



Dear Student,

Based upon your enquiry we are pleased to send you the course curriculum for Linux with Shell Scripting

Given below is the brief description for the course you are looking for:

Module 1:-Introduction to Linux OS

- A brief history of LINUX
- The LINUX kernel
- The LINUX file system
- Getting started navigating the file system
- The file system structure
- Directories and files
- Pathnames
- Navigating the file system
- Running Commands and Getting Help

Module2:- Managing files and directories

- Command line syntax
- Basic file handling commands
- Directory handling commands
- Filename wildcard characters

Module 3:- Securing Files in Linux

- The Linux Security Model
- Users & Groups, Permission Types
- Examining & Changing Permissions
- Changing Permissions using Nautilus



Module 4:- Basic System Configuration

- Configuring Date and Time
- Configuring Printers, Network
- System Logs

Module 5:- MULTI PROCESSING

- What Is a Process
- Process Structure
- The Process Table
- Viewing Processes
- System Processes
- Process Scheduling
- Starting New Processes
- Replacing a Process Image
- Duplicating a Process Image
- Waiting for a Process
- Zombie Processes
- Input and Output Redirection

Module 6:-Investigating and Managing Processes

- Process States, Viewing Processes and Nice Values
- Sending Signals to Processes, Terminating
- signal and traps
- Foreground & Background Process
- at, crontab Listing & Scheduling Jobs



Module 7:-Text Editors

- Creating files using the vi editor
- Opening, Modifying, Saving Files & Undoing Changes
- Using Command Mode
- Text Processing Tools
- Tools for Extracting, Analyzing & Manipulating Text
- Special Characters for Matching Text

Module 8:- Shell Scripting on BASH Shell

- Shell as a programming Language (Interactive Programs)
- Creating a script
- Making a script Executable
- Automating tasks using shell scripts
- Using conditional execution in shell scripts
- Managing repetitive tasks using shell scripts
- Parameters Handling

Module 9:- Advanced features

- functions
- sed
- awk



SHELL SCRIPTING ON LINUX

1. INTRODUCTION

- Shells
- Types of Unix Shells
- Advantages of Shell Scripts
- Interpreted vs. programming language
- Shell interpreter

2. Vi Editor

- Basics of vi/vim editor
- Basic commands
- 3 modes
- Command mode
- Insert mode
- Ex command mode
- Creating shell script
- Making shell script executable

3. SHELL PROGRAMMING – AUTOMATING TASKS

- Shell Variables
- Local and global variables
- Reading user input- read command
- Shell within shell- SHLVL
- Local variables made global
- Command substitution
- Expression evaluation

4. OPERATORS

- Arithmetic test operators
- String test operators
- File test command options



5. CONDITIONAL EXECUTION IN SHELL SCRIPTS

- If, if...else
- If, elif
- Case

6. LOOPING

- while, until, for
- break, continue

7. Command line arguments

- Usage of COA
- Parameter Handling
- What is \$0, \$#, \$*, \$@, \$?, \$\$

8. Useful utilities for Shell Scripts

- Standard input & output
- Regular expressions and Patterns- grep
- Tools for sorting- sort, uniq
- tr
- Sed
- Functions- recursion writing

9. Awk – pretty printing

- Basic Structure
- Executing an AWK script
- Which shell to use with AWK?
- Dynamic Variables
- The Essential Syntax of AWK
- Arithmetic Expressions
- Unary arithmetic operators
- The Autoincrement and Autodecrement Operators
- Assignment Operators
- Conditional expressions
- Regular Expressions
- And/Or/Not



- Commands
- AWK Built-in Variables
- Associative arrays

10. TCL/TK

- Introduction
- Data types, variables, assignments and expressions
- Lists, arrays and associative arrays
- Subroutines or Procedures
- Control structures
- File Input and Output
- The world of regular expressions
- More on TCL - trace, eval, exec, info, history, format
- Tk –frame, label , entry, check button, radio button, message box, scales, list box, scroll bar, text, menu, top level
- Tk – binding, packing, grid, canvas
- Tk – window manager commands, input focus, selection, update, grab, tkwait

11. SQL with SHELL

- Package Installation
- Start the Database
- Post Installation
- Connecting to MySQL using a shell script
- Running SQL queries using shell script
- Shutting down the database



Linux™



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