Linux Administration And Support

Course: **00038**

Filter: **Beginner**

Duration: **20 hours**

Category:: **Linux/Unix**

Price: **1200,00 €**

About Course

Leverage the flexibility and scalability of your Linux OS to meet your organization's critical and ongoing IT needs. In this Linux administration and support training course, you learn to build, manage, and fine tune your Linux, Red Hat, CentOS, Debian, or SUSELinux distribution, as well as manage the day-to-day responsibilities of your role as a Linux administrator.

What you'll learn

- Design, configure, and support Linux servers
- Control and troubleshoot the boot process
- Attach local storage and create file systems
- Deploy software components from source and binary packages

Materials included

- This course uses Red Hat Enterprise Linux
- Concepts taught are applicable to all Linux distributions

Pre-requisites

- Practical skills in the Linux Operating system at the level of: o Course 143, Linux Introduction, or o Course 428, UNIX Introduction

- Must be comfortable with Linux command line, including vi text editor and standard file manipulation utilities

Curriculum

Module 1: Designing and Configuring a Linux Server

- The roles of an administrator
- Open–source licensing
- Acquiring your Linux distribution
- Structuring the file system
- Selecting software packages
- The /etc configuration hierarchy

Module 2: Booting Linux

- Following the boot sequence
- Controlling services with systemctl
- Troubleshooting a boot loader
- Recovering with rescue media

Module 3: Controlling and Monitoring User Processes

- Enforcing access control policy with Pluggable Authentication Modules (PAM)
- Assigning users to groups
- Establishing and modifying accounts
- ps
- pstree
- top
- vmstat
- Examining the /proc file system
- Signaling processes with kill and pkill
- Capturing important events with journalctl
- Meeting compliance requirements with journald and syslog

Module 4: Managing File Systems

- Installing new disks
- Establishing and extending logical volumes
- Creating and tuning journaled file systems
- Attaching to network file servers
- Backing up and restoring data
- Archiving system configuration

Module 5: Adding and Updating Software

- Manipulating portable tar archives
- Installing software with Red Hat Package Manager (RPM) to blend Red Hat with CentOS and other Linux distributions
- Working with SRPMs and packaging binary RPMs
- Resolving dependency issues with yum

Module 6: Configuring Networks

- Setting IPv4 addresses and netmasks
- Configuring and testing IPv6 connectivity
- Providing multiple websites with Apache virtual hosting
- Securing services with access control

Module 7: Supporting Print and File Services

- Offering local and network print services
- Sharing files with NFS
- Emulating Windows services with Samba

Module 8: The Linux Kernel

- Probing the PCI bus with lspci
- Discovering new hardware with sysfs
- Inserting new device drivers
- Determining required functionality
- Balancing network load with Linux Virtual Server (LVS)

- Ensuring high availability with keepalived