

Official CompTIA learning resources
for Instructor-Led Training:

CompTIA Linux+

Official CompTIA learning resources for Instructor-Led Training are designed with the instructor in mind, providing insights and tools for successfully training learners pursuing their CompTIA Linux+ certification.

OVERVIEW

The Official CompTIA Linux+ Instructor and Student Guides (XK0-004) have been developed by CompTIA with input from instructors across the world. Rigorously evaluated by third-party subject matter experts to validate adequate coverage of the Linux+ XK0-004 exam objectives, the Official CompTIA Linux+ Instructor and Student Guides teach the essential skills needed to manage servers and other devices running the Linux operating system and prepares candidates to take the CompTIA Linux+ certification exam.

OFFICIAL LEARNING RESOURCES

- The Official CompTIA Linux+ Instructor Guide (Exam XK0-004) – available in print and eBook
- The Official CompTIA Linux+ Student Guide (Exam XK0-004) – available in print and eBook
- CompTIA Learning Center – Digital Learning Platform – included with purchase of print and eBook
- The Official CompTIA Linux+ CompTIA Labs (Exam XK0-004)

WHY ARE OFFICIAL COMPTIA LEARNING RESOURCES DIFFERENT?

- **For Exam Takers by the Exam Developer** - Official CompTIA learning resources are the only study material exclusively developed by CompTIA.
- **Designed for Instructors by Instructors** - Developed on the principle that “people learn best from other people,” the Official CompTIA Linux+ Guides are specifically designed for expert-facilitated delivery. More than 100 instructors were involved in the development of Linux+ Official learning resources.
- **Complete Library** - No other content library covers all exam objectives for all certifications. It provides complete breadth, depth and currency of material unavailable with competitors.

KEY FEATURES AND BENEFITS

- **Robust Assessment** - Practice questions for each lesson and a final assessment covering all lessons, more than 240 questions in total, are available to help students practice and demonstrate what they have learned.
- **Integrate Active Learning** - Each topic has at least one activity, enabling students to practice guidelines and procedures, as well as solidify understanding of the informational material presented in the course. Activities present a job-plausible scenario or job-realistic assignment and then provide step-by-step instructions for how to approach the problem at hand. Activities may also require the student to analyze sample data, engage in structured discussion or analyze case studies.
- **Alignment and Consistency Across Book, Labs and Assessment** - The book, labs and assessment all work together with a similar approach and voice ensuring that instructors and students have a cohesive, “single-sourced” solution for their Linux+ course. Activities within the book inform the classroom labs and the virtual labs designed for the course. Assessment are based on lessons in the book and includes a final cumulative assessment.
- **Engaging Video Program Developed Exclusively for CompTIA** - Videos developed exclusively for CompTIA provide short, engaging demonstrations of key activities in the course. The videos provide an alternative to hands-on demonstrations for virtual environments or for classrooms that do not have access to all equipment mentioned in the course.

LABS

CompTIA Labs, hosted by Skillable, allow students to learn in actual software applications through a remote lab environment. Labs allow students to practice what they are learning using real, hands-on experiences. Students have access to the software environment for 12 months after a CompTIA Labs access key is redeemed, providing a post-class resource for students to practice their skills.

LABS AVAILABLE:

Lesson 1: Performing Basic Linux Tasks
Lesson 2: Managing Users and Groups
Lesson 3: Managing Permissions and Ownership
Lesson 4: Managing Storage
Lesson 5: Managing Files and Directories
Lesson 6: Managing Kernel Modules
Lesson 7: Managing the Linux Boot Process
Lesson 8: Managing System Components
Lesson 9: Managing Devices
Lesson 10: Managing Networking
Lesson 11: Managing Packages and Software
Lesson 12: Securing Linux Systems
Lesson 13: Working with Bash Scripts
Lesson 14: Automating Tasks
Lesson 15: Installing Linux



ENHANCED LEARNING RESOURCES

The Official CompTIA Linux+ Guides include the accompanying resources:

Comprehensive INSTRUCTOR resources ensure successful course delivery by providing:	Comprehensive STUDENT resources engage students by providing:
<ul style="list-style-type: none">• Course-specific delivery tips provide the instructor with additional insights to deliver the course successfully• Facilitator notes in instructor guide• Solutions to activities and discussions• PowerPoint slides: A complete set of slides to facilitate the class including lists, tables, diagrams, illustrations, annotated screens and activity summaries• Presentation Planners help plan and schedule courses based on different course lengths• Solutions: Instructors have solutions to Activities and Discussion Questions embedded within the Instructor Guide.	<ul style="list-style-type: none">• eBook: An interactive online version of the book, along with secure PDF and downloadable versions• Files: Any course files available to download• Videos: Brief videos, developed exclusively for CompTIA, provide demonstrations of key activities in the course• Assessment: A series of different assessments for each lesson as well as an overall self-assessment• PowerPoint slides• Solutions to activities and discussions• Strengths and Weaknesses Dashboard: Students' assessment results are aggregated in the Strengths and Weaknesses dashboard to provide an indicator of their overall performance in the course.

