
Rule CIC422: CFDT structure entry data was larger than input buffer length

Finding: The CICS Coupling Facility Data Table (CFDT) Pool Server statistics showed that CFDT structure entry data was larger than input buffer length.

Impact: This finding has a LOW IMPACT or MEDIUM IMPACT on the performance of the CICS region.

Logic flow: This is a basic finding, based on an analysis of the data. The finding applies only with CICS/Transaction Server for OS/390 Release 1.3, or for z/OS.

Discussion: A Coupling Facility Data Table is kept in a *named Pool* in an MVS coupling facility. A CFDT Pool consists of an XES list structure, which is accessed through a cross-memory queue server region. There can be multiple CFDT pools, each containing one or more CFDTs.

CFDT Pool server statistics for the coupling facility are available in MXG file CICCFS6D. CPExpert uses data in CICCFS6D to calculate the percent of requests that timed out, using the following algorithm:

$$\text{Percent requests that timed out} = \frac{S6RSP2CT}{S6RSP1CT + \text{Abnormal responses}}$$

where S6RSP1CT = Number of normal responses
S6RSP2CT = Number of requests that timed out
Abnormal = S6RSP2CT + S6RSP3CT + S6RSP4CT +
S6RSP5CT + S6RSP6CT + S6RSP7CT +
S6RSP8CT

S6RSP3CT = Specified entry not found
S6RSP4CT = Version check failed for entry being updated
S6RSP5CT = List authority comparison failed
S6RSP6CT = Maximum list key reached
S6RSP7CT = List structure was out of space
S6RSP8CT = Other IXLLIST return code occurred

CPExpert produces Rule CIC422 when the percent requests that timed out is greater than the value specified by the **CFPCTTIM** guidance variable in USOURCE(CICGUIDE). The default value for the **CFPCTTIM** is 1 indicating that CPExpert should produce Rule CIC422 whenever more than

one percent of the requests timed out because the request exceeded the coupling facility model-dependent time-out criteria.

Suggestion: If this finding is produced, you should consider the following alternatives:

- Review application use of CFDT pools to determine whether the IXLLIST commands can be issued with fewer actions against temporary storage entries. For example, the DELETE command might be issued more frequently to delete a smaller number of entries with each delete.
- Change the CFPCTTIM guidance variable in USOURCE(CICGUIDE) so Rule CIC422 is produced only when you wish to be aware of applications that cause a larger percent of coupling facility time-outs.
- You can specify **%LET CFPCTTIM = 100;** in USOURCE(CICGUIDE) to suppress this finding (the percent requests timed-out cannot be greater than 100), or you can “turn off” the rule using the process described in Section 3 of this User Manual.

Reference: *z/OS V1R1 MVS Programming: Sysplex Services Reference*
Section 42.0 IXLLIST -- List Services and following sections related to the list structure commands shown on Page 1 of this Rule Description

z/OS V1R2 MVS Programming: Sysplex Services Reference
Section 42.0 IXLLIST -- List Services and following sections related to the list structure commands shown on Page 1 of this Rule Description

z/OS V1R3 MVS Programming: Sysplex Services Reference
Section 42.0 IXLLIST -- List Services and following sections related to the list structure commands shown on Page 1 of this Rule Description

z/OS V1R4 MVS Programming: Sysplex Services Reference
Section 46.0 IXLLIST -- List Services and following sections related to the list structure commands shown on Page 1 of this Rule Description