

Linux System Administration (LFS307)

In this course you will learn how to administer, configure and upgrade Linux systems running one of the three major Linux distribution families: Debian/Ubuntu and Red Hat/CentOS/Fedora, how to master the tools and concepts you'll need to efficiently build and manage an enterprise Linux infrastructure, how to work with Git and perform essential collaborative tasks, how to use state-of-the-art system administration techniques in real-life scenarios via practical labs, and more.

Duration: 4 Days

Prerequisites for this course

This course is designed to provide students with the necessary skills and abilities to work as a professional Linux system administrator. Students should have basic knowledge of Linux and its most common utilities and text editors.

Outline for this course

Chapter 1 – Course Introduction

Chapter 2 - Linux Filesystem Tree Layout

Chapter 3 - User Environment

Chapter 4 - User Account Management

Chapter 5 - Group Management

Chapter 6 - File Permissions and Ownership

Chapter 7 - Package Management Systems

dpkg

APT

RPM

dnf and yum

zypper

Chapter 8 - GIT Fundamentals

Chapter 9 – Processes Process Monitoring

Memory Monitoring, Usage and Configuring Swap

I/O Monitoring

Chapter 10 - Containers Overview

Chapter 11 - Linux Filesystems and the VFS

Disk Partitioning

Filesystem Features: Attributes, Creating, Checking, Usage, Mounting

The Ext4 Filesystems

Logical Volume Management (LVM)

Chapter 12 - Kernel Services and Configuration

Kernel Modules

Devices and udev

Chapter 13 - Network Addresses

Network Devices and Configuration

LDAP **

Firewalls

Chapter 14 - System Init: systemd history and customization

Chapter 15 - Backup and Recovery Methods

Chapter 16 - Linux Security Modules

Chapter 17 - System Rescue

Chapter 18 - Closing and Evaluation Survey