Linux Fundamentals





Course Duration: 3 days

Course description

Overview:

Students will install Linux, configure the X Window System, and learn to navigate the Linux command-line shell. Students will also learn fundamental concepts common to Linux: the kernel, Linux filesystem, boot process and runlevels, shell scripting, and editing text files.

Course Objectives

After completing this course, students will be able to:

This courseware will provide you with the information you need to complete the following:

- Describe the structural components of Linux and what distinguishes a distribution of Linux.
- Describe Open Source Software and distinguish between GNU and GPL.
- Create installation boot diskettes.
- Install Linux distribution(s).
- Install and configure XFree86.
- Describe how to get online help.
- · Configure fundamental system hardware.
- Use fdisk or cfdisk to create, edit, and delete disk partitions.
- Use LILO to manage boot options.
- Boot the system, change runlevels, and shut down or reboot the system.
- Describe the Linux hierarchical file system and the role of key directories in organizing system files.
- Work effectively on the Linux command line using common shell commands, streams, pipes, filters, and redirection.
- Use shell scripting to quickly perform repetitive tasks.
- Open, edit, and save text documents using the vi editor.
- Manage, monitor, and maintain virtual machine installations.

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Prerequisites

Before attending this course, students must have:

6-12 months experience with Linux and familiarity with the Linux or Unix command line is required.

Course Content

Lessons

Chapter 1: What is Linux?

- Linux Network Operating System
- Multiple Users and Multitasking
- User Interfaces
- Linux Sessions

Chapter 2: Installing Linux

- Knowledge
- Preparation
- Disk Allocation
- Booting
- Partitioning36
- Copying Software
- Normal Finish
- Superuser
- Administration Shells
- Configuration
- Troubleshooting an Install

Chapter 3: Configuring and Troubleshooting X

- The X Window System
- Running X Applications
- Resources

Chapter 4: Installing Red Hat Linux

- Installing Red Hat Linux 6.0
- Installing Red Hat Linux 6.1

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to enquire about
this course:

Chapter 5: Installing TurboLinux 4.0

- · Preparing for Installation
- Starting an Installation
- Continue the Installation
- Configure Network and Hardware Options
- Partition Disks
- Package and System Installation

Chapter 6: Runlevels and Troubleshooting

- The Boot Process (LILO)
- Linux Runlevels
- The init Control file: /etc/inittab
- Run Command Scripts (Red Hat)

Chapter 7: File System Fundamentals

- The File Hierarchical System
- Device Management

Chapter 8: Navigation and the Linux Shell

- The bash Shell
- The Shell Environment
- Power Tools

Chapter 9: Shell Processing and Scripting

- The Shell
- Command Input and Output
- Pipes and Filters
- Shell Scripts

Chapter 10: Editing Text Files

- The vi Editor
- vi Concepts
- The vi Command
- vi Modes
- Alternatives to vi