function, OR the Sysplex is running in simulated ETR mode and the function is not enabled.

CF REQUEST TIME ORDERING: REQUIRED AND NOT-ENABLED

The CF Request Time Ordering function is required for operations to the CF; however, the required hardware (CF Request Time Ordering function installed on both the CECs where the CF and z/OS systems are running), OR the required connectivity (ETR connected to both the systems where the CF and z/OS systems are running) are not available for the CF Request Time Ordering function OR the CF Request Time Ordering encountered a fatal error and the function is now not-enabled. The reason Message Time Ordering is not enabled is described in the following REASON message text:

REASON: FUNCTION NOT INSTALLED ON THIS SYSTEM

The CF Request Time Ordering function is required for operations to the CF; however, the function is not installed on the CEC running the z/OS system.

REASON: ETR NOT CONNECTED TO COUPLING FACILITY

The CF Request Time Ordering function is required for operations to the CF; however, there is no ETR connected to the CEC where the CF is running.

REASON: REQUEST TIME ORDERING FUNCTION FAILURE

The CF Request Time Ordering function is required for operations to the CF; however, the CF Request Time ordering function has encountered a non-recoverable error. The ETR connected to the sender z/OS system and the receiver CF system may not be functioning properly.

REASON: ETR NETID MISMATCH - CF ETR NETID: etr netid

The CF Request Time Ordering function is required for operations to the CF; however, the ETR that is connected to the CEC that is running the CF does not match the ETR that is connected to the CEC that is running the z/OS

system. Issue D ETR to obtain the ETR NetID of the ETR connected to the z/OS system.

COUPLING FACILITY HAS ONLY SHARED PROCESSORS

All central processors in the coupling facility are defined to be shared. IBM recommends using dedicated CPs for production coupling facility LPARs which will allow the best performance and throughput. See the *PR/SM Planning Guide* for more information regarding processor considerations for coupling facility LPARs.

COUPLING FACILITY HAS ONE OR MORE DEDICATED PROCESSORS

One or more central processors in the coupling facility is defined to be dedicated. This is an optimal configuration. See the *PR/SM Planning Guide* for more information regarding processor considerations for coupling facility LPARs.

In the message text:

hh.mm.ss

The time in hours (00-23), minutes (00-59), and seconds (00-59).

type

Node type (See *ndetype* in IXLYNDE).

mfg

Node manufacturer ID (See *ndemfg* in IXLYNDE).

plant

Node manufacturer plant ID (See *ndeplant* in IXLYNDE).

sequence

Node sequence number (See *ndesequence* in IXLYNDE).

partition

Node LPAR partition number (See *ndepartition* in IXLYNDE).

side

The node PP/SI mode indicator and configuration code from the IXLYNDE are used to determine the value for *side*. Value and meaning are:

- **SIDE: 0** means the coupling facility is on SIDE 0 of a partitionable CPC.
- **SIDE: 1** means the coupling facility is on SIDE 1 of a partitionable CPC.
- blank means the coupling facility is in a non-partitionable CPC.

cpcid

Node Central Processor Complex (CPC) ID (See *ndecpcid* in IXLYNDE).

cuid

Control unit number of the coupling facility.

cfname

Name of the coupling facility from the CFRM active policy.

<i>strspace</i>	Total amount of facility storage in use by allocated structures in units of K.	<i>cfreeespace</i>	The total amount of control storage available for the allocation of control objects for a structure in units of K.
<i>strdumpspace</i>	Total amount of facility dump storage assigned to dump tables in units of K.	<i>ctotalspace</i>	The total amount of control storage in the facility for the allocation of control objects for a structure in units of K.
<i>dumpspace</i>	Total amount of storage assigned to dumping storage.	<i>ncinusespace</i>	The total amount of non-control storage currently in use by objects for a structure in units of K.
<i>tablecount</i>	Current number of dump tables assigned to structures.	<i>ncfreespace</i>	The total amount of non-control storage available for the allocation of objects for a structure in units of K.
<i>freespace</i>	Total amount of storage available for assignment to structures in units of K.	<i>nctotalspace</i>	The total amount of non-control storage in the facility for the allocation of objects for a structure in units of K.
<i>freedumpspace</i>	Total amount of dumping storage available for assignment in a dump table in units of K.	<i>chpid</i>	Coupling facility sender CHPID.
<i>totalspace</i>	Total amount of storage available for the allocation of structures in units of K.	<i>pchid</i>	Coupling facility sender PCHID.
<i>totaldumpspace</i>	Total amount of storage assigned as dumping storage in units of K.	<i>phystatus</i>	One of the following:
<i>maxreqdumpspace</i>	Maximum amount of dump space requested to be assigned to dump tables in units of K.		ONLINE
YES	The facility space is volatile.		The path, <i>chpid</i> to the coupling facility <i>cname</i> is physically available for use. The <i>chpid</i> is configured online and is operational.
NO	The facility space is non-volatile.		OFFLINE
			The path, <i>chpid</i> to the coupling facility <i>cname</i> is configured offline.
<i>stgincrement</i>	Storage increment size for this facility in units of K.		MISABLED
<i>clevel</i>	Coupling facility level for this facility		The path, <i>chpid</i> to the coupling facility <i>cname</i> is not connected to the correct facility.
<i>release1</i>	Coupling facility release level part 1		NOT OPERATIONAL
<i>release2</i>	Coupling facility release level part 2		The path, <i>chpid</i> to the coupling facility <i>cname</i> is not operational.
<i>service1</i>	Coupling facility service level part 1		FACILITY PAUSED
<i>service2</i>	Coupling facility service level part 2		The path, <i>chpid</i> to the coupling facility <i>cname</i> is not operational. The most recent path validation operation attempted for this path received a facility paused status condition.
<i>mm/dd/yyyy</i>	The date in month, day, and year.		PATH NOT AVAILABLE
<i>hh:mm:ss</i>	The time in hours, minutes, and seconds.		The path, <i>chpid</i> to the coupling facility <i>cname</i> is not operational. The most recent path validation operation attempted for this path received a path not available status condition. A path not available status is reported when the CF is not responding. One reason for this may be due to low LPAR weight assigned to the CF LPAR.
<i>inusespace</i>	The total amount of control storage currently in use by control objects for a structure in units of K.		

PATH NOT ACCESSIBLE

The path, *chpid* to the coupling facility *cfname* is defined to a control unit that is accessible by this partition, however the channel path is not accessible by the partition (the channel path is not in the access list nor the candidate list for this partition). The partition cannot access this channel path.

logstatus

One of the following:

ONLINE

The path *chpid* to the coupling facility *cfname* is logically online.

OFFLINE

The path *sender chpid* to the coupling facility *cfname* is logically offline.

channel type

One of the following:

CFS

The channel path type description of path *chpid* is a Coupling Facility Sender.

