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

**Duration: 5 Days    Course Code: AN31G**

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### Overview:

Students in this course will learn how to implement advanced IBM PowerVM features, such as Active Memory Sharing, Active Memory Expansion, shared dedicated processors, multiple shared processor pools, and Live Partition Mobility. Additionally, students 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 POWER6 and POWER7 processors, AIX, and the special monitoring, configuring, and tuning needs of logical partitions (LPARs). This course does not cover application monitoring and tuning. Students 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.

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### Target Audience:

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

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### Objectives:

- Implement the deduplication feature of Active Memory Sharing
  - Configure the Suspend and Resume and Active Memory Sharing features available with the Virtual I/O Server
  - Configure and monitor Active Memory Expansion
  - Perform a Live Partition Mobility between two Power Systems servers
  - 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- Simultaneous multithreading (SMT), shared processors, multiple shared processor pools (MSPP), shared dedicated capacity, Active Memory Sharing (AMS), Active Memory Expansion (AME), Live Partition Mobility (LPM), and other virtualization features
  - Describe the effect of the IBM PowerVM virtualization features on performance and monitoring, such as
- After completing this course, the students should be able to:
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### Prerequisites:

The LPAR prerequisite skills can be met by attending one of the following classes or students can have equivalent LPAR skills.

- AN11 Power Systems for AIX I: LPAR Configuration and Planning
  - AN30 Power Systems for AIX - Virtualization I: Implementing Virtualization
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## Content:

Day 1	Unit 4: Active Memory Sharing	Exercise 6: I/O device virtualization performance and tuning
Welcome	Exercise 4: Active Memory Sharing	Unit 7: Live Partition Mobility
Unit 1: PowerVM features review	Day 3	Exercise 7: Live Partition Mobility
Exercise 1: Introduction to the lab environment	Exercise 4: Active Memory Sharing (continued)	Day 5
Unit 2: Shared processors and virtual processor tuning	Unit 5: Active Memory Expansion	Unit 8: Suspend and resume
Exercise 2: Shared processors and virtual processor tuning	Exercise 5: Active Memory Expansion	Exercise 8: Suspend and resume
Day 2	Unit 6: I/O device virtualization performance and tuning	Unit 9: Virtualization management tools
Unit 3: Configuring multiple shared processor pools and donating dedicated processors	Day 4	Wrap up/Evaluations
Exercise 3: Configuring multiple shared processor pools and donating dedicated processors	Unit 6: I/O device virtualization performance and tuning (continued)	

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## Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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