



Course Outline

Linux Essentials (Course & Lab)



24 Jan 2020



Lesson



Practice test



Lab

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1. Course Objective

Gain hands-on expertise in LPI Linux Essentials certification exam by course and performance based labs. Performance based labs simulate real-world, hardware, software & command line interface environments and can be mapped to any text-book, course & training. LPI Linux Essentials is a professional development certification program. LPI Linux Essentials exam covers basic knowledge on Open Source and various distributions of Linux.

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.

228
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.



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QUIZZES

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.



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FLASHCARDS

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.



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GLOSSARY OF
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 5 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

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: Selecting an Operating System

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

Chapter 2: Investigating Linux's Principles and Philosophy

- Overview
- Linux through the Ages
- Using Open Source Software
- Understanding OS Roles
- Suggested Exercises

Chapter 3: Understanding Software Licensing

- Overview
- Investigating Software Licenses
- The Free Software Foundation
- The Open Source Initiative
- The Creative Commons
- Using Open Source Licenses
- Suggested Exercises

Chapter 4: Using Common Linux Programs

- Overview
- Using a Linux Desktop Environment
- Working with Productivity Software

- Using Server Programs
- Managing Programming Languages
- Suggested Exercises

Chapter 5: Managing Hardware

- Overview
- Learning About Your CPU
- Identifying Motherboard Capabilities
- Sizing Your Power Supply
- Understanding Disk Issues
- Managing Displays
- Handling USB Devices
- Managing Drivers
- Suggested Exercises

Chapter 6: Getting to Know the command Line

- Overview
- Starting a Command Line

- Running Programs
- Manipulating Files
- Using Shell Features
- Suggested Exercises

Chapter 7: Managing Files

- Overview
- Manipulating Files
- Manipulating Directories
- Suggested Exercises

Chapter 8: Getting Help

- Overview
- Using man Pages
- Using info Pages
- Finding Additional Documentation
- Suggested Exercises

Chapter 9: Using Programs and Processes

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

Chapter 10: Searching, Extracting, and Archiving Data

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

Chapter 11: Editing Files

- Overview
- Understanding the Role of Text Files
- Choosing an Editor

- Launching an Editor
- Editing Files with pico or nano
- Editing Files with Vi
- Using Configuration File Conventions
- Editing Formatted Text Files
- Suggested Exercises

Chapter 12: Creating Scripts

- Overview
- Beginning a Shell Script
- Using Commands
- Using Arguments
- Using Variables
- Using Conditional Expressions
- Using Loops
- Using Functions
- Setting the Script's Exit Value
- Suggested Exercises

Chapter 13: Understanding Users and Groups

- Overview
- Understanding Accounts
- Using Account Tools
- Working as root
- Suggested Exercises

Chapter 14: Creating Users and Groups

- Overview
- Creating New Accounts
- Modifying Accounts
- Deleting Accounts
- Managing Groups
- Suggested Exercises

Chapter 15: Setting Ownership and Permissions

- Overview
- Setting Ownership

- Setting Permissions
- Suggested Exercises

Chapter 16: Navigating the Linux Filesystem

- Overview
- Understanding Where Things Go
- Using Special Permission Bits and File Features
- Suggested Exercises

Chapter 17: Managing Network connections

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

Videos and How To

uCertify course includes videos to help understand concepts. It also includes How Tos that help learners in accomplishing certain tasks.

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VIDEOS

02:06

HOURS

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. Performance Based Labs

uCertify's performance-based labs are simulators that provides virtual environment. Labs deliver hands on experience with minimal risk and thus replace expensive physical labs. uCertify Labs are cloud-based, device-enabled and can be easily integrated with an LMS. Features of uCertify labs:

- Provide hands-on experience in a safe, online environment
- Labs simulate real world, hardware, software & CLI environment
- Flexible and inexpensive alternative to physical Labs
- Comes with well-organized component library for every task
- Highly interactive - learn by doing
- Explanations and remediation available
- Videos on how to perform

Lab Tasks

- You work as a Linux system administrator for uCe... command should you use to accomplish this task?
- Deleting a file
- Creating and copying files

- Identifying the CPU architecture
- Displaying basic information of the system
- You work as a technician for uCertify Inc. The c...mand should you execute to accomplish this task?
- You want to access the /dev/sda5 filesystem at /shared. Execute the command to accomplish this task.
- Identifying your current path setting
- Knowing a computer's memory usage
- Knowing ways of listing files
- Creating and listing directories
- Deleting files
- Finding the absolute path
- Creating a subdirectory
- Sorting the file in reverse order
- Deleting a subdirectory
- Viewing the list of files in the current directory
- Changing the root directory
- You work as a Linux System Administrator for uCe...te the command required to accomplish this task.
- Renaming a file and creating a symbolic link
- John works as a Linux System Administrator for u...command should he write to accomplish this task?
- Creating and deleting a directory
- Understanding help facilities
- Searching information in man pages
- Reading info pages of a command
- Searching a file
- Locating man pages for a command
- Searching a binary file directory
- Installing the samba package
- Installing the GNOME desktop environment
- Identifying PID number of a process
- Listing all processes of the root user
- Finding kernel ring buffer messages
- Examining the kernel ring buffer
- Using the grep command

- Searching a word in a file
- Counting the words of a file
- Archiving a file
- Creating a compressed gzip archive file
- Putting files into a single zip file
- Creating an archive file
- Printing a message
- Sending ICMP ECHO_REQUEST to network hosts
- Testing the connection
- Verifying script execution
- Changing the primary group
- You work as a network administrator for uCertify...ical. Write the command to accomplish this task.
- Displaying basic information of users and group
- You work as a network administrator for uCertify...r ID. Write the command to accomplish this task.
- You work as a root user in a Linux-based system....me. Execute the command to accomplish this task.
- Creating a password-protected user
- Switching to another user
- Working with a user account
- Creating a user account
- Getting information about the current account
- Adding a user to a group
- You work as a Linux System Administrator for Tec...imes. Write the command to accomplish this task.
- Deleting a user account
- Deleting a group
- Renaming a group
- Adding a group
- Deleting a user
- Changing the group ownership
- Changing the ownership of a file
- Creating a long directory listing
- Setting the permissions
- Creating links between files

- Setting the SUID on a file
- Displaying hidden files
- Searching information in subdirectories
- Displaying interface details
- John works as a network administrator for uCerti...command should he write to accomplish this task?
- Connecting a network interface with an IP address
- Listing of listening TCP ports
- Displaying the routing table

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.

Have Any Query? We Are Happy To Help!

GET IN TOUCH:

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■ www.uCertify.com