

NDG Introduction to Linux II

Scope and Sequence

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A course developed by NDG (Network Development Group) to teach Linux.

Target Audience

The NDG Introduction to Linux II curriculum is designed for individuals who want to learn Linux.

Prerequisites

NDG Introduction to Linux I is recommended as a prerequisite to NDG Introduction to Linux II.

Curriculum Description

This 19 chapter, 60 hour course covers the fundamentals of the Linux operating system, system architecture, installation, command line and file system. The goal of this course is to provide academic institutions, organizations and individual learners curriculum to help prepare for the exam objectives aligned to the Linux Professional Institute, LPI.org, LPIC-1 (or the CompTIA Linux+ powered by LPI) second certification exam. Individuals who complete this course should understand shells, scripting, data management, interfaces and desktops, administrative tasks, essential system services, network fundamentals, and system security.

This course implements a "practice as you read" approach to learning. Each learner has hands-on access to a Linux virtual machine to practice, explore and trial Linux command line concepts. The learner is also provided 19 prescriptive step-by-step labs. These labs provide a learning environment where students interact with the Linux operating system and build on their skills and knowledge as they progress through the course.

Curriculum Objectives

The NDG Introduction to Linux II course focuses on the basic Linux skills needed in preparation for the Linux Professional Institute LPIC-1 or CompTIA Linux+ powered by LPI certification. Learners will gain proficiency performing maintenance tasks on the command line, installing and configuring a computer running Linux and configuring basic networking. The course objectives align to the LPI LPIC-1 exam topics:

- Shells, Scripting and Data Management
- Interfaces and Desktops
- Administrative Tasks
- Essentials System Services
- Network Fundamentals
- Security

Course Outline

Title of Learning Module / Chapter	LPI.ORG LPIC-1 102 Exam Certification Objective
Before You Get Started	Course Introduction
1. Advanced Shell Features	105.1 Customize and use the shell environment
2. Shell Scripts	105.2 Customize or write simple scripts
3. SQL	105.3 SQL data management
4. X Window Components	106.1 Install and configure X11
5. Configuring Display Managers	106.2 Setup a display manager
6. Accessibility	106.3 Accessibility
7. User and Group Accounts	107.1 Manage user and group accounts and related system files
8. Scheduling Jobs	107.2 Automate system administration tasks by scheduling jobs
9. Localization	107.3 Localisation and internationalisation
10. System Time	108.1 Maintain system time
11. Logging	108.2 System logging
12. Email Configuration	108.3 Mail Transfer Agent (MTA) basics
13. Printer Management	108.4 Manage printers and printing
14. Network Fundamentals	109.1 Fundamentals of internet protocols
15. Network Configuration	109.2 Basic network configuration
	109.4 Configure client side DNS
16. Network Troubleshooting	109.3 Basic network troubleshooting
17. Account Security	110.1 Perform security administration tasks
18. Host Security	110.2 Setup host security
19. Encryption	110.3 Securing data with encryption

Note: NDG Introduction to Linux II will repeat some content from NDG Linux Essentials. Why? LPI Linux Essentials certificate and LPI LPIC-1 certification exam objectives overlap. To cover all objectives, topics introduced in NDG Linux Essentials may be repeated in NDG Introduction to Linux II with more in-depth, high-rigor content. For further information, reference: <http://www.netdevgroup.com/content/lpi/documentation/LPICertobjectives.pdf>

Minimum System Requirements

Learners utilize a web browser to access the NDG Introduction to Linux II content modules, lab exercises and virtual machines. The web based content viewer and Linux console viewer (virtual machine) require at least one of the following web browsers:

- Google Chrome 30+
- Safari 6.1+
- Mozilla Firefox 25+
- Internet Explorer 10+

Industry Certification

The NDG Introduction to Linux II curriculum helps individuals prepare for the [LPI LPIC-1 Exam 102](#) certification exam. To earn the LPI LPIC-1 certification, learners complete two certification exams. This is the second of two exams. The LPI LPIC-1 102 exam topics:

- Shells, Scripting and Data Management
- Interfaces and Desktops
- Administrative Tasks
- Essentials System Services
- Network Fundamentals
- Security

For additional information about the LPI LPIC-1 certification, review the LPI certification website <http://www.lpi.org/linux-certifications>.

Note: This course also aligns to the [CompTIA Linux+ Powered by LPI](#) certification exam. Learners that earn the CompTIA Linux+ certification can receive “The 3-for-1 certification deal”, which documents certification for the CompTIA Linux+, LPI LPIC-1 and SUSE CLA certifications. To learn more, visit the [CompTIA website](#).