

# uCertify

## Course Outline

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### Linux Essentials



Lesson



Practice test



Live-Lab

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## 1. Course Objective

Prepare for the LPI Linux Essentials 010-150 certification exam with the Linux Essentials course. The course covers the LPI Linux Essentials 010-150 exam domains security and file permissions, Linux operating system, power of the command line, finding your way on a Linux system, Linux community and a career in open source.

## 2. Pre-Assessment

Pre-Assessment lets you identify the areas for improvement before you start your prep. It determines what students know about a topic before it is taught and identifies areas for improvement with question assessment before beginning the course.

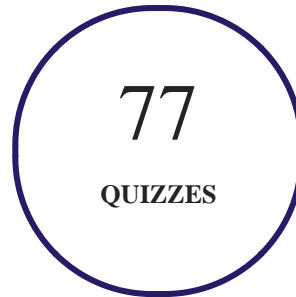
## 3. Exercises

There is no limit to the number of times learners can attempt these. Exercises come with detailed remediation, which ensures that learners are confident on the topic before proceeding.

140  
EXERCISES

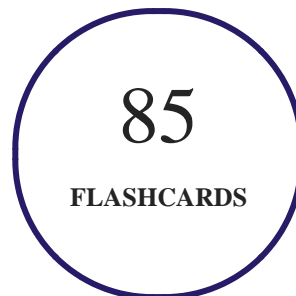
## 4. Quizzes

Quizzes test your knowledge on the topics of the exam when you go through the course material. There is no limit to the number of times you can attempt it.



## 5. Flashcards

Flashcards are effective memory-aiding tools that help you learn complex topics easily. The flashcard will help you in memorizing definitions, terminologies, key concepts, and more. There is no limit to the number of times learners can attempt these. Flashcards help master the key concepts.



## 6. Glossary of terms

uCertify provides detailed explanations of concepts relevant to the course through Glossary. It contains a list of frequently used terminologies along with its detailed explanation. Glossary defines the key terms.



## 7. Expert Instructor-Led Training

uCertify uses the content from the finest publishers and only the IT industry's finest instructors. They have a minimum of 15 years real-world experience and are subject matter experts in their fields. Unlike a live class, you can study at your own pace. This creates a personal learning experience and gives you all the benefit of hands-on training with the flexibility of doing it around your schedule 24/7.

## 8. ADA Compliant & JAWS Compatible Platform

uCertify course and labs are ADA (Americans with Disability Act) compliant. It is now more accessible to students with features such as:

- Change the font, size, and color of the content of the course
- Text-to-speech, reads the text into spoken words
- Interactive videos, how-tos videos come with transcripts and voice-over
- Interactive transcripts, each word is clickable. Students can clip a specific part of the video by clicking on a word or a portion of the text.

JAWS (Job Access with Speech) is a computer screen reader program for Microsoft Windows that reads the screen either with a text-to-speech output or by a Refreshable Braille display. Student can easily navigate uCertify course using JAWS shortcut keys.

## 9. State of the Art Educator Tools

uCertify knows the importance of instructors and provide tools to help them do their job effectively. Instructors are able to clone and customize course. Do ability grouping. Create sections. Design grade scale and grade formula. Create and schedule assignments. Educators can also move a student from self-paced to mentor-guided to instructor-led mode in three clicks.

## 10. Award Winning Learning Platform (LMS)

uCertify has developed an award winning, highly interactive yet simple to use platform. The SIIA CODiE Awards is the only peer-reviewed program to showcase business and education technology's finest products and services. Since 1986, thousands of products, services and solutions have been recognized for achieving excellence. uCertify has won CODiE awards consecutively for last 7 years:

- **2014**
  1. Best Postsecondary Learning Solution
  
- **2015**
  1. Best Education Solution
  2. Best Virtual Learning Solution
  3. Best Student Assessment Solution
  4. Best Postsecondary Learning Solution
  5. Best Career and Workforce Readiness Solution
  6. Best Instructional Solution in Other Curriculum Areas
  7. Best Corporate Learning/Workforce Development Solution
  
- **2016**
  1. Best Virtual Learning Solution
  2. Best Education Cloud-based Solution

3. Best College and Career Readiness Solution
4. Best Corporate / Workforce Learning Solution
5. Best Postsecondary Learning Content Solution
6. Best Postsecondary LMS or Learning Platform
7. Best Learning Relationship Management Solution

- **2017**

1. Best Overall Education Solution
2. Best Student Assessment Solution
3. Best Corporate/Workforce Learning Solution
4. Best Higher Education LMS or Learning Platform

- **2018**

1. Best Higher Education LMS or Learning Platform
2. Best Instructional Solution in Other Curriculum Areas
3. Best Learning Relationship Management Solution

- **2019**

1. Best Virtual Learning Solution
2. Best Content Authoring Development or Curation Solution
3. Best Higher Education Learning Management Solution (LMS)

- **2020**

1. Best College and Career Readiness Solution
2. Best Cross-Curricular Solution
3. Best Virtual Learning Solution

## 11. Chapter & Lessons

uCertify brings these textbooks to life. It is full of interactive activities that keeps the learner engaged. uCertify brings all available learning resources for a topic in one place so that the learner can efficiently learn without going to multiple places. Challenge questions are also embedded in the



chapters so learners can attempt those while they are learning about that particular topic. This helps them grasp the concepts better because they can go over it again right away which improves learning.

