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NDG Linux Essentials Version 1 – Cisco NetAcad™ Scope and Sequence

Instructors and Administrators

Last updated July 23, 2019

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

Target Audience
The NDG Linux Essentials curriculum is designed for individuals interested in learning Linux and institutions interested in NDG Linux course offerings.
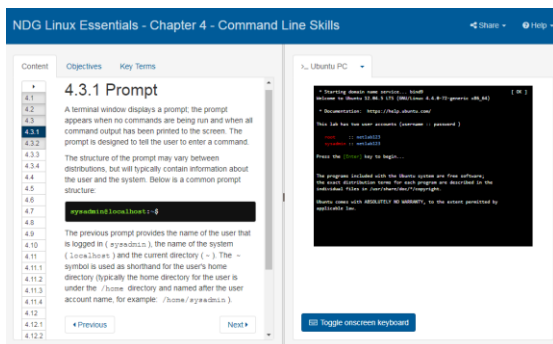
Prerequisites
There are no prerequisites for NDG Linux Essentials. The curriculum is designed for individuals with no Linux experience.

Curriculum Description
This 16 chapter, 70-hour course covers Linux as an operating system, basic open source concepts, and the basics of the Linux command line. 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, Linux Essentials Professional Development Certificate Version 1.5 (Exam 010-150).

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 13 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 Linux Essentials course focuses on the basic Linux skills needed in preparation for the Linux Professional Institute Linux Essentials Professional Development Certificate. The course objectives align to the following concepts:

- FOSS, the various communities, and licenses
- Knowledge of open source applications in the workplace as they relate to closed source equivalents
- Basic concepts of hardware, processes, programs and the components of the Linux operating system
- Work on the command line and with files
- Create and restore compressed backups and archives
- System security, users/groups and file permissions for public and private directories
- Create and run simple scripts

Course Outline

Title of Learning Module / Chapter	Exam 010-150 Objectives
1 Introduction to Linux	1.1 Linux Evolution and Popular Operating Systems
	4.1 Choosing an Operating System
2 Open Source Applications and Licenses	1.2 Major Open Source Applications
	1.3 Understanding Open Source Software and Licensing
3 Using Linux	1.4 ICT Skills and Working in Linux
4 Command Line Skills	2.1 Command Line Basics
5 Getting Help	2.2 Using the Command Line to Get Help
6 Working with Files and Directories	2.3 Using Directories and Listing Files
	2.4 Creating, Moving and Deleting Files
7 Archiving and Compression	3.1 Archiving Files on the Command Line
8 Pipes, Redirection, and REGEX	3.2 Searching and Extracting Data from Files
9 Basic Scripting	3.3 Turning Commands into a script
10 Understanding Computer Hardware	4.2 Understanding Computer Hardware
11 Managing Packages and Processes	4.3 Where Data is Stored
12 Network Configuration	4.4 Your Computer on the Network
13 System and User Security	5.1 Basic Security and Identifying User Types
14 Managing Users and Groups	5.2 Creating Users and Groups
15 Ownership and Permissions	5.3 Managing File Permissions and Ownership
16 Special Permissions, Links and File Locations	5.4 Special Directories and Files

Industry Certification

The NDG Linux Essentials course focuses on the basic Linux skills needed in preparation for the Linux Professional Institute Linux Essentials Professional Development Certificate. To earn this certification, learners must take the 010-150 Exam.

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.