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Learning Style: On Demand

Technology: Linux Foundation

Difficulty: Beginner

Course Duration: 10 Hours

Fundamentals of Open Source IT and Cloud Computing (LFS200)

About This Course:

This course is designed to help new IT Administrators learn foundational concepts and prepare them to work with Linux. It should enable interested students to expand their knowledge and skills with Linux Systems Administration and Cloud Engineering. The course, along with real-world experience and study, will provide the skills and knowledge also tested by the Linux Foundation Certified IT Associate

(LFCA) exam.

Course Objectives:

- 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).

Audience:

- 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.

Prerequisites:

- None

Course Outline:

- Chapter 1. Course Introduction
- Chapter 2. What is Linux?

- Chapter 3. User Interfaces
- Chapter 4. Installing Linux
- Chapter 5. Linux Filesystems and File Management
- Chapter 6. User and System Administration Commands
- Chapter 7. Networking and Network Troubleshooting
- Chapter 8. Software and Cloud Computing: Basic Concepts
- Chapter 9. Security Fundamentals
- Chapter 10. DevOps Fundamentals
- Chapter 11. Supporting Applications and Developers