

# CompTIA Linux+ (LINUX+)

## **Description**

# Why enroll in the CompTIA Linux+ training?

In a world where companies and institutions are increasingly adopting solutions based on open-source software, the CompTIA Linux+ (LINUX+) certification stands out as a must-have. It validates essential skills for independently and professionally administering Linux systems. By choosing this training, you ensure expertise in managing Linux systems, whether in cloud or on-premises environments.

# Linux certification to boost your career

Our CompTIA Linux+ (LINUX+) training not only prepares you to master the fundamentals of the Linux operating system but also equips you to tackle the complex challenges faced by administrators. This course will familiarize you with installation, configuration, service management, and Linux system security. You will also be prepared to take the CompTIA Linux+ (XK0-004) exam, an internationally recognized benchmark of competence.

#### **Course Content**

### Module 1: Performing basic Linux operations

- Understanding Linux development culture
- Preparing and executing system installation
- Executing basic Shell commands
- Documenting with help pages

### Module 2: Managing Linux user and group rights

- Assigning superuser (root) privileges
- Creating, modifying, and deleting users
- Creating, modifying, and deleting groups
- Consulting users and groups
- · Configuring account settings

### Module 3: Managing Linux permissions and ownership

Modifying file and directory permissions

- Changing file and directory ownership
- Configuring specific permissions and settings
- · Troubleshooting access rights issues

### **Module 4: Configuring Linux storage**

- Creating partitions
- Managing logical volumes
- · Mounting and managing file systems
- Managing file systems
- Exploring directory hierarchy
- · Troubleshooting storage issues

### Module 5: Managing Linux files and directories

- · Creating and editing text files
- · Searching for files
- Performing tasks on files and directories
- Managing text files

### Module 6: Administering Linux kernel modules

- Exploring the Linux kernel
- · Installing and configuring kernel modules
- Monitoring kernel modules

### Module 7: Controlling the Linux boot process

- Configuring bootloader tools
- Setting up GRUB 2 bootloader

### **Module 8: Administering Linux services**

- Configuring localization settings
- Setting up graphical user interfaces (GUI)
- · Managing services
- Troubleshooting process issues
- Troubleshooting CPU and memory issues

# Module 9: Managing Linux devices

- Identifying different types of devices
- · Configuring and monitoring devices
- Troubleshooting hardware issues

### **Module 10: Administering Linux networks**

- Reviewing TCP/IP communication basics
- Determining Linux server functions
- Connecting to a network
- Configuring DHCP and DNS protocols
- Setting up cloud computing and virtualization services
- Troubleshooting network issues

### Module 11: Deploying Linux packages and software

- Introduction to package managers
- Managing RPM packages with YUM
- Managing Debian packages with APT
- · Configuring software and package repositories
- · Downloading software
- Building software from source code
- Resolving software dependency issues

#### **Module 12: Securing Linux**

- Best practices in cybersecurity
- · Implementing identity and access management best practices
- Configuring SELinux and AppArmor
- · Setting up the firewall
- Installing logging services
- · Backing up, restoring, and controlling data

### Module 13: Using Bash scripts on Linux

- Customizing the Bash shell
- Introduction to programming and scripting
- Coding and executing a basic Bash script
- Integrating control instructions into a Bash script

### **Module 14: Automating Linux tasks**

- Scheduling tasks
- · Implementing version control with Git
- · Understanding basic management principles

#### **Documentation**

Digital course material included

#### **Exam**

- This course prepares to the CompTIA Linux+ certification
- In order to receive the CompTIA Linux+ certification, learners must pass two exams: XK0-004
- If you wish to take these exams, please contact our secretariat who will let you know the cost of the exam and will take care of all the necessary administrative procedures for you.

#### Participant profiles

Junior system administrators

- Junior cloud engineers
- Linux support technicians
- IT professionals aiming for Linux certification
- · DevOps professionals looking to enhance their Linux skills

# **Prerequisites**

- Install and configure a Linux system
- Administer Linux users and groups
- Manage files, directories, and permissions
- Administer Linux networks and services
- Automate tasks with Bash scripts
- Secure a Linux system

### **Objectives**

- Install and configure a Linux system
- Administer Linux users and groups
- Manage files, directories, and permissions
- Administer Linux networks and services
- · Automate tasks with Bash scripts
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#### **Description**

CompTIA Linux+ (LINUX+) training

Niveau

Intermédiaire

**Classroom Registration Price (CHF)** 

4000

**Virtual Classroom Registration Price (CHF)** 

3750

**Duration (in Days)** 

5

Reference

COM-102