NDG Introduction to Linux II Version 2 – Cisco NetAcad[™] Scope and Sequence

Instructors and Administrators

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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.

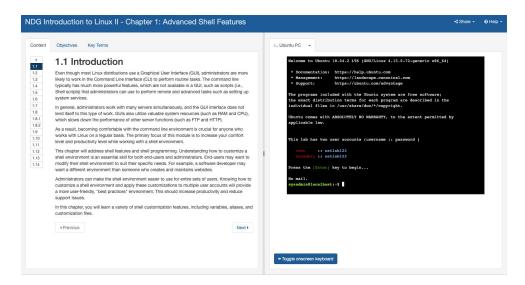
Prerequisites

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 |
| 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 <u>LPI LPIC-1 Exam 102</u> 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.