

# Sysadmin Academy

## Certified IBM AIX Unix Administrator

### Course Syllabus

#### Introduction to AIX Administration

- The Role of the System Administrator
- Hardware Responsibilities
- Software Responsibilities
- Responsibilities to the Users

#### Overview of SMIT

- Using the SMIT GUI
- Using the SMIT Terminal Interface
- SMIT Logs.

#### Security and User Administration

- Security Objectives
- User Administration using SMIT
- Group Administration using SMIT
- Security Files
- Managing User Accounts from the Command Line
- Customizing User Accounts

#### AIX File Hierarchy

- Introducing the File System Paradigm
- The File System Layout
- Application Directories

#### Devices

- Device Terminology
- Listing /dev Directory
- Device configuration database
- Device states
- Device addressing

#### System Startup and Shutdown

- Startup Modes
- Starting System management services.
- Startup process Overview
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- System Resource Controller
- Stopping process
- System Shutdown
- Manage the system Environment

#### AIX V5.3 Installation

- Installation Methods
- Installation process from CD.
- Installation and Maintenance menu.
- Installation settings.
- Method of installation.
- Advanced Options.
- Installation Flow Charts.
- Configuration Assistant Menu.

#### AIX Software Installation and Maintenance

- AIX Product offering
- Packaging definitions
- Fileset Naming
- Bundles.
- Software Updates.
- Software States.
- Software installation and Maintenance.
- Install and update software.
- Software maintenance and utility.
- Instfix command.

#### System Storage Overview

- Components of AIX storage.
- Benefits of LVM
- Physical Storage
- Volume groups
- Volume group Descriptor area.
- Logical Storage.
- Uses of Logical Volume.
- Introduction to File system.
- Mounting & Listing File systems.

#### Working with Logical Volume Manager (LVM)

- Logical Volume Manager.
- SMIT Volume group Menu.
- Add / Remove Volume Groups
- Set characteristics of Volume groups
- Hot Spare
- Logical Storage
- Add / Remove Logical Volume
- Set characteristics of Volume
- Physical Volumes
- lvmstat

#### Working with File System

- Structure of JFS
- Structure of Inode
- Journalled Log
- Listing File systems
- Add / Remove JFS & JFS2 File systems
- Set characteristics of JFS vs JFS2 File systems

#### Managing File Systems

- Space Management
- Listing Free disk space
- Listing disk usage
- Verifying a File system

#### Paging Space

- Paging space Introduction
- Add / Remove Paging space
- Changing paging space.

#### Scheduling cron Jobs

- The cron Daemon
- cron file
- Managing cronfile with crontab
- What Happens When a Job is Scheduled?

#### System Backup

- Types of backup
- Backup Menu
- Rootvg Backup process - mksysb
- Non-rootvg backup
- Restoring backups
- Other Unix commands for backup.

#### Connecting to a Network

- Setting an IP Address and Subnet Mask
- Setting a Default Route
- Setting a System Hostname
- Resolving Hostnames to IP Addresses
- Configuring /etc/hosts
- Configuring a DNS Client
- Choosing a Look Up Service
- Troubleshooting Tools