# AIX 6L Network Installation Management (NIM)

Course Summary

**Length:** 2 days

**Prerequisite:** Introduction to AIX 6L System Administration

**Recommendation Statement:**
The student should understand basic UNIX commands such as navigating directories, working with files and using the VI editor. In addition, the student should understand AIX file systems and how to install the AIX operating system from a local CD/DVD in a non-NIM environment.

**Course Description:**
This course is for system administrators and operators that need to understand how to perform Network based installations of AIX 5L and 6L. You'll learn how to perform NIM tasks such as configuring the NIM Master, NIM resources and NIM clients.

**Upon Completion of this Course, you should be able to:**

- Understand NIM concepts
- Understand NIM Resources including- SPOT, lpp_source, and mksysb
- Configuration of a Network Installation Manager Environment
- Configuring the NIM Master and Creating Basic Installation Resources
- Adding a NIM Client to the NIM Environment
- Performing a Base AIX O/S install onto a NIM Client
- Use a mksysb Image to Install the Base Operating System (BOS) on a NIM Client
- Perform a Non-prompted BOS Installation
- Define and Customize Additional Base Install Resources
- Understand NIM Network Issues
- Perform Maintenance and Updates on NIM resources
- Use NIM for Disaster Recovery
- Maintain Software in an LPP_SOURCE
- Boot a NIM client into maintenance mode from the boot image on a NIM server

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Detailed Course Outline

Module 1. Network Installation Manager definitions and concept

- How NIM works
- Basic NIM configuration
- Planning the NIM Environment
- NIM file system hierarchy

Module 2. Basic configuration of a NIM environment

- Overview of the configuration process
- System requirements
- Install NIM filesets
- EZNIM vs. command Line vs. smit to configure the NIM environment
- Configure the NIM master
- Create file system for NIM
- Define basic resources
- Define the client
- Start the client installation
- Describe the NIM configuration files (/etc/niminfo, /etc/bootptab,
- Display NIM information

Module 3. Configure network services required to support NIM

- Inetd
- Tftp
- Bootp
- NFS

Module 4. The lpp_source

- lpp_source file system
- lpp_source naming convention
- Create a base level NIM resource from the CD/DVD
- Create lpp_source from AIX fileset image (using command line and smit)
- Display lpp_source information

Module 5. SPOT Objects

- SPOT file system
- Define a SPOT resource (using command line and smit)
- Create a SPOT from a mksysb resource
- Check a SPOT resource
- Remove a SPOT resource

Module 6. mksysb Resource

- mksysb image naming convention
- Define a mksysb resource
- Create a mksysb from a NIM client

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Module 7. Define the Client

- Define the client from the command line and smit
- The /etc/niminfo file
- List a NIM client
- Remove a NIM client

Module 8. Start the Client Installation

- The /tftpboot directory
- The *client*.info file
- Watch the client installation status
- Perform a Non-prompted BOS installation
- The bosinst.data file
- The image.data file

Module 9. NIM Administrative Tasks

- Reset the NIM state
- Remove NIM machines and resources
- Deallocate resources
- Perform a maintenance boot from the master server
- Update the NIM lpp_source
- Update a NIM client
- Add software to the lpp_source

Module 10. Update or Clone a Client with alt_disk_install

Module 11. Troubleshoot a NIM Installation

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