



Introduction to Linux for Systems Administrators

Description

This course includes basic Linux command line usage, selected custom operating system installation procedures and basic system administration topics. Topics go beyond the capabilities of the Graphical User Interface.

Prerequisites

The course is designed for computer professionals who are experienced in general computer operating system technologies. Previous UNIX or Linux exposure and basic shell programming concepts is helpful but not required.

Key Topics

Linux System Background

- Linux Background
- Linux Features
- Linux Advantages
- Linux Limitations
- Linux Distribution
- Linux Standards
- Linux Documentation
- Linux Administration
- Hardware & Architecture

Linux Administration Utilities

- Online Documentation
- System Information

Installing a Linux System

- Professional Server Installation Planning Concepts
- System software selection guidelines
- Linux Partitioning Theory
- Perform an Advanced Server Installation

Linux Fundamentals - Linux Command Line Usage

- Command Line Basics - understanding the command prompt
- Common Commands for everyday usage
- Creating, Manipulating and Removing Files
- Creating, Manipulating and Removing Directories
- Commands for Navigating the File System
- Finding Files and Directories
- Linux Text Editor - The vi editor
- File and Directory Naming Rules and Conventions
- Commands for working with data grep, sort, cut, paste, wc, and regular expressions
- Process Management
- The Linux Bash Shell - Basic features



The Linux File System

- File System Organization
- File Types
- Security Fundamentals: Permissions, Ownership, Group ownership, and Time stamps
- The /proc File System
- Determining Disk Usage
- File System Utilities
- File System Commands
- Overview of inodes
- Understanding and using hard and symbolic Links

System Startup and Shutdown

- System Initialization
- Standard Boot Processes - What happens during system boot
- Startup Flow Control - System run levels explained
- Run Command Scripts
- Changing the boot process - Changing a run level (System State)

System Printing

- Basics of installing a system printer for user access
- Basics of managing print jobs

Managing Users and Groups

- Creating and managing Linux user login accounts
- Removing Linux user login accounts
- Creating and managing Linux groups
- Concepts of secure, private workgroups
- Adding existing login accounts to Linux groups
- Removing login accounts from Linux groups
- Removing Linux groups