

Essentials of Unix Administration with FreeBSD

Duration: 4 Days (8Hours per day)

Module 1 – Installing and Upgrading FreeBSD Unix

Installing FreeBSD Unix
Updating FreeBSD with Patches
Upgrading to a New FreeBSD Release
Adding an Administration and Connecting to FreeBSD
Gaining Remote Access using SSH

Module 2 – Discovering the UNIX Command Line

Working with the Default Login Shell
Listing Directory and Aliases
Navigating Directories
Working with the UNIX find Command
Reading and Writing to Files
Building Bespoke Application using Command Pipelines

Module 3 – Managing Software in FreeBSD

Understanding Software Management in FreeBSD
Working with the Command pkg to Manage Software in FreeBSD
Locating files from Software Packages

Module 4 – Working with Unix Text Editors

Using vi, FreeBSD's Default Editor
Using nano editor
Learning vim with vimtutor
The 3 Modes in VIM
Power Editing Files Using VIM

Module 5 – Managing Files and Directories in FreeBSD

Introduction to File Management in FreeBSD
How we Manage Files
Organizing Files using Directories
Moving and Copying Files
Understanding Hard Links and Directories
Hard-Linking Files in FreeBSD
Creating Soft or Symbolic links in Unix
Creating Named Pipes

Module 6 – Managing UNIX File Permissions

Securing Files Using the File Mode
Understanding the File Mode
Controlling the Assigned Permissions to New Files
Setting Standard Permissions on Files
Controlling Directory Permissions
Controlling Ownership of Files
Creating Sticky Directories by Controlling Deletions
Using the SGID Special Permission
Using the SUID Special Permission

Module 7 – Extending Permissions with ACLs

What is ACL
ACL support in FreeBSD
Listing ACLs with FreeBSD



Altering ACLs Using setfacl
Setting Default ACLs on Directories

Module 8 – Managing Users and Groups

Understanding User Management in FreeBSD
Adding Users to FreeBSD with adduser Script
Creating Users Using pw
User Defaults
Managing Users in FreeBSD
Managing User Passwords
Managing Groups in FreeBSD
Elevating User Privileges Using sudo

Module 9 – Monitoring FreeBSD and Managing Server Load

Identify System Hardware
Identify System Load
Managing Processes
Reboot and Poweroff System