
Rule WLM109: Response time distribution for subsystem service class with percentile response performance goal

Finding: This rule provides information about the distribution of response times during those intervals when the identified service class missed its performance goal. This finding applies to service classes that are part of a subsystem (e.g., CICS transactions).

Impact: This finding has NO IMPACT on performance of your computer system. The finding is provided to allow you to assess the overall performance of service classes having an average response time performance goal.

Logic flow: The following rule causes this rule to be invoked:
Rule WLM105: Subsystem Service Class did not achieve percentile response goal

Discussion: For service classes with response goals, RMF includes in SMF Type 72 records a count of transactions that completed in varying percentages of the response goal. These transaction counts are recorded by RMF as the "Response Time Distribution Count Table" contained in SMF Type 72(Subtype 3) records. Section 4 describes the percentages recorded by RMF.

When CPExpert produces Rule WLM105, CPExpert automatically produces Rule WLM109 to provide a *summary* distribution of the response information. The purpose of Rule WLM109 is to allow you to assess whether the average response finding is meaningful, or whether there are some transactions that skew the averages.

Suggestion: Please refer to the documentation for Rule WLM107 for additional discussion of the distribution of response times and suggestions for alternative actions based on the results.

Rule WLM107 describes the potential of system problems that cause a bimodal distribution of response time. The systems problems would not be revealed by analyzing the "served" transaction service class (e.g., CICS or IMS transactions), since these transactions do not consume resources. Rather, the problems would be revealed by analyzing the "server" service class (e.g., a CICS or IMS region) since the "server" service class actually uses the resources in support of the "served" transaction service classes.