

UNIX Course Content:35-40hours

Course Outline

Introduction to UNIX

- Design Philosophy
- System Components
- The Shell and Command Entry
- Documentation

Text Editing

- Types of Editors
- From ed to ex to vi
- Basic Editor Tasks with vi
- Editing Multiple Files
- Named Buffers
- vi Startup File

The File System

- File System Organization
- File Types
- File and Directory Naming Rules and Conventions
- Commands for Navigating the File System
- Introduction to Inodes
- Ownership, Permissions, and Dates
- Manipulating Files and Links
- Manipulating Directories
- Determining Disk Usage
- Other File System Utilities

Printing

- Printing Under AT&T UNIX
- Printing Under BSD UNIX

Text File Manipulation

- Regular Expressions

- grep and egrep
- The Stream Editor sed
- sort
- awk
- Other Text File Utilities

- Other File Processing Commands
- Examining and Comparing Files
- Compression Utilities
- Data Format Interchange
- Encryption

Networking Commands

- Remote Access Control Mechanisms
- Using the Secure Shell(ssh)
- Remote Execution Commands
- ftp, tftp
- telnet

Basic User Commands

- Logging In and Logging Out
- Command Line Editing
- Navigating the File System
- Viewing and Copying Files
- Controlling the Terminal
- Sending and Receiving Mail

UNIX Processes

- The UNIX Process Model
- Process States
- Monitoring and Controlling Processes

Introduction to Shells: sh, csh, and ksh

- Shell Functions
- I/O Redirection and Pipes
- Command Separation and Grouping
- Background Execution
- Filename Expansion
- Shell Variables
- Command Substitution
- Quoting and Escaping Metacharacters
- C Shell Features
- Korn Shell Features

- Command Execution
- Startup Files
- Customizing the User Environment

Multitasking and Batch Processing

- Multitasking
- Scheduled Execution Using cron
- The at and batch Commands

Shell Programming

- Shell Script Features and Capabilities
- How to Create and Run a Script
- Interpreting Command Line Arguments
- Conditional Constructs
- Looping Constructs
- Built-in Expression Operators
- Making Scripts Interactive

Backing Up Files

- Backup Media
- UNIX Device Names
- tar and cpio
- File Transport and Conversion with dd

Desktop Environments

- KDE
- Gnome
- Open Office
- Write
- Calc
- Impress
- Math
- Draw
- Base
- Introduction to YaST