

Power Systems for AIX III: Advanced Administration and Problem Determination

AN15G



Delivery Type: Classroom

Duration: 5 days

Overview

This course provides advanced AIX system administrator skills with a focus on availability and problem determination. It provides detailed knowledge of the ODM database where AIX maintains so much configuration information. It shows how to monitor for and deal with AIX problems. There is special focus on dealing with Logical Volume Manager problems, including procedures for replacing disks. Several techniques for minimizing the system maintenance window are covered. It also covers how to migrate AIX Workload Partitions to another system with minimal disruption. While the course includes some AIX 6.1 enhancements, most of the material is applicable to prior releases of AIX.

Pre-Requisites

You should have basic AIX System Administration skills. These skills include:

- ✓ Use of the Hardware Management Console (HMC) to activate a logical partition running AIX and to access the AIX system console

- ✓ Install an AIX operating system from an already configured NIM server
- ✓ Implementation of AIX backup and recovery
- ✓ Manage additional software and base operating system updates
- ✓ Familiarity with management tools such as SMIT
- ✓ Understand how to manage file systems, logical volumes, and volume groups
- ✓ Understand basic Workload Partition (WPAR) concepts and commands (recommended for the WPAR Manager content)
- ✓ Mastery of the UNIX user interface including use of the vi editor, command execution, input and output redirection, and the use of utilities such as grep
- ✓ These skills could be developed through experience or by formal training. Recommended training courses to obtain these prerequisite skills are either of the following:
- ✓ Power Systems for AIX III: Advanced Administration and Problem Determination (AN12) and its prerequisites
- ✓ AIX System Administration I: Implementation (AU14) and its prerequisites. (Note that AU14 does not cover WPARs)

If the student has AIX system administration skills, but is not familiar with the LPAR environment, those skills may be obtained by attending either of the following:

- ✓ System p Virtualization I: Planning and Configuration (AU73) / (Q1373)
- ✓ Power Systems Administration I: LPAR Configuration (AN11)

Objectives

- ✓ Perform system problem determination and reporting procedures including analyzing error logs, creating dumps of the system, and providing needed data to the AIX Support personnel
- ✓ Examine and manipulate Object Data Manager databases
- ✓ Identify and resolve conflicts between the Logical Volume Manager (LVM) disk structures and the Object Data Manager (ODM)
- ✓ Complete a very basic configuration of Network Installation Manager to provide network boot support for either system installation or booting to maintenance mode
- ✓ Identify various types of boot and disk failures and perform the matching recovery procedures
- ✓ Implement advanced methods such as alternate disk install, multibos, and JFS2 snapshots to use a smaller maintenance window
- ✓ Install and configure Workload Partition Manager to support WPAR management and to implement Live Application Mobility (LAM)

Target Audience

This is an advanced course for AIX system administrators, system support, and contract support individuals with at least six months of experience in AIX.