CBS

The channel path type description of path *chpid* is a Coupling Facility Integrated Cluster Bus Sender.

ICS

The channel path type description of path *chpid* is an Internal Coupling Sender.

CBP

The channel path type description of path *chpid* is a Coupling Facility Integrated Cluster Bus Peer Channel.

CFP

The channel path type description of path *chpid* is a Coupling Facility Peer Channel.

ICP

The channel path type description of path *chpid* is an Internal Coupling Peer Channel.

COUPLING FACILITY SUBCHANNEL STATUS**TOTAL**

Number of coupling facility subchannels that have been defined for this system.

IN USE

Number of coupling facility subchannels that are currently being used by this system to execute requests to the coupling facility. This is equal to the number of concurrent operations that can be initiated to this coupling facility minus any subchannels that are not being used because of subchannel tuning actions.

NOT USING

Number of coupling facility subchannels that are eligible to be used but are not currently

being used by this system to execute requests to the coupling facility. This is equal to the number of subchannels that have been taken out of the pool of usable subchannels by subchannel tuning actions. This count may temporarily include some number of subchannels when a readjusting of the IN USE subchannel count is in progress as a result of configuration actions against CF Links for this facility.

NOT USABLE

Number of coupling facility subchannels that have been defined for this system that can not be used to execute requests to the coupling facility. Equal to the number of subchannels defined that are in excess of the number of concurrent operations that can be initiated to this coupling facility. This count also includes the number of not-operational subchannels, if any.

device

Coupling facility device.

subchannel

Coupling facility subchannel.

status

One of the following:

OPERATIONAL

The coupling facility subchannel *subchannel* to the coupling facility *cfname* is operational and available for operations.

NOT OPERATIONAL

The coupling facility subchannel *subchannel* to the coupling facility *cfname* is not operational and not available for operations.

rfcfname

Name of coupling facility from CFRM active policy. If N/A is displayed, then the coupling facility which is remotely-connected is not also connected to the system on which the D CF command was issued.

rftype

Node type (See *ndetype* in IXLNDE).

rfmfg

Node manufacturer ID (See *ndemfg* in IXLNDE).

rfplant

Node manufacturer plant ID (See *ndeplant* in IXLNDE).

rfsequence

Node sequence number (See *ndesequence* in IXLNDE).

partition

Node LPAR partition number (See *ndepartition* in IXLNDE).

rfsde

The node PP/SI mode indicator and configuration

code from the IXLYNDE are used to determine the value for *side*. Value and meaning are:

- **SIDE: 0** means the coupling facility is on SIDE 0 of a partitionable CPC.
- **SIDE: 1** means the coupling facility is on SIDE 1 of a partitionable CPC.
- blank means the coupling facility is in a non-partitionable CPC.

rfcpcid

Node Central Processor Complex (CPC) ID (See ndecpcid in IXLYNDE).

rfchipid

CHIPID installed on *cfname* that is being used for a peer connection between coupling facility *cfname* and coupling facility *rfcfname*.

rfrchanpathtype

One of the following:

CBP

The channel path type description of path *chipid* is a Coupling Facility Integrated Cluster Bus Peer Channel.

CFP

The channel path type description of path *chipid* is a Coupling Facility Peer Channel.

ICP

The channel path type description of path *chipid* is an Internal Coupling Peer Channel.

CFR

The channel path type description of path *chipid* is a Coupling Facility Receiver.

CBR

The channel path type description of path *chipid* is a Coupling Facility Integrated Cluster Bus Receiver.

ICR

The channel path type description of path *chipid* is an Internal Coupling Receiver.

rfschanpathtype

One of the following:

CFS

The channel path type description of path *chipid* is a Coupling Facility Sender.

CBS

The channel path type description of path *chipid* is a Coupling Facility Integrated Cluster Bus Sender.

ICS

The channel path type description of path *chipid* is an Internal Coupling Sender.

CBP

The channel path type description of path *chipid* is a Coupling Facility Integrated Cluster Bus Peer Channel.

CFP

The channel path type description of path *chipid* is a Coupling Facility Peer Channel.

ICP

The channel path type description of path *chipid* is an Internal Coupling Peer Channel.

rfinochipid

CHIPID installed on *cfname* that is currently not operational. The list of not operational CHIPIDs may span multiple lines, with up to eight CHIPIDs per line.

etr netid

The ETR Net ID of the ETR connected to the Coupling Facility.

System action: The system continues processing.

Operator response: Not Applicable.

System programmer response: Not Applicable.

Source: Cross System Extended Services (XES)

Detecting Module: IXLR3DSF

Routing Code: #

Descriptor Code: 5,8,9

**IXL151I DISPLAY CF SYNTAX IS NOT VALID -
text**

Explanation: A syntax error was found in the D CF command.

In the message text:

EXPECTING "CFNAME=" OR "CFNM="

The keyword that was specified is not valid.

SYNTAX SPECIFIED IS NOT VALID

Syntax specified is not correct.

CFNAME SPECIFIED IS NOT VALID

The *cfname* is not a valid CF Name.

EXPECTING NAME IN PARENTHESES

Expected left parenthesis is missing.

MISSING RIGHT PARENTHESIS

Expected right parenthesis is missing.

EXTRA DATA AFTER PARENTHESIS

Incorrect data was specified after the parenthesis.

System action: The system continues processing.

Operator response: Correct the syntax error and re-enter the command.

System programmer response: Not Applicable.

Source: Cross System Extended Services (XES)

Detecting Module: IXLR3DSF

Routing Code: -

Descriptor Code: 5

IXL152I DISPLAY CF COMMAND FAILED - *text*

Explanation: While processing a D CF command an error occurred. The display could not be processed.

In the message text:

UNEXPECTED ERROR

An unexpected error was encountered while processing the command.

STORAGE IS NOT AVAILABLE

There is not enough system storage to process the command.

NO COUPLING FACILITIES ARE AVAILABLE

There is no coupling facility data to process.

System action: The system continues processing.

Operator response: Do one of the following:

If an unexpected error occurred, re-enter the command.

If the cause of the failure is a storage shortage, determine the cause of the storage shortage to try to relieve the constraint and re-enter the command.

If there are no coupling facilities available, no further action is required.

System programmer response: Not applicable.

Source: Cross System Extended Services (XES)

Detecting Module: IXLR3DSF

Routing Code: -

Descriptor Code: 5

IXL154I UNKNOWN CFNAME: *name*

Explanation: An error occurred while processing a D CF command. The *name* entered was not recognized.

In the message text:

name

The *name* specified is either not a valid coupling facility name, or the *name* specified does not represent a valid coupling facility.

System action: The system continues processing.

Operator response: Correct the error and re-enter the command. The command may be entered without a specific *cfname* to display all of the coupling facilities connected to the system and their *cfnames*.

System programmer response: Not Applicable.

