
Rule WLM002: Conflict exists between Service Class and Report Class

Finding: CPExpert has detected that the service policy being analyzed assigns a workload to a **Report Class**. However, the service policy member being analyzed contains a **Service Class** with the same name.

Impact: This finding should be viewed as NO IMPACT on the performance of your computer system. However, the workload information recorded by SMF may contain "double counting" of data. Consequently, the finding could have a HIGH IMPACT on accounting for the use of system resources, on billing for use of system resources, or on capacity planning efforts.

Logic flow: This is a basic finding. There are no predecessor rules.

Discussion: Two types of performance classes are reflected in data maintained by the Workload Manager: *service classes* and *report classes*.

- Service classes are used by the Workload Manager to determine whether performance goals are being met and to control the allocation of system resources to address spaces¹. A single transaction, job, Started Task, etc. can be controlled by only one service class (defined in the service policy).
- Report classes can be used to obtain information about the use of system resources at various levels of detail, based upon the specifications contained in the Workload Group definition of the service policy. Up to 999 report classes may be defined in a service policy, up to z/OS V1R11. Up to 2047 report classes may be defined with z/OS V1R11. Earlier versions of MVS allowed the assignment of a workload element to up to four report performance groups. With MVS/ESA SP5, a single transaction, job, Started Task, etc. can be assigned to only **one** report class.

The Workload Manager ISPF application does not verify that a report class has a unique name; a report class and a service class may be defined with the same name. Additionally, the Workload Manager does not verify that the report class and service class names describe the same workload. A

¹The Workload Manager may further classify service classes into "served" service classes and "server" service classes. CICS or IMS transactions may be placed into unique service classes, if CICS Version 4 or IMS Version 5 are installed. The Workload Manager will monitor the performance of the transactions against the goal and goal importance associated with their service class. However, the Workload Manager cannot assign resources to the "served" transactions, as the transactions do not directly represent address spaces. CICS or IMS regions act as "servers" for the transactions. If the "served" transactions are not meeting performance goals, the Workload Manager may assign resources to the "server" service class consisting of the CICS or IMS region(s). Please see Section 4 for additional discussion.

report class could have the same name as a service class, but the two classes could describe completely different workloads.

Double counting of resource usage in SMF post-processing can occur if a transaction is assigned to a report class and the same name for the report class is assigned to a service class. Double counting of resource usage could have a significant impact on overall accounting for the use of system resources, on billing for use of system resources, or on capacity planning efforts.

Additionally, analysts or managers can become confused when reviewing reports if the same name were to be used in describing different workloads.

The service policy being analyzed by CPEXpert contains a report class definition which has the same name as a service class. CPEXpert produces Rule WLM002 to alert you to this conflict.

The following example illustrates the output from Rule WLM002:

```
RULE WLM002:  CONFLICT EXISTS BETWEEN SERVICE CLASS AND REPORT CLASS

The Service Policy being analyzed (Policy EQUALHRD) contains a Report
Class which conflicts with a Service Class.  This conflict could cause
double accounting of system resources in reports which key off of the
class name.  This finding has no known effect on performance, but could
have a HIGH IMPACT on accounting, billing, or capacity planning.  The
following Report Class conflicts with a Service Class of the same name:

      REPORT CLASS
      IMS
      IMS1
      TSO
```

Suggestion: CPEXpert strongly suggests that you eliminate the conflict between the report class and service class in the service definition.

Reference: MVS Planning: Workload Management

z/OS (V1R7):	Chapter 10: Defining Report Classes
z/OS (V1R8):	Chapter 10: Defining Report Classes
z/OS (V1R9):	Chapter 10: Defining Report Classes
z/OS (V1R10):	Chapter 10: Defining Report Classes
z/OS (V1R11):	Chapter 10: Defining Report Classes
z/OS (V1R12):	Chapter 10: Defining Report Classes
z/OS (V1R13):	Chapter 10: Defining Report Classes
z/OS (V2R1):	Chapter 10: Defining Report Classes
z/OS (V2R2):	Chapter 10: Defining Report Classes