

AIX LPAR Administration

Course Summary

Description

This course describes how to configure and administer LPARs in a Power Systems environment using the Hardware Management Console (HMC) and is equivalent to the IBM AN110 course.

Objectives

By the end of this course, students will be able to:

- Understand Partitioning concepts on Power-based systems
- Configure and manage the Hardware Management Console (HMC)
- Understand how to associate and allocate resources to partitions
- Understand physical and AIX location codes and how they relate to physical hardware components
- Use the HMC to backup and restore partition data
- Perform dynamic LPAR operations

Topics

- Introduction to partitioning
- Hardware system overview
- Hardware management console
- Hardware management console maintenance
- System power management
- Planning and configuring logical partitions
- Partition operations
- Dynamic LPAR operations

Prerequisites

Student should have completed the AIX Essentials course or have equivalent experience using AIX. The student should have also attended an AIX system administration course or have equivalent experience administering an AIX system.

Duration

Three days

AIX LPAR Administration

Course Outline

- I. Introduction to partitioning**
 - A. understand partitioning concepts: dynamic logical partitioning, micro-partitioning, shared processor pool, virtual I/O, capacity on demand
 - B. understand the functions provided by the HMC
 - C. describe the functions performed by the Power hypervisor
 - D. describe the process for configuring partitions
- II. Hardware system overview**
 - A. identify the elements and hardware components of the Power processor-based system
 - B. describe the function of the service processor
 - C. describe physical location codes and naming conventions
 - D. display location codes
- III. Hardware management console**
 - A. list the functions of the HMC
 - B. connecting to the HMC
 - C. the web-based management console and the user interface
 - D. the setup wizard and configuration options
 - E. add a managed system to the HMC console
 - F. reboot the HMC
 - G. configure the HMC network parameters
 - H. create HMC users
 - I. assigned task roles and managed resource roles
 - J. configure remote access options on the HMC
 - K. enable and disable the remote virtual console
 - L. use the HMC command line
 - M. understand security options on the HMC
- IV. Hardware management console maintenance**
 - A. backup HMC console data
 - B. schedule regular critical console backups
 - C. understand how to upgrade the HMC and install firmware updates
- V. System power management**
 - A. power on a managed system using normal, system profile, or hardware discovery
 - B. power off the managed system
 - C. enable power saver mode
- VI. Planning and configuring logical partitions**
 - A. understand a minimum partition configuration, the maximum number of partitions, partition IDs and naming conventions, partition profiles
 - B. understand basic processor and memory configuration options
 - C. define minimum, maximum and best practice settings for memory and processors
 - D. describe I/O concepts and the best practice configuration settings
 - E. use the partition creation Wizard to create a basic partition and the default profile
 - F. edit a partitions configuration
- VII. Partition operations**
 - A. activate and shutdown partitions
 - B. modify, copy, and delete partition profiles
 - C. create, modify, delete and activate system profiles
 - D. "terminal windows
 - E. change partition availability priority
 - F. backup and restore a partition profile
 - G. troubleshoot partition activation errors
- VIII. Dynamic LPAR operations**
 - A. understand the system requirements for dynamic logical partitioning (DLPAR)
 - B. dynamically remove, add, and move processors, memory and I/O slots to and from partitions.
 - C. Perform the operating system functions necessary to dynamically add and remove I/O slots
 - D. use HMC commands to perform DLPAR operations in West hardware resources
 - E. schedule DLPAR operations
 - F. troubleshoot DLPAR operation errors