WLM: the SYSTEM service class

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Abstract

The Workload Manager (WLM) is an essential component of the z/OS environment.
Its role is to classify the system workloads in user defined service classes and to manage those workloads towards the importance and the goal set for each service class period by the user.

However there are two service classes which are not created by the user: SYSTEM and SYSSTC[1].
These service classes always exist in a z/OS system.

An important characteristic of these service classes is that they don't have a goal so you can't measure a Performance Index for them. They are managed with a very high fixed Dispatching Priority (DP) and I/O Priority (IOP):

- SYSTEM gets 255 for both DP and IOP; this is the highest possible priority; it is used for operative system address spaces;
- SYSSTC gets 254 for both DP and IOP; it is generally used for highly important started tasks processing.

In this paper we will focus on the SYSTEM service class to discuss:

- what is classified in SYSTEM by default;
- what the user can and should do;
- what performance measurements are available and how they can be used.

[1] A third system-provided service class SYSOTHER is used as default service class for non-STC address spaces when no classification rules exist for the subsystem type. It is assigned a discretionary goal.