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Learning Style: Virtual Classroom

Provider: Linux Foundation

Difficulty: Advanced

Course Duration: 4 Days

Linux for System Engineers (LFS311)

Intro to Course:

The demand of system administrators has never been that higher as it is now and competition for people with experience is more aggressive now. Now if you are looking for most advance test preparation for the Linux Foundation Certified Engineer certification or need any coaching to switch to Linux from other platforms or you just want to sharpen your very important admin and networking skills, then you must opt for this course as it is designed to help you in what you really need.

This course is the best way to prepare for the Linux Foundation Certified Engineer (LFSE) examination.

This course will instruct you all that you have to know to be an advanced system administrator and to get ready for the Linux Foundation Certified Engineer affirmation.

This course is intended to work with a wide scope of Linux dispersions, so you will have the option to apply these ideas paying little heed to your distro.

A Linux Systems Engineer usually gets a pay of US $ 77,166 per annum on an average.

Course Outline?

This course is designed to teach you how to do following:

- Step by step instructions to configuration, install and keep up a system running under Linux.
- Instructions to control the network services.
- The knowledge to make and work a system in any significant Linux distribution.
- Instructions to safely design the network interfaces.
- Instructions to install and arrange file, web, email and name servers.

Who can enroll?

- Linux System Engineers

Main Requirement!

This course is intended for system administrators and expert IT professionals who need to increase a practical information on Linux network configuration and services along with related issues, for example, fundamental security and performance.

Course Outline:

Introduction

- Linux Foundation
- Linux Foundation Training
- Linux Foundation Certifications
- Linux Foundation Digital Badges
- Laboratory Exercises, Solutions and Resources
- E-Learning Course: LFS211
- Distribution Details
- Labs

Linux Networking Concepts and Review

- OSI Model Introduction and Upper Layers
- OSI Model Transport Layer
- OSI Model Network Layer
- OSI Model Lower Layers
- Network Topology
- Domain Name System
- System Services
- Managing System Services
- Labs

Network Configuration

- Runtime Network Configuration
- Boot Time Network Configuration
- DNS Client
- Intro to OpenVPN
- Labs

Network Troubleshooting and Monitoring

- Network Troubleshooting
- Client-Side Troubleshooting
- Server-Side Troubleshooting
- Network Monitoring
- Labs

Remote Access

- Remote Access History
- Intro to Cryptography
- Secure Remote Access
- Remote Graphics
- Labs

Domain Name Service

- Overview Of DNS
- BIND (named) Server
- BIND Zone Configuration

- DNS views
- Labs

HTTP Servers

- Apache
- Apache Configuration
- Apache Virtual Hosts
- Apache Security
- Labs

Advanced HTTP Servers

- Mod Rewrite
- Mod Alias
- Mod Status
- Mod Include
- Mod Perl
- Performance Considerations
- HTTP Balancer
- Labs

Email Servers

- Email Overview
- Postfix
- Dovecot
- Labs

File Sharing

- FTP
- vsftpd
- rsync
- SSH Based Protocols
- Other Protocols
- Labs

Advanced Networking

- Routing
- VLANs
- DHCP
- NTP
- Labs

HTTP Caching

- Overview
- Squid Configuration

- Labs

Network File Systems

- NFS
- SMB/CIFS
- Other Network File Systems
- Mounting Network File Systems
- Labs

Introduction to Network Security

- Security Concepts
- Security Practices
- Security Tools
- Labs

Firewalls

- TCP Wrappers
- netfilter Concepts
- Iptables Command
- Managing IPtables
- Advanced Firewalls
- Network Address Translation
- nft Concepts
- Labs

LXC Virtualization Overview

- Linux Containers (LXC)
- Labs

High Availability

- Overview
- DRBD
- Labs

Database

- Introduction
- Database Management Systems
- Structured Query Language (SQL)
- Labs

System log

- Overview
- Remote Logging: Client

- Remote Logging: Server
- Labs

Package Management

- Installing from Source
- Package Management
- Packaging System Benefits
- Main Package Management Systems
- Role of Linux Distributions
- Building RPM Packages
- RPM Spec File Sections
- RPM Spec File Example
- Building Debian Packages
- Labs

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