Basic z/OS Tuning Using the Workload Manager

Dauer: 5 Tage Kursnummer: ES54G

Überblick:
Do you need to know how to establish a practical performance management program for your z/OS system? This course is designed for new performance analysts to learn to work with the Workload Manager (WLM) in goal mode. Learn concepts of WLM and performance management in the z/OS system using the WLM. Learn how to analyze Resource Monitoring Facility (RMF) reports and implement service definitions via the WLM Interactive System Productivity Facility (ISPF) application. The course uses both z/OS hands-on lab exercises and RMF case studies to reinforce the concepts and techniques discussed in lecture.

Wer soll teilnehmen?:
This is an intermediate course for z/OS system programmers, z/OS performance analysts, and z/OS performance administrators new to performance management for their z/OS system. Note: ES54 is intended for individuals new to WLM and the z/OS performance area.

Kursziel:
- Describe a performance and tuning methodology
- Develop a systematic z/OS performance and tuning plan
- Describe the factors which could affect the performance of a z/OS system
- Use the WLM ISPF application
- Describe the components of a service definition
- Define workloads and service levels and classification rules
- State which z/OS commands affect WLM operation
- Identify the major WLM services for z/OS, including enclaves and application environments, and how they are used by DB2, WebSphere and CICS
- Analyze CPU performance when running in a shared LPAR environment
- Measure and tune z/OS DASD, processor storage, and coupling facility configurations
- Explain the functions and facilities of RMF and SMF
- Analyze performance bottlenecks using RMF
- Use Workload License Charges (WLC), defined capacity and soft capping to manage software costs
- Describe advanced z/OS environments that utilize Intelligent Resource Director (IRD) and Enterprise Workload Manager (EWLM)

Voraussetzungen:
- Understand basic MVS / z/OS operation, such as job flow through JES, job scheduling paging, swapping, dispatching controls, I/O scheduling.
- Have a basic knowledge of the purpose of the Workload Manager’s function in managing system workloads.
- Be familiar with using TSO and ISPF to manage data sets and run batch jobs
- z/OS Basisausbildung (ES10D3DE)
- z/OS Facilities (ES15D0DE)
- z/OS - Grundlagen für Systemprogrammierer - Praktikum (ES40D2DE)
Detaillierte Kursbeschreibung:

Tuning methodology
- describe the basic terms in the process of tuning and system structure
- outline the tuning methodology, including the factors affecting performance and the individual steps in analyzing system performance

Basic system workload management
- use WLM dialog to create/modify service definitions
- create service class goals and classification rules to manage a complex z/OS workload

SMF and RMF
- set up collection and utilize SMF data
- implement and analyze RMF measurements for Monitors I, II, and III
- utilize the RMF Spreadsheet Reporter and RMF Performance Management

CPU performance when running in a shared LPAR environment
- utilize zSeries processor metrics and LPAR weights
- analyze RMF CPU and LPAR reports
- describe the functionality of zAAP processors

WLM commands, internals and services
- understand the behavior and operation of WLM services, including enclaves, application environments, execution delay monitoring, and their use by DB2, WebSphere and CICS
- optimize the use of WLM-managed initiators

Measure and tune z/OS DASD and processor storage
- understand DASD configurations in order to analyze RMF DASD reports
- interpret RMF paging and virtual storage reporting

Additional Topics - Coupling Facility, Intelligent Resource Director (IRD), Global Resource Serialization (GRS), Workload License Charges (WLC), and Enterprise Workload Manager (EWLM)
- analyze RMF coupling facility reports through an understanding of how a CF operates in a parallel sysplex
- understand the basic functionality, terminology and benefits of Intelligent Resource Director (IRD)
- state how GRS operations can be tuned for optimal z/OS performance
- utilize WLC, defined capacity, and the sub-capacity reporting tool to optimize software charges
- describe how WLM implements soft capping
- understand the operation and usage of EWLM and its relationship to z/OS WLM

Weitere Informationen:
Für weitere Informationen oder Buchung kontaktieren Sie uns bitte unter 01/66 55 655 3000 info@globalknowledge.at www.globalknowledge.at

Global Knowledge Network GmbH, Gutheil-Schoder Gasse 7a, A-1101 Wien