



UNIX Shell Scripting Course Content:35-40hours

Course Outline

Brief introduction to Shells: sh, bash, csh, and ksh

- Necessity for shell programming/scripting
- Salient and distinct features of each shell and how it differs
- Commenting (single line and multi-line)
- All about Hash bang notation
- Create and Run a Script
- Command Line Arguments parsing and positional parameters
- Conditional Constructs using test command, if – fi construct
- Looping Constructs (for, foreach, while, case, select)
- Read command
- Built-in Expression Operators
- Making Scripts Interactive
- Debugging shell script by enabling options
- Shell (script) Functions
- I/O Redirection and Pipes
- Command Separation and Grouping
- Background Execution
- Filename Expansion
- Shell special variables
- Array variables
- Command Substitution
- Executing script within another script
- Startup Files of each shell
- Customizing the User Environment
- Scripts vs Compiled Programs
- Shell Script Examples
- Return code Values
- The exit Command
- Command Search Order
- Metacharacters (escaping) and wildcards
- Filename Generation, filename substitution Characters
- Quoting



- Signals and traps
- Kernel's role in shell scripting
- Exec command
- Eval and expr command
- File Descriptors
- Error Redirection
- Combined Redirection
- Pipes
- Filters
- Split Outputs
- Command Grouping
- Line Continuation
- Monitoring, Controlling and Terminating Processes
- Process Signals
- Running long Processes
- Job control in the Korn Shell
- Daemons
- Shell Defaults, SHELL environment variable
- The /etc/environment File
- The /etc/profile File
- Environment Variables
- The .profile File
- The .kshrc File
- Korn Shell Aliases
- Korn Shell History

Batch Processing and scheduling

- Scheduled Execution Using cron
- Autosys introduction

Backing Up Files through scripting

- tar and cpio and file transport and conversion with dd

Networking Commands scripting

- rsync, ssh, ftp scripting

Database connectivity through scripting

- oracle connectivity
- mysql connectivity

Text File Manipulation using awk

- introduction to awk

Text File Manipulation using sed

- understanding sed
- nuances and etiquettes

Perl scripting

- Running Perl scripts
- Data types
- Basic concepts (assignment, comments)
- Standard I/O, print
- Conditional statements
- Relational and logical operators
- Control loops
- Scalar and vector variables
- Built-in array functions

Hashes (Associative Arrays)

- Variables, creation, assignment and access
- Access
- Hashes as arrays
- Built in Hash Functions

Subroutines

- Basic I/O (STDIN, STDOUT, STDERR)
- Files handle and file handling
- Error handling
- Directory Processing
- System Processing Management

Regular expression

- Pattern matching
- Templates
- Wildcards and character classes
- Recovering previous matches
- Recovering previous matches

User Defined Functions

- Using and creating Functions
- Arguments and Return values
- Scoping

- Prototypes

b1 Onlinetrainings