Source: Cross System Extended Services (XES)

Detecting Module: IXLR3DSF

Routing Code: -

Descriptor Code: 5

IXL157I PATH *chpid* IS NOW OPERATIONAL TO CUID: *cuid* COUPLING FACILITY *type.mfg.plant.sequence* PARTITION: *partition* side CPCID: *cpcid*

Explanation: Sender *chpid* *chpid* that was not in use by the system to communicate with the coupling facility identified, has now become operational. The coupling facility is identified by the node descriptor. See mapping IXLYNDE.

In the message text:

chpid

Coupling facility sender CHPID.

cuid

Control unit number of the facility.

type

Node type (See ndetype in IXLYNDE).

mfg

Node manufacturer ID (See ndemfg in IXLYNDE).

plant

Node manufacturer plant ID (See ndeplant in IXLYNDE).

sequence

Node sequence number (See ndesequence in IXLYNDE).

partition

Node LPAR partition number (See ndepartition in IXLYNDE).

side

The node PP/SI mode indicator and configuration code from the IXLYNDE are used to determine the value for *side*. Value and meaning are:

- **SIDE: 0** means the coupling facility is on SIDE 0 of a partitionable CPC.
- **SIDE: 1** means the coupling facility is on SIDE 1 of a partitionable CPC.
- blank means the coupling facility is in a non-partitionable CPC.

cpcid

Node Central Processor Complex (CPC) ID (See ndecpcid in IXLYNDE).

System action: The system will start using the operational path. If this was the first path to the coupling facility, this resulted in a gain of connectivity.

Operator response: Not Applicable.

System programmer response: Not Applicable.

Source: Cross System Extended Services (XES)

Detecting Module: IXLC3VSC

Routing Code: 2,10

Descriptor Code: 12

IXL158I **PATH *chpid* IS NOW NOT-OPERATIONAL TO CUID: *cuid* COUPLING FACILITY**
type.mfg.plant.sequence PARTITION:
partition side CPCID: *cpcid*

Explanation: Sender *chpid* *chpid* that was in use by the system to communicate with the identified coupling facility has become not operational. The cause is either a path failure or loss of the coupling facility. The coupling facility is identified by the node descriptor. See mapping IXLYNDE.

In the message text:

chpid
 Coupling facility sender CHPID.

cuid
 Control unit number of the facility.

type
 Node type (See ndetype in IXLYNDE).

mfg
 Node manufacturer ID (See ndemfg in IXLYNDE).

plant
 Node manufacturer plant ID (See ndeplant in IXLYNDE).

sequence
 Node sequence number (See ndesequence in IXLYNDE).

partition
 Node LPAR partition number (See ndepartition in IXLYNDE).

side
 The node PP/SI mode indicator and configuration code from the IXLYNDE are used to determine the value for *side*. Value and meaning are:

- **SIDE: 0** means the coupling facility is on SIDE 0 of a partitionable CPC.
- **SIDE: 1** means the coupling facility is on SIDE 1 of a partitionable CPC.
- blank means the coupling facility is in a non-partitionable CPC.

cpcid
 Node Central Processor Complex (CPC) ID (See ndecpcid in IXLYNDE).

System action: The system discontinues using the not-operational path. If this was the last path to the coupling facility, this will result in a loss of connectivity.

Operator response: Notify the system programmer if the connection to the coupling facility identified is critical for system operations.

System programmer response: Determine the cause of the path failure and correct it.

Source: Cross System Extended Services (XES)

Detecting Module: IXLC3BBC, IXLC3VSC,
 IXLD3CMP

Routing Code: 2,10

Descriptor Code: 11

IXL159E **COUPLING SUPPORT FACILITY HARDWARE ERROR DETECTED.**

Explanation: A hardware error was detected. The list notification vector was found to be incorrect. A notification vector used to indicate the completion of asynchronous command operations has not been updated correctly by the coupling support facility.

System action: The system continues using the notification vector. Performance and system throughput may be affected. Asynchronous operation completion processing may take longer than usual.

Operator response: Notify the system programmer.

System programmer response: Examine the system LOGREC symptom record which contains detailed information on the hardware error. Contact hardware support.

Source: Cross System Extended Services (XES)

Routing Code: 1,2,10.

Descriptor Code: 11,12

IXL160E **CF REQUEST TIME ORDERING: REQUIRED AND NOT-ENABLED *text reason***

Explanation: The CF Request Time Ordering is required for operations to this coupling facility, however not all hardware and connectivity requirements are available. The coupling facility is identified by the node descriptor. See mapping IXLYNDE. The reason CF Request Time Ordering is not enabled is described in the message text.

In the message text, *text* is:

COUPLING FACILITY *type.mfg.plant.sequence*
PARTITION: *partition side CPCID: cpcid*

In the message text:

type
 Node type (See ndetype in IXLYNDE).

mfg
 Node manufacturer ID (See ndemfg in IXLYNDE).

plant
 Node manufacturer plant ID (See ndeplant in IXLYNDE).

sequence
 Node sequence number (See ndesequence in IXLYNDE).

partition

Node LPAR partition number (See *ndepartition* in IXLYNDE).

side

The node PP/SI mode indicator and configuration code from the IXLYNDE are used to determine the value for *side*. Value and meaning are:

- **SIDE: 0** means the coupling facility is on SIDE 0 of a partitionable CPC.
- **SIDE: 1** means the coupling facility is on SIDE 1 of a partitionable CPC.
- blank means the coupling facility is in a non-partitionable CPC.

cpcid

Node Central Processor Complex (CPC) ID (See *ndecpcid* in IXLYNDE).

In the message text, *reason* is one of the following:

REASON: ETR NOT CONNECTED TO COUPLING FACILITY

The CF Request Time Ordering function is required for operations to the CF; however, there is no ETR connected to the CEC where the CF is running.

REASON: REQUEST TIME ORDERING FUNCTION FAILURE

The CF Request Time Ordering function is required for operations to the CF; however, the CF Request Time Ordering function has encountered a non-recoverable error. The ETR connected to the sender z/OS system and the receiver CF system may not be functioning properly.

REASON: CF IS OUT OF SYNCH WITH TIMING NETWORK

The CF Request Time Ordering function is required for operations to the CF; however, the TOD clock for the CF is not in synchronization with the timing network in use by the other systems in the sysplex. The timing network is defined by the CTNID for the CEC the CF is running on.

REASON: REQUEST TIME ORDERING NOT INSTALLED ON THE CF

The CF Request Time Ordering function is required for operations to the CF; however, the CF Request Time Ordering function is not available or not installed on the CEC running the CF. CF Request Time Ordering function must be installed on both CECs where the sender z/OS system and the receiver CF are running in order for CF Request Time Ordering to be enabled.

