

LINUX ADMINISTRATION WITH SCRIPTING

Duration: 60 Hrs.

Overview

Linux Essentials and Administration is designed for Linux system administrators who are interested in learning essential system administration skills for Enterprise Linux. The program provides hands-on training to effectively use, customize, and script common command line utilities. In addition, administrators will learn how to perform essential system administration tasks including basic installation, package management, and user management procedures.

Course Objective

This 60 hours training program will help participants understand the basic concepts of Linux, User management, Disk Management, Package Management, Server Management, Security Implementation and Scripting etc.

Prerequisite

User-level experience with any computer operating system is required to understand the Linux Administration with Scripting.

Learning Content

| Topic | Sub Topic |
|-----------------|--|
| Basic Concepts | Course |
| | Linux History, overview, Principles, |
| | Getting started with GNOME and edit text files with gedit, Manage files graphically and access remote systems with Nautilus, Getting help in graphical environment |
| | Installation overview, directory structure |
| | Installation Graphical |
| | Configuring Local Services, date and time, configuration of printer |
| | Basic commands |
| | vi editor |
| Disk Management | manage users and groups |
| | Partition, Swap Creation |
| | lvm |
| | quota management and permanent mounting |
| Management | Raid, Luks |
| | basic job control or cron |

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| of Linux | use of helping command |
| | scp or ssh |
| | Filter Commands |
| | Understand runlevels |
| Package Administration | Package installation with rpm |
| | Package installation with yum |
| Servers and Security | Use hardlinks, softlink, archives |
| | Regular Expressions, Pipelines, and I/O Redirection |
| | nfs, cifs and autofs |
| | Ldap |
| | Controlling Access to Files |
| | Analyzing and Storing Logs |
| | Managing Processes |
| | Tuning and Maintaining the Kernel |
| | System Recovery Techniques |
| | Enhance User Security |
| | Apache Server |
| | File Security with GnuPG |
| | Route Network Traffic |
| | Secure Network Traffic |
| | NTP Server Configuration |
| | Web Server Additional Configuration |
| | Basic SMTP Configuration |
| | Caching-Only DNS Server |
| | FTP |
| | squid |
| samba | |
| dhcp | |
| nis | |
| pam, iptables, TCP Wrappers | |
| Shell Scripting | Bash Scripting and Tools |
| | Basic Shell Scripting |
| | Graphical tools of Scripting (Zenity and dialogs) |