
Rule CIC256: CICS Monitoring Facility (Performance Class) was turned on

Finding: CPExpert has detected that the CICS Monitoring Facility (Performance Class) was turned on in the System Initialization Table (SIT).

Impact: This finding has a LOW IMPACT or MEDIUM IMPACT on the performance of the CICS region. Turning on the CICS Monitoring Facility (Performance Class) data can result in a large number of records written to the SMF file and result in significant overhead. IBM estimates that the overhead can range from 5% to 10%, depending upon the workload.

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

Discussion: The CICS/ESA Monitoring Facility data are written based on the setting of the MN, MNPER, MNEXE, and MNEVE keywords in the CICS System Initialization Table. There are three types of CICS Monitoring Facility data: *performance* class data, *exception* class data, and *SYSEVENT* data.

- The performance class data consist of detailed information at the transaction level. At least one performance class record is written for each CICS transaction.
- The exception class data consist of information on exceptional conditions experienced by a CICS transaction. These exceptional conditions primarily include waits for storage or files.
- The SYSEVENT class data consist of information which is used primarily to record transaction timing data. The SYSEVENT class includes the terminal ID and elapsed time of each CICS transaction.

The SYSEVENT class data are not applicable with CICS/ESA Version 4.1 if executing under the Workload Manager (MVS/ESA SP5 Goal Mode), as CICS provides the Workload Manager with detailed information about each transaction.

The CICS Monitoring Facility records can be extremely voluminous and can consume a significant part of the SMF file.

Additionally, collecting and recording the performance and accounting data can require a significant amount of processor resources. The IBM *CICS/ESA Performance Guides* estimate that the overhead is likely to be about 5% to 10%, depending upon the workload.

CPEXpert produces Rule CIC256 when MN=ON and MNPER=ON have been specified in the SIT, and the CPEXpert **PRODTEST** guidance variable in USOURCE(CICGUIDE) has been specified as "%LET PRODTEST=PROD" to indicate that the region is a production CICS region.

Suggestion: CPEXpert suggests that you consider terminating the collection of CICS Monitor Facility (Performance Class) data. According to the IBM *CICS Performance Guides*, Performance Class data is rarely required for a production CICS region.

However, you should be aware that transaction accounting information is suppressed if CICS Monitor Facility (Performance Class) data is suppressed. Many sites use transaction accounting information for billing or charging purposes. You **should not** suppress CICS Monitor Facility (Performance Class) data if you use transaction accounting information.

Reference: *CICS/MVS Version 2.1.2 Performance Guide*: pages 49 and 208.

CICS/ESA Version 3.1.1 Performance Guide: pages 147 and 273.

CICS/ESA Version 3.2.1 Performance Guide: pages 53 and 241.

CICS/ESA Version 3.3.1 Performance Guide: pages 63 and 259.

CICS/ESA Version 4.1.1 Performance Guide: Section 2.3 and Section 4.10.3.

CICS/TS Release 1.1 Performance Guide: Section 2.3 and Section 4.10.4.

CICS/TS Release 1.2 Performance Guide: Section 2.3 and Section 4.10.4.

CICS/TS Release 1.3 Performance Guide: Section 2.3 and Section 4.14.5.

CICS/TS for z/OS Release 2.1 Performance Guide: Chapter 6 (The CICS monitoring facility).

CICS/TS for z/OS Release 2.2 Performance Guide: Section 2.3 (The CICS monitoring facility)