REASON: REQUEST TIME ORDERING NOT INSTALLED ON THIS SYSTEM

The CF Request Time Ordering function is required for operations to the CF; however, the CF Request Time Ordering function is not available or not installed on the CEC running the z/OS system. CF Request Time Ordering function must be installed

on both CECs where the sender z/OS system and the receiver CF are running in order for CF Request Time Ordering to be enabled.

REASON: ETR NETID MISMATCH - CF ETR NETID:***cfetrid***

The CF Request Time Ordering function is required for operations to the CF; however, the ETR that is connected to the CEC that is running the CF does not match the ETR that is connected to the CEC that is running the z/OS system. The *cfetrid* is the ETR Network ID of the ETR that is connected to the Coupling Facility.

Issue D ETR to obtain the ETR NetID of the ETR connected to the CEC running the z/OS system.

Note: This message and reason may be issued during IPL if the system is running in XCF-Local mode and the XES CF link connectivity and ETR validation code executes before the z/OS system has obtained the ETR Netid from the hardware. If the CEC where the CF is running does have the ETR Netid correctly defined, then this message (IXL160E) will be DOMed and message IXL161I will be issued approximately 30 seconds later when the CF ETR validation code is executed again.

REASON: CTNID MISMATCH - CF CTNID:***cfstpid-cfetrid***

The CF Request Time Ordering function is required for operations to the CF; however, the CTNID that is defined for the CEC that is running the CF does not match the CTNID that is defined for the CEC that is running the z/OS system. The *cfstpid* is the eight-byte STP portion of the CTNID that has been defined for the CEC running the CF. The *cfetrid* is the ETR Network ID of the ETR that is connected to the Coupling Facility.

Issue D ETR to obtain CTN information for the CEC running the z/OS system.

REASON: CTNID MISMATCH - CF CTNID: *cfstpid*

The CF Request Time Ordering function is required for operations to the CF; however, the CTNID that is defined for the CEC that is running the CF does not match the CTNID that is defined for the CEC that is running the z/OS system. The *cfstpid* is the eight-byte STP portion of the CTNID that has been defined for the CEC running the CF. The sysplex is running in a Coordinated Timing Network that is using STP to steer the local clock. The ETR portion of the CTNID is not displayed.

Issue D ETR to obtain CTN information for the CEC running the z/OS system.

System action: The system discontinues using the coupling facility.

Operator response: Notify the system programmer if

IXL161I

the coupling facility identified is critical for system operations.

System programmer response: Based on the *reason* message text, determine the cause of the failure and correct it.

Source: Cross System Extended Services (XES)

Detecting Module: IXLC3VSC

Routing Code: 1,2,10

Descriptor Code: 11

IXL161I CF REQUEST TIME ORDERING: *text1*
text2

Explanation: The CF Request Time Ordering function is enabled for operations to the coupling facility or the CF Request Time Ordering function is not enabled and not required. The coupling facility is identified by the node descriptor. See mapping IXLYNDE.

In the message text, *text1* is:

REQUIRED AND ENABLED

The CF Request Time Ordering is required for operations to the coupling facility, and the required hardware (CF Request Time Ordering function installed on both the CECs where the CF and z/OS systems are running), and the required connectivity (ETR connected to both the systems where the CF and z/OS systems are running) are available for the CF Request Time Ordering function.

NOT-REQUIRED AND ENABLED

The CF Request Time Ordering is not required for operations to the coupling facility, and the required hardware (CF Request Time Ordering function installed on both the CECs where the CF and z/OS systems are running), and the required connectivity (ETR connected to both the systems where the CF and z/OS systems are running) are available for the CF Request Time Ordering function.

NOT-REQUIRED AND NOT-ENABLED

The CF Request Time Ordering is not required for operations to the coupling facility. The required hardware (CF Request Time Ordering function installed on both the CECs where the CF and z/OS systems are running), and the required connectivity (ETR connected to both the system where the CF and z/OS systems are running) are not available for the CF Request Time Ordering function, OR the Sysplex is running in simulated ETR mode and the function is not enabled.

In the message text, *text2* is:

```
COUPLING FACILITY type.mfg.plant.sequence  
PARTITION: partition side CPCID: cpcid
```

In the message text:

type

Node type (See ndetype in IXLYNDE).

mfg

Node manufacturer ID (See ndemfg in IXLYNDE).

plant

Node manufacturer plant ID (See ndeplant in IXLYNDE).

sequence

Node sequence number (See ndesequence in IXLYNDE).

partition

Node LPAR partition number (See ndepartition in IXLYNDE).

side

The node PP/SI mode indicator and configuration code from the IXLYNDE are used to determine the value for *side*. Value and meaning are:

- **SIDE: 0** means the coupling facility is on SIDE 0 of a partitionable CPC.
- **SIDE: 1** means the coupling facility is on SIDE 1 of a partitionable CPC.
- blank means the coupling facility is in a non-partitionable CPC.

cpcid

Node Central Processor Complex (CPC) ID (See ndecpcid in IXLYNDE).

System action: The system will request CF Request Time Ordering function to be executed on each operation to the coupling facility if it is enabled. The system will not request CF Request Time Ordering if the function is not enabled

System programmer response: None.

Source: Cross System Extended Services (XES)

Detecting Module: IXLC3VSC

Routing Code: 2,10

Descriptor Code: 12

Chapter 6. IXP Messages

See *Input/Output Configuration Program User's Guide and Reference* for additional messages.

IXP050D	SHOULD <i>jobname</i> 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 or Input/Output Configuration panel 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

IXP056I	IOCP JOB <i>jobname</i> 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 IXP050D, 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

IXP057I	IOCP JOB <i>jobname</i> SUCCESSFUL. LEVEL xxx IOCDS REPLACED.
----------------	--

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 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 IXP050D, 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: 6M

Chapter 7. IXZ Messages

**IXZ0001I CONNECTION TO JESXCF
COMPONENT ESTABLISHED, GROUP
xcfgroup MEMBER xcfmember**

Explanation: A JES member *xcfmember* has successfully established a connection to the JESXCF component in group *xcfgroup*.

In the message text:

xcfgroup XCF group to which this member belongs
xcfmember The XCF member attempting to join the *xcfgroup*

System action: The JES member is successfully connected to the *xcfgroup*, and JESXCF is ready to respond to requests from *xcfmember*.

Operator response: None.

System programmer response: None.

Source: JES common coupling services (JESXCF)

Routing Code: 2

Descriptor Code: 7

**IXZ0002I CONNECTION TO JESXCF
COMPONENT DISABLED, GROUP
xcfgroup MEMBER xcfmember**

Explanation: A JES member *xcfmember* has successfully disconnected from JESXCF group *xcfgroup*.

In the message text:

xcfgroup XCF group to which this member belongs
xcfmember The XCF member disconnecting from the *xcfgroup*

System action: The JES member is successfully disconnected from the *xcfgroup*, and JESXCF is no longer available to respond to requests from *xcfmember*.