Learners can do Flashcards, Exercises, Quizzes and Labs related to each chapter. At the end of every lesson, uCertify courses guide the learners on the path they should follow.

## Syllabus

### Chapter 1: Introduction

- What Is Linux?
- What Is the Linux Essentials Certification?
- Course Structure
- How This Course Is Organized
- Conventions Used in This Course

### Chapter 2: Selecting an Operating System

- What Is an OS?
- Investigating User Interfaces
- Where Does Linux Fit in the OS World?
- What Is a Distribution?

### Chapter 3: Understanding Software Licensing

- Investigating Software Licenses
- Looking at the Free Software Foundation
- Looking at the Open Source Initiative
- Looking at the Creative Commons
- Using Open Source Licenses

#### Chapter 4: Investigating Linux's Principles and Philosophy

- Exploring Linux through the Ages
- Using Open Source Software
- Understanding OS Roles

#### Chapter 5: Using Common Linux Programs

- Using a Linux Desktop Environment
- Working with Productivity Software
- Using Server Programs
- Managing Programming Languages
- Handling Software Packages

## Chapter 6: Managing Hardware

- Learning about Your CPU
- Identifying Motherboard Capabilities
- Sizing Your Power Supply
- Understanding Disk Issues
- Managing Displays
- Handling USB Devices
- Managing Drivers

## Chapter 7: Getting to Know the Command Line

- Starting a Command Line

- Running Programs
- Using Shell Features
- Getting Help Using man Pages
- Getting Help Using info Pages
- Finding Additional Documentation

## Chapter 8: Managing Files

- Understanding Where Things Go
- Navigating Files and Directories
- Manipulating Files
- Manipulating Directories

## Chapter 9: Searching, Extracting, and Archiving Data

- Using Regular Expressions
- Searching for and Extracting Data
- Redirecting Input and Output
- Archiving Data

## Chapter 10: Exploring Processes and Process Data

- Understanding Package Management
- Understanding the Process Hierarchy
- Identifying Running Processes
- Using Log Files

## Chapter 11: Editing Files

- Understanding the Role of Text Files
- Choosing an Editor
- Launching an Editor
- Editing Files with pico or nano
- Editing Files with vi

## Chapter 12: Creating Scripts

- Beginning a Shell Script
- Using Commands
- Using Arguments
- Using Variables

- Using Conditional Expressions
- Using Loops
- Using Functions
- Setting the Script's Exit Value

### Chapter 13: Understanding Basic Security

- Understanding Accounts
- Using Account Tools
- Working as root

### Chapter 14: Creating Users and Groups

- Creating New Accounts
- Modifying Accounts
- Deleting Accounts
- Managing Groups

### Chapter 15: Setting Ownership and Permissions

- Setting Ownership

- Setting Permissions
- Using Special Permission Bits and File Features

## Chapter 16: Managing Network Connections

- Understanding Network Features
- Configuring a Network Connection
- Testing Your Network Connection
- Protecting Your System from the Bad Guys

## Chapter 17: Appendix A

- LPI's Certification Program
- The Linux Essentials Certification
- Certification Objectives Map

## 12. Practice Test

uCertify provides full length practice tests. These tests closely follow the exam objectives and are designed to simulate real exam conditions. Each course has a number of test sets consisting of hundreds of items to ensure that learners are prepared for the certification exam.

## Here's what you get

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PRE-ASSESSMENTS QUESTIONS

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POST-ASSESSMENTS QUESTIONS

## Features

### Full Remediation

Each question comes with detailed remediation explaining not only why an answer option is correct but also why it is incorrect.

### Unlimited Practice

Each test can be taken unlimited number of times until the learner feels they are prepared. Learner can review the test and read detailed remediation. Detailed test history is also available.

### Learn, Test and Review Mode

Each test set comes with learn, test and review modes. In learn mode, learners will attempt a question and will get immediate feedback and complete remediation as they move on to the next question. In test mode, learners can take a timed test simulating the actual exam conditions. In review mode, learners can read through one item at a time without attempting it.

## 13. Live Labs



Live-Lab is a real computer equipment, networked together and conveniently accessible over the internet using virtualization. A live-lab has equipments such as a computer, server, switch or router in it that a user is free to configure.

The benefits of live-labs are:

- Exam based practical tasks
- Real equipment, absolutely no simulations
- Access to the latest industry technologies
- Available anytime, anywhere on any device
- Break and Reset functionality
- No hardware costs

## Lab Tasks

**Introduction**

**Selecting an Operating System**

**Understanding Software Licensing**

**Investigating Linux's Principles and Philosophy**

**Using Common Linux Programs**

**Managing Hardware**

**Getting to Know the Command Line**

**Managing Files**

**Searching, Extracting, and Archiving Data**

**Exploring Processes and Process Data**

**Editing Files**

**Creating Scripts**

**Understanding Basic Security**

**Creating Users and Groups**

**Setting Ownership and Permissions**

**Managing Network Connections**

**Appendix A**

**Here's what you get**


## 14. Post-Assessment

After completion of the uCertify course Post-Assessments are given to students and often used in

conjunction with a Pre-Assessment to measure their achievement and the effectiveness of the exam.

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