

Publication Changes for APAR OA63039

In this document, changes introduced for APAR OA63039 are highlighted in green, updates to text highlighted in blue, and editorial updates highlighted in purple.

z/OS MVS Setting Up a Sysplex (SA23-1399)

Summary of changes:

- Formatting the CFRM couple data set to support more than 2048 CF structures
- Update to "Support for CFRM functions" table in section "Considerations for supporting CFRM functions"

CFLEVEL Functionality – CFLEVEL 26

[In Chapter 4 "Managing Coupling Facility Resources" -
 "Planning for a coupling facility" -
 "Defining a coupling facility" -
 "Understanding the coupling facility level (CFLEVEL)" -
 "CFLEVEL and operating system level coexistence"]

Under the summary of CFLEVEL 26 function add:

With a PTF for APAR OA63039:

- Support for 4095 structures in a single coupling facility image

Formatting the CFRM Couple Data Set To Support More Than 2048 CF structures

[Chapter 11 "Format Utility for Couple Data Sets"
 "Coding the Couple Data Set Format Utility"
 "CFRM Parameters for Format Utility"]

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ITEM NAME(STR) NUMBER()

Specifies the number of coupling facility structures that can be defined in one policy. This number refers to structure definitions, not to the number of allocated structure instances. One structure definition can refer to more than one allocated structure instance, as would be the case for a structure that was being rebuilt or duplexed. When the value specified for NUMBER is between 2049 and 4096, the ITEM NAME(VERSION) parameter with a NUMBER value of 12 or higher must be specified as input to the utility.
(Default=50, Minimum=1, Maximum=4096)

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ITEM NAME(VERSION) NUMBER()

Specifies the version of a CFRM couple data set to format.

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(Default=Version required by the function(s) for which the couple data set is being formatted, Minimum=1, Maximum=**12**).

Considerations for supporting CFRM functions

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Add a **row** to the table for > 2048 structures support. Remainder of the table is unchanged.

Table 25. Support for CFRM function		
Function	Data Name (Note 2)	Notes
> 2048 structure definitions, scalability, and performance improvements for larger number of structures	STR and VERSION(12)	Minimum release supported: z/OS 3.2 with APAR OA63039. When the CFRM couple data set is formatted for more than 2048 structures, it requires the explicit specification of VERSION(12) or higher as input to the XCF couple data set format utility.
Non-disruptive structure copy for system-managed rebuild or duplexing rebuild	VERSION(11)	Minimum release supported: z/OS V2R5 with APAR OA68733. A VERSION(11) or higher CFRM CDS is required to define a CFRM policy that specifies the NDCOPY keyword for any structure.

z/OS MVS Programming: Sysplex Services Reference (SA38-0658)

Summary of changes:

- IXLCONN return code '0C'x, reason code 'xxxx0C11'x recommended action

IXLCONN updates

[Chapter "IXLCONN – Connect to a coupling facility structure"
"Return and reason codes for the IXLCONN macro"]

In the section “Return and reason codes for the IXLCONN macro”, make the following updates for return code ‘C’x, hexadecimal reason code xxxx0C11 (IXLRSNCODEDEFINE).

Table 48. Return and reason codes for the IXLCONN macro (continued)		
Hexadecimal return code	Hexadecimal reason code	Equate symbol meaning and action
C	xxxx0C11	Equate Symbol: IXLRSNCODEDEFINE Meaning: Environmental error. The local vector requested on connect could not be defined on a TYPE=CACHE or TYPE=LIST request. Action: Consider one or more of the following actions: • Retry the request later. Many system conditions that prevent the definition of a local vector are dynamic and transient in nature. Retrying the request after waiting a short duration often results in the successful definition of a local vector. • When a large number of structure instances are allocated in the sysplex (e.g., 2048 or more structure instances), are connected to from the z/OS LPAR that the program is running on and the z/OS LPAR resides on a z15 or lower server, processor vector storage may become exhausted. This can be due to the number of vectors defined to connectors to the allocated structure instances on the LPAR and the LPAR model dependent limitations being reached. One of the following actions may be necessary by the installation: ○ Move some of the structure-specific workload off of the z/OS image where the local vector could not be defined to another z/OS image where vector definition errors are not being encountered - preferably to a z/OS image on a z16 or higher machine where more processor vector resources are available. ○ Move the entire z/OS image where the vector definition error was encountered to a z16 or higher machine where the system will have access to more model dependent vector storage.

z/OS MVS System Messages, Vol 10 (IXC-IZP) (SA38-0677)

Summary of changes:

- IXC291I (couple data set format utility error)

Message IXC291I

IXC291I *text*

Explanation

The XCF couple data set format utility program encountered an error in the DEFINEDS statement in the JCL for the program. The data set might not have been formatted.

In the message text:

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ITEM NAME(VERSION) NUMBER VALUE NOT VALID FOR INPUT PARAMETERS

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ITEM NAME(STR) NUMBER VALUE REQUIRES CDS VERSION 12 OR HIGHER

The NUMBER value given for ITEM NAME(STR) requires that the CFRM CDS be formatted for VERSION 12 or higher. Specify ITEM NAME(VERSION) with a NUMBER value of 12 or higher.

z/OS MVS System Codes (SA38-0665)

Under "Chapter 2 System Completion Codes" for **00C**:

Explanation

Cross-system coupling facility (XCF) encountered an error. See *z/OS MVS Diagnosis: Reference* for more information on diagnosing sysplex problems.

The reason code in register 15 is:

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11050043

Data space IXCDSMEY cannot be added to the PASN access list

13301001

Internal Error. If this error occurs, it is an indication that there is an error in an XCF CFRM couple data set sub record. This is an unrecoverable system error. XCF system task IXCLOTSK will exceed its restart count and the system will wait state with a wait state code 0A2 and reason code 009.

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0D0Exxx
Internal Error