Rule CIC192: The DMBPL specification may be too low

Finding: CPExpert believes that the DMBPL specification in the System Initialization Table (SIT) may be too low.

Impact: This finding should normally have a MEDIUM IMPACT or HIGH IMPACT on the performance of the CICS region.

Logic flow: This is a basic finding, based upon an analysis of the CICS statistics.

Discussion: The DMBPL operand in the SIT specifies the number of blocks in data management block (DMB) pool. CICS uses the value specified in the DMBPL operand to limit the total virtual storage allocated at any one time to the DMB pool. CICS does not reserve the amount of storage specified, but allocates and deallocates the storage as required.

If tasks must wait for DMB pool space, data bases are closed to make room for the new DMB to be loaded, and the new data base will be opened. This process will halt processing in the entire CICS region until the CLOSE/OPEN processing completes. Severe response degradation would normally result from halting processing in the CICS region. Additionally, the CICS region could experience higher and highly erratic CPU time for CICS Task Control.

CPExpert produces Rule CIC192 if there were any waits for DMB pool space.

Suggestion: CPExpert suggests that you increase the value of the DMBPL operand in the SIT to eliminate the waits for DMB pool space.

- Since CICS does not reserve the virtual storage for the DMB pool space, there is little danger in specifying additional space. However, there may be significant performance degradation if insufficient space is specified.

- If virtual storage is a constraint, consider limiting the number of tasks using IMS/VS (assigning them to a Task Class and using the CMXT operand to limit the number of tasks). The CICS Performance Guide suggests that you particularly consider limiting lengthy tasks and heavy update tasks.

Reference: *CICS/OS/VS Version 1.7 Performance* Guide: page 69 and pages 257-258.

CICS/MVS Version 2.1.2 Performance Guide: pages 182-183 and pages 398-399.

CICS/ESA Version 3.1.1 Performance Guide: pages 55-60 and pages 250-252.

CICS/ESA Version 3.2.1 Performance Guide: pages 172-174 and pages 276-280.

CICS/ESA Version 3.3.1 Performance Guide: pages 182-184 and pages 296-299.

CICS/ESA Version 4.1.1 Performance Guide: Section 4.5.5 and Appendix A.1.5.

CICS/TS: not applicable.

CICS/TS for z/OS: not applicable. |