Operator response: None.

System programmer response: None.

Source: JES common coupling services (JESXCF)

Routing Code: 2

Descriptor Code: 7

**IXZ0003I CONNECTION TO JESXCF
COMPONENT BROKEN GROUP
xcfgroup MEMBER xcfmember**

Explanation: A JES member *xcfmember* has

terminated either normally or abnormally.

In the message text:

xcfgroup XCF group to which this member belongs
xcfmember The XCF member that lost its connection to *xcfgroup*

System action: The JES member is disconnected from the *xcfgroup*, and JESXCF is no longer available to respond to requests from *xcfmember*.

Operator response: Notify your system programmer.

System programmer response: Restart *xcfmember* to reestablish the connection to the JESXCF component.

Source: JES common coupling services (JESXCF)

Routing Code: 2

Descriptor Code: 7

**IXZ0004E JESXCF COMPONENT FAILED,
CONNECTION BROKEN TO GROUP
xcfgroup MEMBER xcfmember**

Explanation: An abend occurred in the JESXCF component while JESXCF was processing on behalf of JES member *xcfmember* in group *xcfgroup*.

In the message text:

xcfgroup XCF group to which this member belongs
xcfmember The XCF member that lost its connection to *xcfgroup*

System action: The JES member *member* terminates abnormally with a completion code of X'EC5' and a system dump is provided.

Operator response: Notify your system programmer.

System programmer response: Search the problem reporting data bases for a fix to this coding problem. If a fix exists, correct the problem and then restart *xcfmember* to reestablish the connection to the JESXCF component. If no fix exists for this particular problem, record the return and reason codes, and contact your IBM Support Center.

Source: JES common coupling services (JESXCF)

Routing Code: 10

Descriptor Code: 7

**IXZ0005E THE OPTIONAL JES3 FEATURE IS NOT
ENABLED TO RUN ON THIS SYSTEM**

Explanation: Parmlib member IFAPRDxx indicated

IXZ0006E • IXZ0101E

JES3 is disabled and can not register as an z/OS element.

System action: JES3 fails to be enabled on this system. z/OS issues abend EC5 RC=*n* where *n* is either:

- 2 JES3 is not ENABLED
- 3 The JES release specified on the JESXCF ATTACH is not supported by z/OS.

System programmer response: Verify that the system is using the correct parmlib member (IFAPRDxx) and that the state (ENABLE or DISABLE) is correct.

Source: JES common coupling services (JESXCF)

Detecting Module: IZXIXMF

Routing Code: 10

Descriptor Code: 4

IXZ0006E UNSUPPORTED LEVEL OF JES ATTEMPTED TO JOIN JESXCF GROUP

Explanation: The JES FMID specified on the JESXCF ATTACH macro is not an z/OS-supported release.

System action: JES fails to be enabled on this system. MVS issues abend EC5 RC=*n* where *n* is either:

- 2 JES3 is not ENABLED
- 3 The JES release specified on the JESXCF ATTACH is not supported by z/OS.

System programmer response: Verify that the release specified on the JESXCF ATTACH is valid. If another IBM z/OS element or product issued the JESXCF ATTACH macro, contact the IBM Support Center.

Source: JES common coupling services (JESXCF)

Detecting Module: IZXIXMF

Routing Code: 10

Descriptor Code: 7

IXZ0101E FAILURE DURING THE XCF JOIN TO XCF, GROUP *xcfgroup* BY MEMBER *xcfmember* **RET=return-code RSN=reason-code**

Explanation: An attempt by JES member *xcfmember* to join group *xcfgroup* failed.

In the message text:

- xcfgroup* XCF group to which these members belong
- xcfmember* The XCF member that failed to join to *xcfgroup*

return-code The hexadecimal return code from the IXCJOIN macro

reason-code The hexadecimal reason code from the IXCJOIN macro

System action: JES component initialization terminates.

Operator response: Notify your system programmer.

System programmer response: Using the return and reason code, determine whether the problem is either a program or environmental error. Refer to the IXCJOIN macro description in *z/OS MVS Programming: Sysplex Services Reference* for an explanation of *return-code* and *reason-code*. If the problem is a configuration error, correct the problem and restart the JES member. If the problem is a coding problem, search problem reporting data bases for a fix for the problem. If no fix exists, contact your IBM Support Center and provide the return and reason codes.

Source: JES common coupling services (JESXCF)

Routing Code: 10

Descriptor Code: 7

IXZ0101E FAILURE DURING QUERY OF A JES MEMBER'S XCF DATA, BY GROUP *xcfgroup* MEMBER *xcfmember* **RET=return-code RSN=reason-code**

Explanation: An XCF query attempt to determine the initial status of a JES member failed.

In the message text:

- xcfgroup* XCF group to which this member belongs
- xcfmember* XCF member being queried
- return-code* The hexadecimal return code from the IXCQUERY macro
- reason-code* The hexadecimal reason code from the IXCQUERY macro

System action: JES member *xcfmember* terminates with a system dump.

Operator response: Notify your system programmer.

System programmer response: Using the return and reason code, determine whether the problem is either a program or environmental error. Refer to the IXCQUERY macro description in *z/OS MVS Programming: Sysplex Services Reference* for an explanation of *return-code* and *reason-code*. If the problem is a configuration error, correct the problem and restart the JES member. If the problem is a coding problem, search problem reporting data bases for a fix for the problem. If no fix exists, contact your IBM Support Center and provide the return and reason codes.

Source: JES common coupling services (JESXCF)

Routing Code: 10

Descriptor Code: 7

IXZ0102E FAILURE DURING THE REMOVAL OF THIS MEMBER FROM XCF PARTICIPATION, GROUP *xcfgroup* MEMBER *xcfmember* RET=*return-code* RSN=*reason-code*

Explanation: An JES member *xcfmember* failed while attempting to leave (using IXZXIXDT services) group *xcfgroup*.

In the message text:

<i>xcfgroup</i>	XCF group to which the member belongs
<i>xcfmember</i>	XCF member leaving the group
<i>return-code</i>	The hexadecimal return code from the IXCLEAVE macro
<i>reason-code</i>	The hexadecimal reason code from the IXCLEAVE macro

System action: JES member *xcfmember* terminates with a system dump.

Operator response: Notify your system programmer.

System programmer response: Using the return and reason code, determine whether the problem is either a program or environmental error. Refer to the IXCLEAVE macro description in *z/OS MVS Programming: Sysplex Services Reference* for an explanation of *return-code* and *reason-code*. If the problem is a configuration error, correct the problem and restart JES. If the problem is a coding problem, search problem reporting data bases for a fix for the problem. If no fix exists, contact your IBM Support Center and provide the return and reason codes.

