IBM PowerVM: Implementing Virtualization

Duration: 5 Days **Course Code: AN30G** **Delivery Method: Virtual Classroom**

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.

Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

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)
- or you must have equivalent AIX and LPAR skills

General TCP/IP knowledge is strongly recommended. This prerequisite may be met by attending TCPIP for AIX Administrators (AN210).

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

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

Additional Information:

Training Paths that reference this course are: Cloud Foundation: Power, AIX Virtualization, IBM Power systems for AIX virtualization

Further Information:

For More information, or to book your course, please call us on 00 966 92000 9278

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