
Rule CIC258: CICS Internal Trace Table might be too small

Finding: CPExpert has detected that the CICS Internal Trace Table might be too small.

Impact: This finding has a LOW IMPACT on the performance of the CICS region. However, the finding can have a HIGH IMPACT on the site's ability to research problems and determine their causes.

Logic flow: This is a basic finding, based upon an analysis of the System Initialization Table.

Discussion: The CICS Auxiliary Trace is a standard feature of CICS. The Auxiliary Trace gives an overview of transaction flows, and can be used to find situations that occur under full load.

The CICS Auxiliary Trace is intended to be used while debugging a CICS application or task. Auxiliary Trace can result in a **significant** overhead and it is not intended to be used in a normal production CICS region. Collecting and recording the performance and accounting data can require a significant amount of processor resources. The IBM *CICS Performance Guides* estimate that the overhead is likely to be over 25%, depending upon the workload.

The CICS Auxiliary Trace uses the CICS Internal Trace Table to store trace entries. The default size of the Internal Trace Table is 16K (defined in the SIT). This size often is too small to allow enough trace entries to be stored so that a comprehensive amount of trace data is stored.

CPExpert produces Rule CIC258 when less than 100K has been specified for the TRTABSZ keyword in the SIT. While IBM recommends a much larger value (see below), CPExpert believes that your site might have deliberately selected a smaller value. Since you have changed the default value of 16K to a larger value, CPExpert will produce Rule CIC258 only when the specified value is not significantly higher than the default.

Suggestion: The IBM Support Center suggests that the default 16K size of the Internal Trace Table be increased significantly. IBM Support Center personnel indicate that "most shops" run with 1-2M trace tables.

Reference: *CICS/ESA Version 3.3.1 System Definition Guide*: Section 3.1.5.

CICS/ESA Version 4.1.1 System Definition Guide: Section 3.1.6.

CICS/TS Release 1.1 System Definition Guide: Section 3.1.5.

CICS/TS Release 1.2 System Definition Guide: Section 3.1.5.

CICS/TS Release 1.3 System Definition Guide: Section 3.1.5.

CICS/TS for z/OS Release 2.1 System Definition Guide: (The system initialization parameter descriptions - TRTABSZ keyword).

CICS/TS for z/OS Release 2.2 System Definition Guide: (The system initialization parameter descriptions - TRTABSZ keyword). |

Thanks: David Ehresman (University of Louisville, KY) suggested this rule and provided the basic information. Thanks, David!