IBM Education Assistance for z/OS V2R1

Item: Greater 999 WLM Application Environments
Element/Component: z/OS WLM
Agenda

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Trademarks

Presentation Objectives

- The limit of application environments defined in the WLM service definition is raised from 999 to 3000
Overview

- Problem Statement / Need Addressed
  - Especially with large SAP DB2 environments, the limitation to 999 application environments (AEs) in the WLM service definition could become too low

- Solution
  - The limit is raised from 999 to 3000 AEs

- Benefit / Value
  - Customers with large DB2 environments will benefit from the raised limit
  - Especially during roll-out of a new DB2 version and temporarily needing AEs for the previous and new version of DB2, more than 999 AEs might become necessary
  - Customers operating several sysplexes but keeping all definitions in one single WLM service definition might also need more than 999 AEs
Usage & Invocation

- An application environment is a named entity which allows WLM to start server address spaces for scalable client/server type applications. One of the main exploiters of this function are DB2 Stored Procedures.

- The application environments are defined in the WLM service definition. The main purpose of such a definition is to tell WLM the name of the start procedure to start a new server address space when needed.

- With the WLM ISPF application, customers can now define up to 3000 application environments in their service definition.
Migration & Coexistence Considerations

- No toleration/coexistence PTF needed on z/OS V1R12 and V1R13
- As soon as more than 999 AEs are defined with the z/OS V2R1 WLM ISPF Application or with z/OSMF V2R1, the functionality level of the service definition is raised to LEVEL029
  - Any service definition at functionality level 29 cannot be extracted, displayed, modified, installed, or activated by an WLM ISPF Application prior z/OS V2R1
  - If a service definition at LEVEL029 is installed to the WLM Couple Data Set by z/OS V2R1, systems with z/OS V1R12 and V1R13 of the same sysplex can activate the policy
Installation

- Customers with a need for more than 999 AEs must allocate a Couple Data Set for WLM which can hold the required number of AE objects
  - This is achieved by performing the **Allocate couple data set using CDS values** task in the WLM ISPF application
    - If a service definition with more AEs than allowed for the current WLM couple data set would be installed, the WLM ISPF application displays message **IWMAM047 WLM couple data set is too small to hold the service definition**
  - Customers can also allocate a WLM couple data set by running some JCL as provided in the IWMFTCDS member of SYS1.SAMPLIB
    - Fill in a number for item APPLENV up to 3000
    - Run the job on any z/OS V2R1 system in the sysplex
Presentation Summary

- WLM supports a much higher number of Application Environments
  - The Couple Data Set for WLM can now be allocated to contain up to 3000 entries for application environments
  - The WLM ISPF Application is enhanced to allow up to 3000 application environments in the WLM service definition
  - The WLM task in z/OSMF is enhanced accordingly
Appendix

- Publication references
  - MVS Planning: Workload Management, SA22-7602, chapter 16 and 21
  - MVS Setting Up a Sysplex, SA22-7625, chapter 10