Power Systems for AIX - Virtualization II: Advanced PowerVM and Performance

Duration: 5 Days   Course Code: AN31G

Overview:

Learn to implement advanced PowerVM features such as Active Memory Sharing, Shared Dedicated Processors, Multiple Shared Processor Pools, N_Port Virtualization, and Remote Live Partition Mobility.
This course focuses on the features that relate to the performance of the POWER6 processor, AIX 6.1, and the special monitoring, configuring, and tuning needs of logical partitions (LPARs). This course does not cover application monitoring and tuning.
You will learn skills to implement, measure, analyze, and tune PowerVM virtualization features for optimal performance on IBM System p servers.
You will also learn about the AIX 6.1 performance analysis and tuning tools that enable an administrator to take advantage of the Micro-Partitioning and other virtualization features of the System p servers.
Hands-on lab exercises reinforce each lecture and give the students practical experience.

Target Audience:

This course is for anyone responsible for implementing and managing virtualization features on a System p server including: AIX technical support individuals System administrators Systems engineers System Architects

Objectives:

- Describe the effect of the POWER6 virtualization features on performance and monitoring, such as: Simultaneous Multithreading (SMT), Micro-Partitioning, Multiple Shared Processor Pools (MSPP), shared dedicated capacity, Active Memory Sharing (AMS) and other virtualization features

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- Interpret the outputs of AIX 6.1performance monitoring and tuning tools used to view the impact of SMT, Micro-Partitioning, additional shared processor pool activations and device virtualization. The tools include: vmstat, iostat, sar, topas, trace, curt, mpstat, lparstat, smtctl

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- List various sources of information and support related to AIX 6.1 performance tools, system sizing, system tuning, and AIX 6.1 enhancements and new features

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- Perform a Live Partition Mobility between two different POWER6 servers

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- Describe the New features available with the Virtual I/O Server version 2.1 and version 2.2 such as: N_port ID Virtualization, Heterogeous Multi-threading, Virtual Tape devices, Active Memory sharing

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- Describe and implement the Active Memory Sharing feature

Prerequisites:

Students should complete:

- Power Systems for AIX I: LPAR Planning and Configuration (AN11) or (AX11) or
- Power Systems for AIX - Virtualization I: Implementing Virtualization (AN30) or (AX30)
or have equivalent LPAR skills

Content:

Day 1

- Unit 1 - PowerVM features Review

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- Unit 2 - Processor Virtualization Tuning
- Exercise 2 - SMT and Micro-Partitioning
- Unit 3 - Shared Dedicated Capacity and Multiple Shared Processor Pools
- Exercise 3 - Configuring Multiple Shared Processor Pools
- Unit 4 - Active Memory Sharing
- Exercise 4 - Configuring Active Memory Sharing
- Unit 5 - N_Port ID Virtualization (NPIV)
- Unit 6 - I/O Devices Virtualization Performance and Tuning
- Exercise 6 - Virtual I/O Server, vSCSI, Virtual Ethernet and shared Ethernet Adapter
- Unit 7 - Live Partition Mobility
- Exercise 7 - Live Partition Mobility implementation
- Unit 8 -PowerVM Advanced System Maintenance
- Unit 9 - Virtualization Management Tools

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- Exercise 4 - Configuring Active Memory Sharing (con't)

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- Exercise 2 - SMT and Micro-Partitioning (con't)

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- Exercise 8 - PowerVM Maintenance

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Day 4

- Exercise 6 - Virtual I/O Server, vSCSI, Virtual Ethernet and shared Ethernet Adapter (con't)

Further Information:

For More information, or to book your course, please call us on 00 20 (0) 2 2269 1982 or 16142

training@globalknowledge.com.eg

www.globalknowledge.com/en-eg/

Global Knowledge, 16 Moustafa Refaat St. Block 1137, Sheraton Buildings, Heliopolis, Cairo