Source: JES common coupling services (JESXCF)

Routing Code: 10

Descriptor Code: 7

IXZ0103E FAILURE DURING THE DELETE OF THIS MEMBER FROM XCF PARTICIPATION, GROUP *xcfgroup* MEMBER *xcfmember* RET=*return-code* RSN=*reason-code*

Explanation: An attempt to delete an inactive JES member *xcfmember* from group *xcfgroup* failed. This message does not always indicate an error condition. That is, you can consider it informational if it is being issued because an aged group member(s) (a member that has remained across a sysplex IPL state for more than 24 hours) has been identified as aged and subsequently being deleted by more than one member currently joining the *xcfgroup*. In this situation, JESXCF

also issues IXZ0104I noting the 'aged' member.

In the message text:

<i>xcfgroup</i>	XCF group to which the member belongs
<i>xcfmember</i>	XCF member being deleted
<i>return-code</i>	The hexadecimal return code from the IXCDELET macro
<i>reason-code</i>	The hexadecimal reason code from the IXCDELET macro

System action: Processing continues.

Operator response: Notify your system programmer.

System programmer response: Using the return and reason code, determine whether the problem is either a program or environmental error. Refer to the IXCDELET macro description in *z/OS MVS Programming: Sysplex Services Reference* for an explanation of *return-code* and *reason-code*. If the problem is a configuration error, correct the problem and restart JES. If the problem is a coding problem, search problem reporting data bases for a fix for the problem. If no fix exists, contact your IBM Support Center and provide the return and reason codes.

Source: JES common coupling services (JESXCF)

Routing Code: 2

Descriptor Code: 7

IXZ0104I AGED XCF MEMBER DATA HAS BEEN DELETED, GROUP *xcfgroup* MEMBER *xcfmember*

Explanation: JES member *xcfmember* of XCF group *xcfgroup* has been deleted from the XCF group because it is **aged**. A member becomes aged when it remains across a sysplex IPL and in a failed state for more than 24 hours.

In the message text:

<i>xcfgroup</i>	XCF group to which the member belongs
<i>xcfmember</i>	XCF member deleted

System action: Member data for *xcfmember* in *xcfgroup* is deleted.

Operator response: Notify your system programmer.

System programmer response: None.

Source: JES common coupling services (JESXCF)

Routing Code: 2

Descriptor Code: 7

**IXZ0105E FAILURE DURING THE XCF JOIN
BECAUSE A DUPLICATE JES XCF
MEMBER IS ACTIVE, GROUP *xcfgroup*
MEMBER *xcfmember***

Explanation: JES member *xcfmember* is attempting to join group *xcfgroup*, but its name duplicates that of a member already active in *xcfgroup*.

In the message text:

<i>xcfgroup</i>	XCF group to which the member belongs
<i>xcfmember</i>	XCF member attempting to join the <i>xcfgroup</i>

System action: JES component terminates. Group *xcfgroup* is removed.

Operator response: Determine whether:

- The JES member is being started with the correct start parameter set, rather than another member's parameter set.
- Another member is already active with the same member name (as defined in the initialization data set).

Notify your system programmer.

System programmer response: Based on the information that your operator supplies, either correct the use of the wrong parameter set, terminate the current member, or rename the new member attempting to join the XCF group. Be certain that no two members of the same JES2 multi-access spool (MAS) configuration or JES3 complex are defined with the same XCF member name. If two members are defined with the same name, must be terminated prior to starting this member, or this member must be renamed and then added to the XCF group.

Source: JES common coupling services (JESXCF)

Routing Code: 10

Descriptor Code: 7

**IXZ0106E FAILURE DURING THE XCF JOIN
BECAUSE THE MAXIMUM NUMBER OF
XCF GROUPS ARE ACTIVE, GROUP
xcfgroup MEMBER *xcfmember***

Explanation: JES member *xcfmember* attempted to join XCF group *xcfgroup*. The attempt failed because the maximum number of groups defined to the sysplex has already been attained. The maximum number of groups is specified on the MAXGROUP parameter of the DEFINEDS statement in the JCL for the XCF couple data set format utility.

In the message text:

<i>xcfgroup</i>	XCF group to which the member belongs
-----------------	---------------------------------------

xcfmember XCF member attempting to join the group

System action: The JES member terminates.

Operator response: Notify your system programmer.

System programmer response: Format the XCF couple data set with a sufficient maximum value to include all XCF groups in your sysplex. Refer to *z/OS MVS Setting Up a Sysplex* for information on how to specify the MAXGROUP parameter on the DEFINEDS statement.

Source: JES common coupling services (JESXCF)

Routing Code: 10

Descriptor Code: 7

**IXZ0107E FAILURE DURING THE XCF JOIN
BECAUSE THE MAXIMUM NUMBER OF
XCF MEMBERS ARE ACTIVE, GROUP
xcfgroup MEMBER *xcfmember***

Explanation: JES member *xcfmember* attempted to join XCF group *xcfgroup*. The attempt failed because the maximum number of members defined to the sysplex has already been attained. The maximum number of members is specified on the MAXMEMBER parameter of the DEFINEDS statement in the JCL for the XCF couple data set format utility.

In the message text:

<i>xcfgroup</i>	XCF group to which the member belongs
<i>xcfmember</i>	XCF member attempting to join the group

System action: The JES member terminates.

Operator response: Notify your system programmer.

System programmer response: Format the XCF couple data set with a sufficient maximum value to include the total number of members in your sysplex. Refer to *z/OS MVS Setting Up a Sysplex* for information on how to specify the MAXMEMBER parameter on the DEFINEDS statement.

Source: JES common coupling services (JESXCF)

Routing Code: 10

Descriptor Code: 7

**IXZ0108E COMMUNICATION FROM *xcfmember1*
TO *xcfmember2* HAS BEEN LOST,
GROUP *xcfgroup***

Explanation: JES member *xcfmember1* is unable to communicate with *xcfmember2*. If *xcfmember2* is active, it may be hung or in a loop.

In the message text:

<i>xcfmember1</i>	The XCF member attempting to send a message to <i>xcfmember2</i>
<i>xcfmember2</i>	The XCF member to which <i>xcfmember1</i> sent a message
<i>xcfgroup</i>	XCF group to which these members belong

System action: JESXCF is unable to complete the message communication. This highlighted message remains until *xcfmember2* eventually responds or fails. Processing does not continue until the IXZ0108 message is deleted.

Operator response: Notify your system programmer if this message is not automatically deleted within several minutes.

System programmer response: Check the system log for additional messages associated with *xcfmember1* and *xcfmember2*. Request a dump of *xcfmember1*, *xcfmember2*, the JESXCF address space and its associated data spaces on each member's system. Gather documentation for any other components indicated in associated error messages. Search problem reporting data bases for a fix for the problem. If no fix exists, contact your IBM Support Center and supply the system log data and any related dump data.

