

# Linux+

## Course Description & Overview

SecureNinja's CompTIA Linux+ (XK0-006) certification training equips learners with the skills needed to confidently manage, troubleshoot, and secure Linux systems in real-world enterprise environments. This comprehensive course explores the fundamentals of Linux command-line usage, system administration, network configuration, security practices, and automation through tools like Bash and scripting utilities. It is aligned with the latest CompTIA Linux+ exam objectives and reflects modern job roles and technologies used in cybersecurity, DevOps, and cloud-based environments.

Covering everything from system configuration and command-line operations to automation, security, and containerization, this certification equips students with practical knowledge of Linux infrastructure across hybrid cloud environments. This training is an excellent step toward mastering open-source platforms while preparing to earn a vendor-neutral certification that is recognized by employers and meets DoD 8140 compliance requirements.

### Why Choose CompTIA Linux+

- **Widely Recognized Credential:** Validates Linux skills in real-world enterprise environments.
- **Updated for XK0-006:** Covers emerging technologies such as containerization, automation, and orchestration.
- **Vendor-Neutral Training:** Prepares learners to work across multiple distributions and platforms.
- **In Demand by Employers:** Meets DoD 8140/8570 requirements and is highly valued in DevOps, cybersecurity, and system admin roles.

### Topics Covered

- **System Management:** User and group administration, storage management, and configuration.
- **Security:** File permissions, access controls, and network security tools.
- **Scripting and Automation:** Shell scripting, task scheduling, and version control.
- **Containers and Orchestration:** Managing containers and Kubernetes basics.
- **Troubleshooting:** Diagnosing and resolving system and network issues.

### Who is it for

- **IT Professionals:** Those seeking to validate or enhance their Linux skills.
- **System Administrators:** Professionals responsible for deploying and managing Linux-based infrastructure.
- **Cybersecurity Analysts:** Those who use Linux in penetration testing, threat detection, or server hardening.
- **DevOps and Cloud Engineers:** Anyone working with automated environments and cloud-native platforms.

## Who Would Benefit

- Junior to Mid-Level Admins: Looking to formalize and expand their Linux experience.
- Network Engineers: Who want to enhance their understanding of Linux-based systems.
- Certification Seekers: Individuals pursuing DoD 8140 compliance or career advancement in IT infrastructure roles.

## Prerequisites

Basic familiarity with computer systems and networking is recommended. Prior experience with Linux is extremely helpful but not required.

## Course Outline

### 1. System Management

- User, group, and permission management
- Disk partitions, volumes, and file systems
- System startup and service management

### 2. Security

- Access controls and authentication mechanisms
- Firewall and intrusion detection configuration
- Log management and auditing

### 3. Scripting, Containers, and Automation

- Shell scripting and command-line tools
- Version control using Git
- Managing containers with Docker and basic Kubernetes

### 4. Troubleshooting

- Resolving boot, network, and permission issues
- Performance monitoring and diagnostics
- Analyzing logs and system messages

### 5. Hardware and System Configuration

- Installing and configuring Linux systems
- Kernel modules, services, and software packages
- Virtualization and cloud integration concepts

## Course Length

- 5 Days
- 40 Hours

## Exam Details

- Exam Code: XK0-006
- Number of Questions: Maximum of 90
- Question Types: Multiple-choice and performance-based
- Test Duration: 90 minutes
- Passing Score: 720 (on a scale of 100–900)

The CompTIA Linux+ XK0-006 certification is ideal for individuals who want to build or validate their Linux administration skills across multiple job roles. Whether you're advancing your career in system administration, cybersecurity, or DevOps, this course provides the practical foundation to support and manage modern Linux environments with confidence.