



Linux Fundamentals

Duration:

40 Hours

Who should attend?

Linux users, programmers, and network administrators

Prerequisites:

Knowledge of general operating system concepts

Course modules

Introduction to Linux

- o Linux History
- o Linux Vendor Distribution Chart
- o Operating System Core
- o Logging in, Changing Password, Password Command
- o Command Structure, Simple Commands
- o Control Characters
- o Main Pages
- o Network Basics

Networking

- o Linux networking interfaces
- o Networking tools - ping, traceroute, ip, tcpdump, wget etc.
- o File transfer - ftp, scp.
- o SSH Server/Client

The File System

- o The Linux File System Structure
- o Pathnames and Directories
- o Displaying hidden files, File Types, Long Listing
- o Meta-characters
- o Asterisk, Question Mark, Square Brackets

Manipulating Files and Directories

- o Determining File Type
- o Displaying File Content Using cat, more, head, tail

- o Counting using wc
- o Comparing Files Using diff
- o File and Directory Name Conventions
- o Creating Files and Directories
- o Copying Files, Moving and Renaming Files
- o How Information is Stored on the Disk?
- o Links

File Security

- o Security Overview
- o Linux Accounts
- o File Ownership
- o Directory and File Access Modes
- o Symbolic Mode, Octal (Absolute) Mode

Text Editor

- o VI
- o VIM
- o NANO

Shell Overview

- o Introduction to Shell (BASH)
- o Aliases
- o Shell commands
- o Environment commands
- o Shell Initialization Files

Redirections and Pipes

- o Standard Input, Output and Error
- o Redirecting Standard Output, Error and Input
- o Appending to File
- o File Overwrite Protection
- o Multiple Redirections
- o Merging Standard Output with Standard Error
- o Pipes

Power Tools

- o Regular Expressions
- o Commands: find, grep, cut, sort, uniq
- o Text Manipulation with the tr Command and sed Command

BlueTech

we create new talents

- o Process Management
 - o Process Hierarchy
 - o Processes and PIDs
 - o Process Life Line
 - o Managing Jobs
 - o Signaling with kill
 - o I/O Considerations
 - o Batch Processes – The at Command
 - o Listing and Deleting at Jobs
- Module 11 - Network Basics
- o Client Server
 - o Telnet
 - o Trust
 - o rlogin
 - o rcp and rsh