For additional information on dumping JES and JESXCF address spaces, as well as restarting the JESXCF address space, see *z/OS MVS Programming: JES Common Coupling Services*.

Source: JES common coupling services (JESXCF)

Routing Code: 10

Descriptor Code: 2,7

IXZ0110E JOIN OF MEMBER *xcfmember* TO GROUP *xcfgroup* FAILED BECAUSE *sysname* IS BEING PARTITIONED OUT OF THE SYSPLEX

Explanation: JES member *xcfmember* has requested to attach to JESXCF group *xcfgroup*, but the join to XCF failed because the requesting system is being partitioned out of the SYSPLEX. All requests from this system to join any XCF group are permanently suspended.

In the message text:

xcfmember The XCF member attempting to attach.

xcfgroup The XCF group to which *xcfmember* is attempting to attach.

sysname The system name which is being partitioned out of the SYSPLEX.

System action: Initialization of JES2, JES3, or a JES3 Functional Subsystem ends. Additional messages

and/or abends can be produced by the address space that attempted the attach.

Operator response: Notify your system programmer.

System programmer response: After SYSPLEX partitioning for the system in question is complete, re-IPL that system.

Source: JES common coupling services (JESXCF)

Routing Code: 10

Descriptor Code: 7

IXZ0300E FAILED TO JOIN XCF GROUP

RC=retcode RSN=reason-code

Explanation: An internal JESXCF function attempted to attach to the JESXCF component using the JESXCF attach service (IXZXIXAT). The attach was unsuccessful.

In the message text:

retcode The return code from the JESXCF attach service

reason-code The reason code from the JESXCF attach service

System action: The JESXCF function ends. Depending on the situation, the JESXCF function might attempt a restart.

Operator response: Notify your system programmer.

System programmer response: Search the problem reporting data bases for a fix to this coding problem. If a fix exists, correct the problem and then restart the system to reinitialize the failed JESXCF function. If no fix exists for this particular problem, record the message number and the return and reason codes, and contact your IBM Support Center.

Source: JES common coupling services (JESXCF)

Detecting Module: IXZRCEC

Routing Code: 10

Descriptor Code: 7

IXZ0301E FAILED TO ATTACH TASK *modname*

RC=retcode

Explanation: The JESXCF component attempted to attach a task on behalf of an internal JESXCF function. The attach was unsuccessful.

In the message text:

modname The name of the module that was to be attached as a task

retcode The return code from the MVS attach service

System action: JESXCF processing continues.

IXZ0302E • IXZ0765E

Operator response: Notify your system programmer.

System programmer response: Search the problem reporting data bases for a fix to this coding problem. If a fix exists, correct the problem and then restart the system to reinitialize the failed JESXCF function. If no fix exists for this particular problem, record the message number and the return code, and contact your IBM Support Center.

Source: JES common coupling services (JESXCF)

Detecting Module: IXZRCAT

Routing Code: 10

Descriptor Code: 2,12

IXZ0302E FAILED TO {BUILD | CLEAR} MAILBOX
mailboxname **RC=retcode**
RSN=reason-code

Explanation: An internal JESXCF function attempted to perform an action on a JESXCF mailbox using a JESXCF mailbox service. The action was unsuccessful.

In the message text:

mailboxname The name of the JESXCF mailbox being processed

retcode The return code from the specified JESXCF mailbox service

reason-code The reason code from the specified JESXCF mailbox service

System action: The JESXCF function ends. Depending on the situation, the JESXCF function might attempt a restart.

Operator response: Notify your system programmer.

System programmer response: Search the problem reporting data bases for a fix to this coding problem. If a fix exists, correct the problem and then restart the system to reinitialize the failed JESXCF function. If no fix exists for this particular problem, record the message number and the return and reason codes, and contact your IBM Support Center.

Source: JES common coupling services (JESXCF)

Detecting Module: IXZRCEC

Routing Code: 10

Descriptor Code: 2,12

IXZ0109E FAILURE IN JESXCF, UNABLE TO POST JES MEMBER *xcfmember* GROUP *xcfgroup*

Explanation: JESXCF was unable to post JES member *xcfmember* in group *xcfgroup*. If active, *xcfmember* is probably hung or in a loop.

In the message text:

xcfgroup the XCF group to which the member to be posted belongs

xcfmember The XCF member name of the member being posted

System action: JESXCF processing continues.

Operator response: Notify your system programmer if this message is not automatically deleted within several minutes.

System programmer response: Check the system log for additional messages associated with *xcfmember*. Request a dump of *xcfmember*, and the JESXCF address space and its associated data spaces on the member's system. If the problem is due to a coding error, search problem reporting data bases for a fix for the problem. If no fix exist, contact your IBM Support Center and supply the system log data and any related dump data.

Source: JES common coupling services (JESXCF)

Routing Code: 10

Descriptor Code: 2,12

IXZ0763E OPTIONS FOR SYSJES COMPONENT TRACE ARE NOT VALID.

Explanation: The parameter that you specified with the OPTIONS keyword is not valid. OPTIONS is not a required parameter for SYSJES CTRACE. The OPTIONS parameter is always the same as the "SUB" name even if it is not specified.

System action: The CTRACE state remains unchanged.

Operator response: Reissue the TRACE CT command and either correct the incorrect parameter or omit OPTIONS. For example, in response to *ITT006A SPECIFY OPERAND(S) for TRACE CT COMMAND* the following are equivalent:

R id,OPTIONS=(USREXIT),END and *R id.END*. Refer to *z/OS MVS IPCS Commands* for the correct syntax of the CTRACE command.

System programmer response: None.

Source: JES common coupling services (JESXCF)

Routing Code: 10

Descriptor Code: 2,12

IXZ0765E CTRACE DEFINE FOR *subname* FAILED WITH PARMLIB MEMBER *membername*, NO PARMLIB MEMBER WILL BE USED

Explanation: JESXCF attempted to use the parmlib member *membername* in *SYS1.PARMLIB* for CTRACE define processing, but a parmlib error was detected. An error was found in a referenced parmlib member (CTIJES01, CTIJES02, CTIJES03, or CTIJES04).

In the message text:

subname The name of the "SUB" level event
membername The parmlib member (CTIJES01, CTIJES02, CTIJES03, or CTIJES04) with the error

System action: JESXCF attempts to use its own default parmlib settings rather than those defined in *membername*.

Operator response: Notify your system programmer.

System programmer response: Check the specified SYS1.PARMLIB member for syntax errors. Correct the error before you next re-IPL your system. JESXCF will not re-read the parmlib member until JESXCF is again initialized.

Source: JES common coupling services (JESXCF)

Routing Code: 10

Descriptor Code: 2,12

IXZ0766E CTRACE DEFINE FOR SYSJES FAILED, TRACING WILL NOT BE INITIALIZED

Explanation: JESXCF could not define a SYSJES CTRACE due to a system error.

