

Document Generated: 12/18/2025 Learning Style: Virtual Classroom

Technology: CompTIA

Difficulty: Intermediate

Course Duration: 5 Days

# CompTIA Linux+ (CompTIA-Linux+)



f you enroll in this course without the Master Subscription plan, you receive a Free Official Exam Voucher for XK0-005 Exam. This course does not include Exam Voucher if enrolled within the Master Subscription, however, you can request to purchase the Official Exam Voucher separately."

#### About this course:

Its time to prepare for the CompTIA Linux+ (CompTIA-Linux+) which a very popular course and valued certification around the world. There is a huge demand of Linux administrators, engineers and architects because of their experience and pro skills related to Linux. If you have the basic knowledge the foundation is already set for the next level where you can learn further about the installation, security, and troubleshooting. This course will also help you to be prepared for the CompTIA Linux+ exam.

This certification differentiates you from the crowd in the IT industry because of your consistent learning and experience of Linux. Having a six month or 1-year experience is the key to your exam because you cannot enroll if you don't have the basic knowledge about it. In this course, you will learn about managing the user administrations, Linux based clients and monitoring the security of the systems.

# What has changed in the CompTIA Linux+ program?

So, there is a significant difference between the two versions as the previous one was all basic and beginner learning. There was less material and the goal were only to run the program. But, as now today the global industries rely on the IT sector for producing outstanding results, the new plus program is going to take you the very next level of quality. The course will be detailed and one may learn about the new strategies and tips for making things done in the practical world.

# Advantages of the LPI Linux programs?

There are many jobs out there for the Linux professionals as it has been providing a great panel of jobs for many years. Once you are done with the four levels of Linux certification, you can work anywhere around the world because of your experience with the technology. Technology like the Linux essentials which many companies require for the entry-level experts should be on your fingertips to cover the foundation.

#### Skills covered

- Once you are done with the course you will have the pro skills to handle the Linux system. Here are some of the skills that you have:
- You will be able to configure the hardware settings and would be able to run the system effectively than before
- You can easily manage the hard disk and the libraries of the system
- Would be able to easily create a better file system and would be able to manage the files and processes
- Managing of the user accounts and troubleshooting of the network settings and services

# **Course Objectives:**

The objectives of this course are to make sure that you:

Install and manage the Linux administration and work with Linux ownerships

- Able to manage all the operating system and networks especially Kernel
- Able to troubleshoot and provide security to the Linux operating system for effective and efficient performance.

#### Audience:

People who can enroll for this course can be:

- IT Professionals with experience or good knowledge
- · Linux administrators, engineers, and architects

# **Prerequisite:**

- The person enrolling for the course should have prior experience working with Linux for a year or more.
- Should have all the basic knowledge about the Linux operating system and its administration and support.

#### **Course Outline:**

#### **Lesson 1: Performing Basic Linux Tasks**

- Topic A: Identify the History and Development of Linux
- Topic B: Enter Shell Commands
- Topic C: Get Help Using Linux
- Topic D: Start and Stop Linux

# **Lesson 2: Managing User and Group Accounts**

- Topic A: Create User and Group Accounts
- Topic B: Configure User Profiles
- Topic C: Administer User and Group Accounts

#### **Lesson 3: Managing Partitions and the Linux Filesystem**

- Topic A: Create Partitions
- Topic B: Navigate Through the Linux Filesystem
- Topic C: Manage the Filesystem
- Topic D: Maintain the Filesystem

# **Lesson 4: Managing Files in Linux**

- Topic A: Create and Edit Text Files
- Topic B: Locate Files
- Topic C: Search Text Using Regular Expressions
- Topic D: Apply Filters to Text Streams
- Topic E: Link Files
- Topic F: Back Up and Restore Files
- Topic G: Manage Databases Using MariaDB

#### **Lesson 5: Managing Linux Permissions and Ownership**

- Topic A: Modify File and Directory Permissions
- Topic B: Modify Default Permissions
- Topic C: Modify File and Directory Ownership
- Topic D: Set Special Permissions and Attributes

# **Lesson 6: Printing Files**

- Topic A: Configure a Local Printer
- Topic B: Print Files
- Topic C: Configure Remote Printing

# **Lesson 7: Managing Packages**

- Topic A: Manage Packages Using RPM
- Topic B: Verify Packages
- Topic C: Upgrade Packages
- Topic D: Configure Repositories
- Topic E: Manage Packages Using YUM
- Topic F: Advanced Package and Application Management

### **Lesson 8: Managing Kernel Services**

- Topic A: Explore the Linux Kernel
- Topic B: Customize Kernel Modules
- Topic C: Create an initrd Image
- Topic D: Manage Device Drivers and Hardware Devices
- Topic E: Monitor Processes and Resources

# Lesson 9: Working with the Bash Shell and Shell Scripts

- Topic A: Perform Basic Bash Shell Operations
- Topic B: Write a Bash Shell Script
- Topic C: Customize the Bash Shell
- Topic D: Redirect Standard Input and Output
- Topic E: Use Control Statements in Shell Scripts

#### **Lesson 10: Managing Jobs and Processes**

- Topic A: Manage Jobs and Background Processes
- Topic B: Manage Processes Using the Process Table
- Topic C: Delay and Detach Jobs
- Topic D: Schedule Jobs
- Topic E: Maintain the System Time

#### **Lesson 11: Managing System Services**

- Topic A: Configure System Services
- Topic B: Monitor System Logs

Topic C: Configure Security-Enhanced Linux (SELinux)

#### **Lesson 12: Configuring Network Services**

- Topic A: Connect to a Network
- Topic B: Configure Routes
- Topic C: Configure Client Network Services
- Topic D: Manage Remote Network Systems

## **Lesson 13: Configuring Basic Internet Services**

- Topic A: Configure Email Services
- Topic B: Control Internet Services

### **Lesson 14: Securing Linux**

- Topic A: Implement Basic System Security
- Topic B: Secure User Accounts

# **Lesson 15: Managing Hardware**

- Topic A: Identify Common Hardware Components and Resources
- Topic B: Configure Removable Hardware
- Topic C: Configure Disk Quotas

# **Lesson 16: Troubleshooting Linux Systems**

- Topic A: Troubleshoot System-Based Issues
- Topic B: Troubleshoot Hardware Issues
- Topic C: Troubleshoot Network Connection and Security Issues

# **Lesson 17: Installing Linux**

- Topic A: Prepare for Installation
- Topic B: The Linux Boot Process
- Topic C: Configure GRUB
- Topic D: Install the Operating System

#### **Lesson 18: Configuring the GUI**

- Topic A: Implement X
- Topic B: Customize the Display Manager
- Topic C: Enable Accessibility Settings in Linux