

UNIX AIX Course Content:35-40hours

Course Outline

Introduction to AIX

- UNIX overview and history
- AIX and UNIX
- Major components of AIX
- The Kernel
- File Systems
- The Shell
- Text processing
- Programming Languages
- Programming Tools
- System Management
- On-line Documentation

Using the System

- Logging in and out
- Passwords
- Command Format
- The date, cal, who and finger commands
- Sending and receiving mail
- The write and wall commands
- Talk with another user
- Controlling access with mesg
- The clear, echo and banner commands
- The wc command
- Keyboard usage tips

AIX Documentation

- Getting help
- The man command

- InfoExplorer
- Using InfoExplorer
- Searching with InfoExplorer
- AIX v4.3 Web-based Documentation
- Searching the AIX Base Documentation database

Files and Directories

- File types
- I-nodes
- Filesystem structure
- Pathnames
- Where am I?
- Changing your Current Directory
- Creating and Removing Directories
- Multiple Directories
- Listing Directories
- Long Listing of files
- Displaying Directory information
- AIX Filenames
- The touch command

Using Files

- Copying Files
- Moving Files
- Renaming Files
- Linking Files
- Removing Files
- Listing File Contents
- Displaying File Contents
- Printing

File Permissions

- Overview
- File Permissions
- Changing Permissions using the Symbolic Notation
- Changing Permissions using the Octal Notation
- Default File Permissions and umask
- Write Permission on a Directory
- Common Commands and the Permissions required

The vi Editor

- Starting the vi Editor
- Adding text
- Exiting the Editor
- Cursor Movement
- Deleting text
- Searching for text pattern
- Changing and Moving text
- Executing AIX commands
- vi Options
- Command-line Editing
- Editors

Shell Basics

- The Shell
- Metacharacters and Wildcards
- Character Substitution in File Names
- The Standard Files
- File Descriptors
- Input and Output Redirection
- Creating a file with cat
- Error Redirection
- Combined Redirection
- Pipes
- Filters
- Split Outputs
- Command Grouping
- Line Continuation

Using Shell Variables

- Shell Variables
- Listing variable settings
- Setting and referencing Shell variables
- Shell variable examples
- Command Substitution
- Quoting Metacharacters
- Command line Parsing

Processes

- What is a Process?

- Login Process environment
- Parents and Children
- Variables and Processes
- Exporting Shell variables
- What is a Shell Script?
- Invoking Shell Scripts
- Return Codes from Commands

Controlling Processes

- Monitoring, Controlling and Terminating Processes
- Process Signals
- Running long Processes
- Job control in the Korn Shell
- Daemons

Customising the User Environment

- Shell Defaults
- The /etc/environment File
- The /etc/profile File
- Environment Variables
- The .profile File
- The .kshrc File
- Korn Shell Aliases
- Korn Shell History

AIX Utilities

- The find Command
- Using the find Command
- Executing Commands with find
- Interactive Command Execution
- Additional find Options
- The grep Command
- grep with Regular Expressions
- grep Options
- The sort Command
- The head and tail Commands
- Transferring DOS data files

AIX Utilities Part II

- The xargs Command

- Using xargs with find and grep
- Shell vs. find
- The -links option with find
- Using alias and find
- The which, whereis and whence Commands
- The file Command
- Comparing files using diff and cmp
- Comparing directories with dircmp
- File Compression Commands; compress, uncompress and zcat
- Displaying Non-Printable characters in Files and Directories
- Assigning Unique File Names

Additional Shell Features (Optional)

- Shell Variables
- Positional Parameters
- The expr Utility
- Conditional Execution
- The test Command
- The if Command
- The read Command
- Looping with for and while
- Command Search Order