NDG Introduction to Linux II Version 2 – Cisco NetAcad™

Scope and Sequence

Instructors and Administrators

The NDG Linux II curriculum is designed for individuals interested in learning Linux and institutions interested in NDG Linux course offerings.

Target Audience

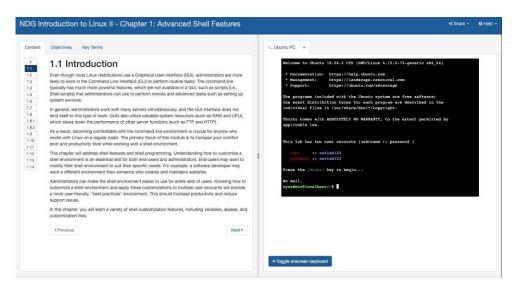The NDG Introduction to Linux II curriculum is designed for individuals who want to learn Linux.

Prerequisites

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

Curriculum Description

This 18 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 Linux Administrator first certification exam Version 5.0 (Exam 102-500). 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 18 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 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. X Windows	106.1 Install and configure X11
4. Graphical Desktops	106.2 Graphical Desktops
5. Accessibility	106.3 Accessibility
6. User and Group Accounts	107.1 Manage user and group accounts and related system files
7. Scheduling Jobs	107.2 Automate system administration tasks by scheduling jobs
8. Localization	107.3 Localisation and internationalisation
9. System Time	108.1 Maintain system time
10. System Logging	108.2 System logging
11. Email Configuration	108.3 Mail Transfer Agent (MTA) basics
12. Printer Management	108.4 Manage printers and printing
13. Networking Fundamentals	109.1 Fundamentals of internet protocols
14. Network Configuration	109.2 Persistent network configuration
	109.4 Configure client side DNS
15. Network Troubleshooting	109.3 Basic network troubleshooting
16. Account Security	110.1 Perform security administration tasks

17. Host Security	110.2 Setup host security
18. Encryption	110.3 Securing data with encryption

Note: NDG Introduction to Linux II will repeat some content from NDG Introduction to Linux I. Why? Some LPI LPIC-1 101 and 102 certification exam objectives overlap. To cover all objectives, topics introduced in NDG Introduction to Linux I may be repeated in NDG Introduction to Linux II with more in-depth, high-rigor content. For further information, reference: https://www.netdevgroup.com/support/documentation/le_lpic1_overlap.pdf.

Minimum System Requirements
Learners utilize a web browser to access the NDG Introduction to Linux II content modules, lab exercises and virtual machines. NDG recommends using a desktop operating system (Windows, Mac, or Linux) with a physical keyboard. Smartphones and tablet devices are not currently supported. The following web browsers are recommended:

- Google Chrome 56+
- Safari 10+
- Mozilla Firefox 53+

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. The LPI LPIC-1 Exam 102 is the second of two exams.

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

 For additional information about the Linux Professional Institute certifications, review their website here:

https://www.lpi.org/our-certifications/summary-of-certifications

Whom should I contact if I have questions about this course that are not explained in this document?
Questions specific to the NDG Linux courses should be directed to Network Development Group at hostedsupport@netdevgroup.com. Please take a few minutes to review the NDG website, www.netdevgroup.com, the course materials, and this document before emailing the NDG staff.