

Power Systems for AIX - Virtualization I: Implementing Virtualization

Duration: 5 Days Course Code: AN30G

Overview:

This course provides an overview of the PowerVM edition's features on POWER6 and POWER7 processor-based systems. It explains the new features and benefits of virtualization including processor virtualization, Integrated Virtual Ethernet, Virtual I/O Server, and virtual devices, such as virtual Ethernet, virtual SCSI, and virtual Fibre Channel adapters. Basic and advanced configurations of the Virtual I/O Server and its clients are discussed including various availability options.

Expand your knowledge about PowerVM features that were introduced in *Power Systems for AIX I: LPAR Configuration and Planning (AN110)* / *Power Systems for AIX I: LPAR Configuration and Planning (ILO) (AX110)*.

This course provides lectures and hands on labs in a face-to-face classroom setting. The course is also offered in a live virtual classroom environment (ILO - Instructor Led Online) with hands-on labs *Power Systems for AIX - Virtualization I: Implementing Virtualization (ILO) (AX301)*.

Target Audience:

This advanced course is appropriate for System Administrators, Technical Support Personnel, and Business Partners responsible for implementing LPARs on IBM Power Systems with AIX servers.

Objectives:

- Discuss the advantages or value of PowerVM edition's features
- Define micro-partitioning and shared processor LPARs
- Discuss the benefits of simultaneous multithreading
- Discuss and configure the Integrated Virtual Ethernet (IVE)
- Install and configure the Virtual I/O Server
- Configure virtual network devices, such as virtual Ethernet and shared Ethernet adapters
- Configure virtual SCSI and virtual Fibre Channel storage adapters
- Configure virtual SCSI target devices on a virtual SCSI adapter
- Define file-backed storage pools and file-backed virtual optical devices
- Identify single points of failure in virtualized environments
- Configure multiple VIO servers for high availability
- Configure advanced virtual networking options
- Configure the shared Ethernet adapter failover feature
- Configure advanced virtual SCSI options
- Configure MPIO in a VIO server's client partition
- Manage the service events, configure call home, add, exchange FRUs, and discuss FSP failover
- Perform PowerVM (VIOS) Maintenance

Prerequisites:

You should have advanced system administration experience with AIX 5.3 or later. This prerequisite may be met by attending one of the following courses:

- *Power Systems for AIX II: AIX Implementation and Administration (AN120)* or *Power Systems for AIX II: AIX Implementation and Administration (ILO) (AX120)*
- *AIX Jumpstart for UNIX Professionals (AN140)* or *AIX Jumpstart for UNIX Professionals (ILO) (AX140)*

■ or you must have equivalent AIX and LPAR skills.
General TCP/IP knowledge is strongly recommended. This prerequisite may be met by attending *AIX 5L TCP/IP I: Configuration (AU070)* or *TCPIP for AIX Administrators (AN210)* / *TCPIP for AIX Administrators (ILO) (AX210)*.

You are also expected to have logical partition administration skills on POWER6 or POWER7 processor-based systems, which can be obtained by attending *Power Systems for AIX I: LPAR Configuration and Planning (AN110)* or *Power Systems for AIX I: LPAR Configuration and Planning (ILO) (AX110)*.

Content:

Day 1

- Unit 1: Introduction to partitioning
- Exercise 1: Power System documentation overview
- Unit 2: Processor virtualization
- Exercise 2: Processor virtualization configuration

Day 2

- Unit 3: Integrated Virtual Ethernet
- Exercise 3: Integrated Virtual Ethernet configuration
- Unit 4: Virtual Ethernet
- Exercise 4: Virtual Ethernet Adapter configuration
- Unit 5 - Topic 1: Virtual I/O Server and virtual devices
- Exercise 5 - Topic 1: Virtual I/O Server and client partition configuration

Day 3

- Unit 5 - Topic 2: Virtual I/O Server and virtual devices
- Exercise 5 - Topic 2: Virtual I/O Server and client partition configuration
- Unit 6: Virtual network configurations with dual VIOS
- Exercise 6: Shared Ethernet adapter failover setup

Day 4

- Unit 7: Virtual SCSI configurations with dual VIOS
- Exercise 7: Dual VIO servers configuration with MPIO in the client partition
- Unit 8: N_Port ID Virtualization
- Exercise 8: Virtual Fibre Channel adapter configuration
- Unit 9: Migration from Physical to Virtual Storage

Day 5

- Unit 10: HMC Service Management.
- Exercise 9: Manage Service Events
- Unit 11: PowerVM advanced systems maintenance
- Exercise 10: PowerVM system maintenance
- Exercise 11: (Optional) file-backed virtual disk and virtual media repository configuration

Further Information:

For More information, or to book your course, please call us on 0800/84.009

info@globalknowledge.be

www.globalknowledge.be