

## **AIX6 System Administration Update**

### **Course Summary**

#### **Description**

This course combines lectures and hands-on exercises that teach the skills necessary to install and manage AIX Version 6.1 in a fully virtualized POWER6 hardware environment. It includes training on new and enhanced features in AIX, the HMC, and POWER6 platform hardware.

#### **Objectives**

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

- Install and manage a typical AIX 6.1 system LPAR.

#### **Topics**

- PowerVM - Virtualization Enhanced
- AIX6 Installation
- AIX6 New Features
- Integrated Virtual Ethernet
- Workload Partitions
- Live Partition Mobility
- The System Planning Tool

#### **Audience**

This course is designed for experienced AIX V5 system administrators who will manage IBM's AIX 6.1 operating system in a virtualized environment.

#### **Prerequisites**

Students should have strong background working with the AIX V5 operating system, including experience configuring Logical Partitions (LPARs), Virtual IO Servers (VIOs), and working with the Hardware Management Console V6 (HMC6) and POWER4 or POWER5 platform machines.

#### **Duration**

2.5 days

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### **Course Outline**

- I. PowerVM – Virtualization Enhanced**
  - A. PowerVM Offerings
  - B. Shared Dedicated Processors
  - C. Multiple Shared Processor Pools
  - D. N-Port ID Virtualization
  - E. Live Partition Mobility
  - F. The Host Ethernet Adapter
- II. AIX6 Installation**
  - A. 64 bit Kernel Only
  - B. Trusted AIX
- III. AIX6 New Features**
  - A. JFS2 Internal Snapshots
  - B. File System Encryption
  - C. Systems Director Console
  - D. Concurrent Update
  - E. Restricted Performance Tunables
  - F. Enhanced Role Based Access Control (RBAC)
- IV. Integrated Virtual Ethernet**
  - A. What Is It
  - B. Different Feature Codes
  - C. Port Assignment
  - D. Multi Core Scaling (MCS)
- V. Workload Partitions**
  - A. Why WPARs
  - B. WPAR vs LPAR
  - C. System WPARs
  - D. Application WPARs
  - E. Creation Options
  - F. Managing WPARs
  - G. WPAR Mobility
- VI. Live Partition Mobility**
  - A. How LPM Works
  - B. LPM is Not an Availability Solution
  - C. Requirements for LPM
  - D. The Validation Process
  - E. Adapter Numbering Issues
- VII. The System Planning Tool**
  - A. Enhanced Functionality
  - B. Where to get the SPT
  - C. Creating a System Plan
  - D. Deploying a System Plan
  - E. Using the SPT from an HMC
- E. Application Recommendations**

## Agenda (Draft)

- Session 1:**    **Introductions**  
                  **Lecture - *PowerVM – Virtualization Enhanced***  
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                  **Lecture - *AIX6 Installation***
- Session 2:**    **Lecture - *AIX6 New Features***  
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                  **LAB - *AIX6 New Features***
- Session 3:**    **Lecture - *Integrated Virtual Ethernet***  
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                  **Lecture - *Workload Partitions***  
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                  **LAB – *Workload Partitions***
- Session 4:**    **LAB: - *Workload Partitions (contd)***  
                  **Lecture - *Live Partition Mobility***  
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                  **Lecture - *The System Planning Tool***
- Session 5:**    **LAB - *System Planning Tool***  
                  **Conclusion/Questions**