Power Systems for AIX - PowerVM I Implementing Virtualization

Course code: AN30G

This course provides an overview of the PowerVM edition's features on POWER processor-based systems. It explains the new features and benefits of virtualization including processor virtualization, 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 (AN11G).This course provides lectures and hands on labs in an instructor lead course environment, either in a face-to-face classroom or in a live virtual classroom environment (ILO - Instructor Led Online).

Who is the course for

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.

What we teach you

- Configure virtual SCSI devices that are backed by physical volumes, logical volumes, and optical media devices
- Configure the Optical Media Repository, load a CD image, and use it to install a new AIX partition
- Configure virtual Fibre channel devices using NPIV technology
- Configure Ethernet link aggregation for load balancing and backup channel in the VIOS
- Configure Shared Ethernet adapter failover and load sharing
- Configure vNIC failover
- Perform Virtual I/O Server maintenance operations

Required skills

You must have advanced system administration experience with AIX 6 **or** AIX 7. This prerequisite can be met by attending

one of the following courses:

Power Systems for AIX II: Implementation and Administration (AN12G)

Power Systems for AIX III: Advanced Administration and Problem Determination (AN15G)

AIX Jumpstart for UNIX Professionals (AN14G)

Alternatively, you must have equivalent AIX **and** LPAR skills.

General TCP/IP knowledge is strongly recommended.

You are also expected to have logical partition administration skills on Power Systems servers, which can be obtained by

attending Power Systems for AIX I: LPAR Configuration and Planning (AN11G).

Teaching materials

IBM guide book for this course.

Course outline

- Unit 1: Introduction to partitioning
- Exercise 1: Power Systems documentation overview
- Unit 2: HMC V8 enhancements
- Exercise 2: HMC enhanced interface
- Unit 3: Processor virtualization
- Exercise 3: Processor virtualization configuration
- Unit 4: Virtual Ethernet
- Exercise 4: Virtual Ethernet adapter configuration
- Unit 5: Virtual I/O Server and Shared Ethernet Adapter
- Exercise 5: Virtual I/O Server configuration
- Unit 6: Virtual SCSI devices
- Exercise 6: Client partition configuration
- Unit 7: Virtual network configuration with dual VIOS

- Exercise 7: SEA failover setup
- Unit 8: Virtual SCSI configurations with dual VIOS
- Exercise 8: Dual VIO server configuration with MPIO in the client partition
- Unit 9: Virtual Fibre Channel devices
- Exercise 9: Virtual Fibre Channel adapter configuration
- Unit 10: HMC Service Management
- Exercise 10: Manage service events
- Unit 11: PowerVM advanced systems maintenance
- Exercise 11: PowerVM system maintenance
- Exercise 12: (Optional) File-backed virtual SCSI devices