

## Training: The Linux Foundation LFS200 Fundamentals of Open Source IT and Cloud Computing



### TRAINING GOALS:

The intent of this course is to take you on a journey from little or no knowledge of IT topics to the knowledge needed to demonstrate Linux and cloud environment proficiencies. The course begins with a foundational understanding of computer hardware, software, and operating systems, and walks you through concepts related to system administration, networking, troubleshooting, the Internet, cloud, security, DevOps, project management, and open source software and licensing. The course is a good preparation for the Linux Foundation Certified IT Associate (LFCA) exam.

#### What You'll Learn

This course begins by laying the foundation of systems commands and the administration of users. It then discusses the installation, configuration, and basic maintenance of operating systems and applications, and demonstrates the use of basic Linux commands and utilities. In this course, you will also learn about Linux files and storage systems as well as the basics of Linux shell and simple scripts. You will gain foundational knowledge of networking architecture, topologies, hardware, and environments, and will be able to discuss basic network configuration and protocols. The course will also teach you about various Cloud technologies and service models such as Software as a Service (SaaS), Platform as a Service (PaaS) and Infrastructure as a Service (IaaS). You will also get familiar with Cloud architecture, technologies, and the benefits of Cloud, and learn the basics of how virtual resources are deployed in the Cloud. Upon course completion, you will be able to demonstrate a core understanding of licenses and agreements and discuss version control. You will also gain understanding of cybersecurity in the Linux environment, and a general working knowledge of security-related concepts such as confidentiality, integrity authentication and non-repudiation. The course will also explain how to leverage Software Development and IT operations (DevOps).

#### Who Is It For

The course is designed for those new to the IT industry or considering starting an IT career as a System Administrator or Engineer. This course is ideal for users interested in advancing to the professional level through a gained understanding of critical concepts for modern IT systems, including cloud computing.

### CONSPECT:

- Course Introduction
- What is Linux?
- User Interfaces

- Installing Linux
- Linux Filesystems and File Management
- User and System Administration Commands
- Networking and Network Troubleshooting
- Software and Cloud Computing: Basic Concepts
- Security Fundamentals
- DevOps Fundamentals
- Supporting Applications and Developers

## REQUIREMENTS:

This course assumes no previous Linux knowledge but it does require other operating system and interface skills that a regular user encounters such as logging into a Graphical Interface (GUI), running applications from the GUI, downloading files from the Internet and installing software packages on your selected system.

Before starting this course, we recommend [Introduction to Linux](#), a free edX course.

### Lab Info

The demo/lab environment is Virtual Machine focused.

- The prerequisites are:  
A system with one of the following environments installed:
  - VMware player or Workstation
  - Oracle VirtualBox
  - KVM
- The necessary skills to create a virtual machine on the chosen hypervisor.
- The machine should have a minimum of 4GB of memory and 20GB of free disk space.
- The install image for Ubuntu 20.04 (link and installation instructions 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
- 10-15 Hours of Course Material
- Quizzes
- Video Content
- 12 Months of Access to Online Course
- Digital Badge
- Discussion Forums