EXAM PREP OPTION

CompTIA CertMaster Practice is an online knowledge assessment and remediation tool designed to help learners feel more confident and prepared for the CompTIA exam.

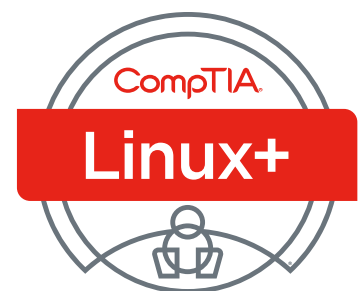
COURSE OVERVIEW

This course is for students who are preparing for CompTIA Linux+ certification exam XK0-004. Linux+ XK0-004 is now developed by CompTIA and offered as a single, performance-based exam.

Linux+ validates the necessary skills of IT professionals with hands-on experience configuring, monitoring, and supporting servers running the Linux OS. It is the right step for all early to mid-career IT professionals utilizing Linux-based systems, whether they are managing infrastructure, cloud workflows, or ensuring the cybersecurity of their organization. Linux+ also validates the critical Linux skills needed in cloud and cybersecurity.

JOB ROLES

- Linux Administrator
- Systems Administrator
- Network Administrator
- Web Administrator
- Technical Support Specialist



PREREQUISITES

Students should have CompTIA A+, CompTIA Network+ certifications and preferably 9 – 12 months of Linux experience. In this course, students will learn the background knowledge and skills necessary to administer, troubleshoot, install or maintain Linux. Concepts covered include:

- System Configuration
- The Command Line Interface
- Scripting Basics
- Network Settings and Services
- System Security

TABLE OF CONTENTS

Lesson 1: Performing Basic Linux Tasks Topic A: Identify the Linux Design Philosophy Topic B: Enter Shell Commands Topic C: Get Help with Linux	Lesson 2: Managing Users and Groups Topic A: Assume Superuser Privileges Topic B: Create, Modify, and Delete Users Topic C: Create, Modify, and Delete Groups Topic D: Query Users and Groups Topic E: Configure Account Profiles	Lesson 3: Managing Permissions and Ownership Topic A: Modify File and Directory Permissions Topic B: Modify File and Directory Ownership Topic C: Configure Special Permissions and Attributes Topic D: Troubleshoot Permissions Issues
Lesson 4: Managing Storage Topic A: Create Partitions Topic B: Manage Logical Volumes Topic C: Mount File Systems Topic D: Manage File Systems Topic E: Navigate the Linux Directory Structure Topic F: Troubleshoot Storage Issues	Lesson 5: Managing Files and Directories Topic A: Create and Edit Text Files Topic B: Search for Files Topic C: Perform Operations on Files and Directories Topic D: Process Text Files Topic E: Manipulate File Output	Lesson 6: Managing Kernel Modules Topic A: Explore the Linux Kernel Topic B: Install and Configure Kernel Modules Topic C: Monitor Kernel Modules
Lesson 7: Managing the Linux Boot Process Topic A: Configure Linux Boot Components Topic B: Configure GRUB 2	Lesson 8: Managing System Components Topic A: Configure Localization Options Topic B: Configure GUIs Topic C: Manage Services Topic D: Troubleshoot Process Issues Topic E: Troubleshoot CPU and Memory Issues	Lesson 9: Managing Devices Topic A: Identify the Types of Linux Devices Topic B: Configure Devices Topic C: Monitor Devices Topic D: Troubleshoot Hardware Issues
Lesson 10: Managing Networking Topic A: Identify TCP/IP Fundamentals Topic B: Identify Linux Server Roles Topic C: Connect to a Network Topic D: Configure DHCP and DNS Client Services Topic E: Configure Cloud and Virtualization Technologies Topic F: Troubleshoot Networking Issues	Lesson 11: Managing Packages and Software Topic A: Identify Package Managers Topic B: Manage RPM Packages with YUM Topic C: Manage Debian Packages with APT Topic D: Configure Repositories Topic E: Acquire Software Topic F: Build Software from Source Code Topic G: Troubleshoot Software Dependency Issues	Lesson 12: Securing Linux Systems Topic A: Implement Cybersecurity Best Practices Topic B: Implement Identity and Access Management Methods Topic C: Configure SELinux or AppArmor Topic D: Configure Firewalls Topic E: Implement Logging Services Topic F: Back Up, Restore, and Verify Data
Lesson 13: Working with Bash Scripts Topic A: Customize the Bash Shell Environment Topic B: Identify Scripting and Programming Fundamentals Topic C: Write and Execute a Simple Bash Script Topic D: Incorporate Control Statements in Bash Scripts	Lesson 14: Automating Tasks Topic A: Schedule Jobs Topic B: Implement Version Control Using Git Topic C: Identify Orchestration Concepts	Lesson 15: Installing Linux Topic A: Prepare for Linux Installation Topic B: Perform the Installation

PURCHASE EVERYTHING IN ONE PLACE

Official CompTIA learning resources are available on the CompTIA Store at <https://store.comptia.org/>, which means partners will be able to obtain Official CompTIA learning resources, CompTIA CertMaster products and exam vouchers all in one place. Please contact your CompTIA business development representative for more information.