

## **AN30G**

### **Power Systems for AIX - PowerVM I Implementing Virtualization**

Durata: 5 gg

#### **Descrizione**

This course provides an overview of the PowerVM edition's features on POWER6, POWER7, and POWER8 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).

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

#### **A chi è rivolto?**

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.

#### **Prerequisiti**

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. This prerequisite can be met by attending TCP/IP for AIX Administrators (AN21G).

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).

## **Contenuti**

- 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