System action: The SYSJES CTRACE define failed and tracing is unavailable for the specified SYSJES.

Operator response: Notify your system programmer.

System programmer response: Check the system log for additional messages associated with this failure and gather appropriate documentation. Search problem reporting data bases for a fix for the problem. If no fix exists, contact your IBM Support Center.

Source: JES common coupling services (JESXCF)

Routing Code: 10

Descriptor Code: 2,12

IXZ0767E SYSJES INTERNAL ERROR, TRACING WILL NOT BE INITIALIZED

Explanation: An internal error was detected during JESXCF processing.

System action: Tracing is not available for the JESXCF component.

Operator response: Notify your system programmer.

System programmer response: Check the system log for additional messages associated with this failure and gather appropriate documentation. Search problem reporting data bases for a fix for the problem. If no fix exists, contact your IBM Support Center.

Source: JES common coupling services (JESXCF)

Routing Code: 10

Descriptor Code: 2,12

IXZ0769E SYSJES CTRACE IS UNAVAILABLE

Explanation: You attempted to start SYSJES TRACE when tracing is inactive. Tracing may be inactive because JESXCF was previously cancelled with an MVS FORCE command.

System action: Tracing is not available for the JESXCF component.

Operator response: Notify your system programmer.

System programmer response: Check the system log for additional messages associated with this failure and gather appropriate documentation. Search problem reporting data bases for a fix for the problem. If no fix exists, contact your IBM Support Center.

Source: JES common coupling services (JESXCF)

Routing Code: 10

Descriptor Code: 2,12

Chapter 8. IYP Messages

See *Input/Output Configuration Program User's Guide and Reference* for additional messages.

IYP050D SHOULD *jobname* WRITE TO LEVEL *xx* 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.

xx The specified level.

Note: If the CBD.CPC.IOCDS resource of the FACILITY class exists in an installed security product (for example, RACF), IOCP does not issue this message to the system operator. IOCP determines your authorization to write an input/output configuration data set (IOCDS) from your authorization to update the CBD.CPC.IOCDS resource. If the security administrator has authorized you to update this resource, IOCP writes the IOCDS. If you are not authorized to update the resource, IOCP does not write the IOCDS.

System action: IOCP issues this message to request permission from the system operator for the job to write to the specified level IOCDS in the support element. 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 support element with the input/output configuration data generated by this job. The operator should use the Input/Output Configuration panel 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 support element.

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

IYP056I IOCP JOB *jobname* FAILED. DID NOT BUILD LEVEL *xx* 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.

xx The specified level.

System action: IOCP ends the job with return code 8. IOCP issues this message to inform the programmer and the system operator, if the operator previously responded to message IYP050D, that this job failed to build the level indicated input/output configuration data set (IOCDS).

One of the following occurred:

- An error was found in the IOCP input statements
- The system operator previously replied 'NO' to message IYP050D
- The CBD.CPC.IOCDS resource of the FACILITY class has been defined to an installed security product and you have not been authorized by the security administrator to update access to the CBD.CPC.IOCDS resource.

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,Note 32

Descriptor Code: 6

IYP057I IOCP JOB *jobname* SUCCESSFUL. LEVEL *xx* IOCDS REPLACED.

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.

xx The specified level.

System action: IOCP ends the job with a return code

of 0, 2, or 4. IOCP issues this message to inform the programmer and the system operator, if the operator previously granted permission to write the IOCDS in response to message IYP050D, 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,Note 32

Descriptor Code: 6

Chapter 9. IZP Messages

See *Input/Output Configuration Program User's Guide and Reference* for additional messages.

IZP050D	SHOULD jobname WRITE TO LEVEL xxx IOCDS? REPLY 'YES', 'NO', OR 'CANCEL'
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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.

Note: If IOCP is running on MVS/ESA SP 3.1.3 or later and the CBD.CPC.IOCDS resource of the FACILITY class exists in an installed security product (for example, RACF), IOCP does not issue this message to the system operator. IOCP determines your authorization to write an input/output configuration data set (IOCDS) from your authorization to update the CBD.CPC.IOCDS resource. If the security administrator has authorized you to update this resource, IOCP writes the IOCDS. If you are not authorized to update the resource, IOCP does not write the IOCDS.

System action: IOCP issues this message to request permission from the system operator for the job to write to the specified level IOCDS in the processor controller or support element. 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 or support element with the input/output configuration data generated by this job. The operator should use the IOCDSM frame or Input/Output Configuration panel 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 or support element.

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

IZP056I	IOCP JOB jobname FAILED. DID NOT BUILD LEVEL xxx IOCDS.
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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 programmer and the system operator, if the operator previously responded to message IZP050D, that this job failed to build the level indicated input/output configuration data set (IOCDS).

One of the following occurred:

- An error was found in the IOCP input statements
- The system operator previously replied 'NO' to message IZP050D
- The CBD.CPC.IOCDS resource of the FACILITY class has been defined to an installed security product and IOCP is running on MVS/ESA SP 3.1.3 or later and you have not been authorized by the security administrator to update access to the CBD.CPC.IOCDS resource.

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,Note 33

IZP057I	IOCP JOB jobname SUCCESSFUL. LEVEL xxx IOCDS REPLACED.
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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 a return code of 0, 2, or 4. IOCP issues this message to inform the programmer and the system operator, if the operator previously granted permission to write the IOCDS in response to message IZP050D, 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,Note 33

Descriptor Code: 6

Appendix. Accessibility

Accessibility features help a user who has a physical disability, such as restricted mobility or limited vision, to use software products successfully. The major accessibility features in z/OS enable users to:

- Use assistive technologies such as screen readers and screen magnifier software
- Operate specific or equivalent features using only the keyboard
- Customize display attributes such as color, contrast, and font size

Using assistive technologies

Assistive technology products, such as screen readers, function with the user interfaces found in z/OS. Consult the assistive technology documentation for specific information when using such products to access z/OS interfaces.

Keyboard navigation of the user interface

Users can access z/OS user interfaces using TSO/E or ISPF. Refer to *z/OS TSO/E Primer*, *z/OS TSO/E User's Guide*, and *z/OS ISPF User's Guide Vol I* for information about accessing TSO/E and ISPF interfaces. These guides describe how to use TSO/E and ISPF, including the use of keyboard shortcuts or function keys (PF keys). Each guide includes the default settings for the PF keys and explains how to modify their functions.

z/OS information

z/OS information is accessible using screen readers with the BookServer/Library Server versions of z/OS books in the Internet library at:

www.ibm.com/servers/eserver/zseries/zos/bkserv/

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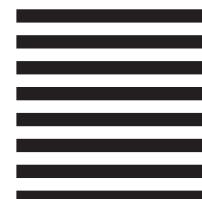
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