Course Code: AN62G Course Title: PowerHA SystemMirror 7 Advanced Configurations

# **Description:**

This course is designed to teach experienced PowerHA SystemMirror for AIX professionals the latest features in PowerHA SystemMirror. It covers how to:

- Effectively administer and monitor an IBM PowerHA SystemMirror for AIX cluster
- Implement PowerHA SystemMirror for AIX's more complex options

# **Objectives:**

- Review fundamental PowerHA SystemMirror for AIX concepts and components
- Create four node clusters with two independent resource groups
- Create and test robust application start and stop scripts
- Create and test custom application monitors
- Create resource group dependencies
- Customize event notifications
- Integrate WPAR and DLPAR with applications under PowerHA control
- Integrate applications into PowerHA using Smart Assists
- Determine the status of the cluster and cluster components using PowerHA/SNMP commands
- Manage the cluster using the IBM Systems Director plug-in

# **Prerequisites:**

You should have experience with installing **and** performing standard PowerHA SystemMirror for AIX configuration functions, which can be obtained through the following course (**or** equivalent experience):

• PowerHA SystemMirror for AIX System Administration I: Planning and Implementation (AN61G)

You should also be familiar with:

- The AIX operating system
- The IBM server hardware that they are using
- The principles of good system management
- TCP/IP communications concepts and tools, as covered in (AN12G) or (AN14G) briefly
- Logical Volume Manager (LVM) concepts and configuration, as covered in (AN12G) or (AN14G)
- Good Korn Shell script programming

# **Duration:**

40 Hrs

#### **Topics:**

Day 1

- Welcome
- Unit 1: PowerHA review with the advanced topology and CSPOC
- Exercise 1: Lab setup, cluster review, topology, and CSPOC administration

#### Day 2

- Unit 2: Adding applications
- Exercise 2: Adding additional applications

#### Day 3

- Unit 3: Advanced administration: Resources and resource groups
- Exercise 3: Application monitors and resource group dependencies

#### Day 4

- Unit 4: Determining cluster status using the command line interface
- Exercise 4: Determining cluster status using command line Unit 5: Advanced administration: Event configuration Exercise 5: PowerHA for AIX event configuration

#### Day 5

- Unit 6: Advanced administration: DLPAR and WPAR implementation
- Exercise 6: Implementing DLPAR and WPAR
- Unit 7: Using the PowerHA SystemMirror plug-in for IBM Systems Director (optional)
- Open lab time

# Audience:

This course is designed for experienced AIX system administrators and support personnel who are responsible for the administration, maintenance, and implementation of PowerHA SystemMirror clusters on IBM Power Systems running AIX. This audience includes:

- Students who want to learn to work with the PowerHA SystemMirror 7.1 for AIX
- Students who want to learn about how to implement PowerHA SystemMirror for AIX in complex configurations
- Technical leaders responsible for designing PowerHA SystemMirror for AIX clustering solutions