

Training: The Linux Foundation LFS207 Linux System Administration Essentials



TRAINING GOALS:

Linux is the #1 operating system for web servers, cloud computing, smart phones and consumer electronics. Due to its high adoption rates and continued growth, there's a shortage of Linux system administrators. This course will teach you the skills and processes you need to work as a professional Linux systems administrator. The topics covered are directly aligned with the knowledge domains tested by the Linux Foundation Certified Systems Administrator (LFCS) exam, and will substantially increase students' ability to become certified.

What You'll Learn

In this course you will learn how to administer, configure and upgrade Linux systems running one of the 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.

Who Is It For

The course is ideal for those new to IT, or those who have worked with operating systems other than Linux and want to move into a career administering Linux systems. Aspiring cloud professionals will also benefit from understanding Linux administration as it serves as the basis of most cloud instances.

CONSPECT:

- Course Introduction
- Linux Filesystem Tree Layout
- User Environment
- User Account Management
- Group Management
- File Permissions and Ownership
- Package Management Systems
- Dpkg
- APT
- RPM
- dnf and yum

- zipper
- Introduction to Git
- Using Git: An Example
- Processes
- Process Monitoring
- Memory Monitoring, Usage and Configuring Swap
- I/O Monitoring and Tuning
- Virtualization Overview
- Containers Overview
- Linux Filesystems and the VFS
- Disk Partitioning
- Filesystem Features: Attributes, Creating, Checking, Usage, Mounting
- The Ext4 Filesystem
- Logical Volume Management (LVM)
- Kernel Services and Configuration
- Kernel Modules
- Devices and udev
- Network Addresses
- Network Devices and Configuration
- LDAP
- Firewalls
- System Init: systemd, SystemV and Upstart
- Backup and Recovery Methods
- Linux Security Modules
- System Rescue

REQUIREMENTS:

Basic knowledge of Linux, including installing Linux and using the command line is helpful, but not required. If you don't have any Linux experience, we highly recommend the free [Introduction to Linux](#) course on edX.

Lab Info

Lab exercises in this course are designed to work either on native hardware, or using a virtual machine (VM), under a hypervisor, such as those in the KVM, VMWare, or Virtual Box families. Detailed instructions to set up your lab environment are provided in the course.

Difficulty level



CERTIFICATE:

The participants will obtain certificates signed by The Linux Foundation.

TRAINER:

Certified The Linux Foundation Trainer.

ADDITIONAL INFORMATION:

- Online, Self Paced
- 50-60 Hours of Course Material
- Hands-on Labs & Assignments¹
- Video Content
- 12 Months of Access to Online Course
- Digital Badge
- Discussion forums