Power Systems for AIX - Virtualization II: Advanced PowerVM and Performance
Information

Length:	4.5 Days
Ref:	AN31G
Delivery method:	ClassroomInstructor Led Online
Price:	EUR

Overview

You will learn how to implement advanced IBM PowerVM features, such as Active Memory Sharing, Active Memory Expansion, shared dedicated processors, and multiple shared processor pools.

Additionally, you will learn skills to implement, measure, analyze, and tune PowerVM virtualization features for optimal performance on IBM Power Systems servers. This course focuses on the features that relate to the performance of IBM POWER processor-based systems, AIX, and the special monitoring, configuring, and tuning needs of logical partitions (LPARs). This course does not cover application monitoring and tuning.

You will also learn AIX performance analysis and tuning tools that help an administrator take advantage of shared processors and other virtualization features of the IBM Power Systems servers.

Hands-on lab exercises reinforce each lecture and give the students practical experience.

Public

This course is for anyone responsible for the system administrative duties implementing and managing virtualization features on a System p server. The audience for this training includes the following:

- AIX technical support individuals
- System administrators
- Systems engineers
- System architects

Prerequisits

The LPAR prerequisite skills can be met by attending one of the following classes**or** you can have equivalent LPAR skills:

- *Power Systems for AIX - Virtualization I: Implementing Virtualization (AN30G)*

Objective

- Describe the effect of the IBM PowerVM virtualization features on performance and monitoring, such as:
    - Simultaneous multithreading (SMT), shared processors, virtual processors, multiple shared processor pools (MSPP), shared dedicated capacity, Active Memory Sharing (AMS), Active Memory Expansion (AME)

- Interpret the outputs of AIX performance monitoring and tuning tools used to view the impact of features such as SMT, shared processors, additional shared processor pool activations, and device virtualization
- Configure and monitor Active Memory Expansion
- Configure the Suspend and Resume and Active Memory Sharing features
- Implement the deduplication feature of Active Memory Sharing

Topics

Day 1

- Welcome
- Unit 1: PowerVM features review
- Exercise 1: Introduction to the lab environment
- Unit 2: Shared processors and virtual processor tuning Exercise 2: Shared processors and virtual processor tuning

Day 2

- Unit 3: Multiple shared processor pools and donating dedicated processors
- Exercise 3: Multiple shared processor pools and donating dedicated processors
- Unit 4: Active Memory Sharing Exercise 4: Active Memory Sharing

Day 3

- Exercise 4: Active Memory Sharing (continued)
- Unit 5: Suspend and Resume Exercise 5: Suspend and Resume Unit 6: Active Memory Expansion Exercise 6: Active Memory Expansion

Day 4

- Unit 7: Virtual storage performance
- Exercise 7: Virtual storage performance Unit 8: Virtual network performance

Day 5

- Exercise 8: Virtual network performance
- Unit 9: Virtualization monitoring and performance management tools Exercise 9: Using the Virtual I/O Server Performance Analysis Reporting Tool
- Wrap up/Evaluations