

CompTIA Linux+

Course Duration: 40 Hours

Course code: XK0-005

1. Course Overview

This course can benefit you in two ways. If you intend to pass the CompTIA Linux+ (Exam XK0-005) certification examination, this course can be a significant part of your preparation. But certification is not the only key to professional success in the field of systems administration. Today's job market demands individuals with demonstrable skills, and the information and activities in this course can help you build your sysadmin skill set so that you can confidently perform your duties in any intermediate-level Linux systems administration role.

2. What you'll learn?

On course completion, you will be able to:

- Configure, manage, and troubleshoot Linux systems.
- Operate Linux in both on-premises and cloud-based server environments.
- Implement security best practices.
- Use scripting, containerization, and automation to optimize a Linux system.

3. Target Audience

The CompTIA Linux+ certification is intended for IT professionals who work with Linux systems, including network administrators, systems administrators, and technical support specialists. It's also for people who want to work in these roles.

This CompTIA Linux+ training is considered foundational-level Linux training, which means it was designed for junior systems admins. This Linux skills course is designed for junior systems admins with three to five years of experience with Linux.

4. Pre-Requisites

Recommended experience

12 months of experience with Linux

Working as a junior Linux support engineer or junior cloud/DevOps support engineer

5. Course content

Lesson 1: Introducing Linux

- A: Identify Linux Characteristics
- B: Understand Bash Interaction with Linux
- C: Use Help in Linux
- D: Identify the Linux Troubleshooting Methodology

Lesson 2: Administering Users and Groups

- A: Manage User Accounts
- B: Manage Group Accounts
- C: Configure Privilege Escalation
- D: Troubleshoot User and Group Issues

Lesson 3: Configuring Permissions

- A: Configure Standard Linux Permissions
- B: Configure Special Linux Permissions
- C: Configure Access Control Lists

Lesson 4: Implementing File Management

- A: Understand the Linux File System
- B: Use File Management Commands
- C: Find File Locations

Lesson 5: Authoring Text Files

- A: Edit Text Files
- B: Manage Text Files

Lesson 6: Managing Software

- A: Understand Software Management
- B: Manage RPM Software Packages and Repositories
- C: Manage Debian-based Software Packages and Repositories
- D: Compile from Source Code
- E: Acquire Software
- F: Run Software in a Sandbox

Lesson 7: Administering Storage

- A: Understand Storage
- B: Deploy Storage
- C: Manage Other Storage Options
- D: Troubleshoot Storage

Lesson 8: Managing Devices, Processes, Memory, and the Kernel

- A: Gather Hardware Information
- B: Manage Processes
- C: Manage Memory
- D: Manage the Linux Kernel

Lesson 9: Managing Services

- A: Manage System Services
- B: Configure Common System Services
- C: Configure Localization Settings

Lesson 10: Configuring Network Settings

- A: Understand Network Fundamentals
- B: Manage Network Settings
- C: Configure Remote Administrative Access

D: Troubleshoot the Network

Lesson 11: Configuring Network Security

A: Configure the Firewall

B: Monitor Network Traffic

Lesson 12: Managing Linux Security

A: Harden a Linux System

B: Manage Certificates

C: Understand Authentication

D: Configure SELinux or AppArmor

Lesson 13: Implementing Simple Scripts

A: Understand Bash Scripting Basics

B: Use Shell Script Elements

C: Implement Scripts with Logical Controls

Lesson 14: Using Infrastructure as Code

A: Understand Infrastructure as Code

B: Implement Orchestration

C: Manage Version Control with Git

Lesson 15: Managing Containers in Linux

A: Understand Containers

B: Deploy Containers

C: Understand Virtualization Concepts

Lesson 16: Installing Linux

A: The Linux Boot Process

B: Modify Boot Settings

C: Deploy Linux

6. Exam Reference

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| Exam Code | XK0-005 |
| Number of Questions | 90 Questions |
| Length of Test | 90 Minutes |
| Passing Score | 720 (on a scale of 100 to 900) |

