

High School Technology Services  
myhsts.org  
Certification Courses

**ComTIA Linux+ in 40 hour training**

Last updated on June 2017

The Linux Professional Institute Certification (LPIC) has been around since 1999 and is the oldest available vendor-neutral Linux certification. It has always been targeted at the junior Linux user with about a year of experience, and it covers a variety of basic topics from planning an installation to basic service configuration.

The main advantage of LPIC over other certifications is that it's vendor-neutral. You're expected to have a breadth of knowledge about various Linux systems, and you're not tested on the intricacies of one system or another. This approach keeps your options open when presenting the certification to a potential employer.

Successful completion of both LPIC-1 exams (101 and 102) is required to obtain the LPIC level 1 certification. The topics for these exams have been updated recently, with the latest version released in February 2015. This version of the exam introduces new topics such as databases and email server basics.

These exams are also offered as CompTIA's Linux+ certification. Linux+ has been “powered by LPI” (the Linux Professional Institute) since 2010, with the CompTIA and LPI exams being taken from the same pool of LPI questions. This partnership allows you to take the same exam through CompTIA under the LX0-103 and LX0-104 names to obtain Linux+ certification. Passing either LPIC level 1 or Linux+ will also earn you a SUSE Certified Linux Administrator certification, if you want to claim it.

**Exam Topics for CompTIA Linux+ (LX0-103) and LPIC-1 (101-400)**

Topic 101: System Architecture

Topic No.	Description
101.1	Determine and configure hardware settings.
101.2	Boot the system.
101.3	Change runlevels / boot targets and shutdown or reboot system.

High School Technology Services  
myhsts.org  
Certification Courses

Topic 102: Linux Installation and Package Management

<b>Topic No.</b>	<b>Description</b>
102.1	Design hard disk layout.
102.2	Install a boot manager.
102.3	Manage shared libraries.
102.4	Use Debian package management.
102.5	Use RPM and YUM package management.

Topic 103: GNU and Unix Commands

<b>Topic No.</b>	<b>Description</b>
103.1	Work on the command line.
103.2	Process text streams using filters.
103.3	Perform basic file management.
103.4	Use streams, pipes, and redirects.
103.5	Create, monitor, and kill processes.
103.6	Modify process-execution priorities.
103.7	Search text files using regular expressions.
103.8	Perform basic file-editing operations using vi.

High School Technology Services  
myhsts.org  
Certification Courses

Topic 104: Devices, Linux Filesystems, Filesystem Hierarchy Standard

<b>Topic No.</b>	<b>Description</b>
104.1	Create partitions and filesystems.
104.2	Maintain the integrity of filesystems.
104.3	Control mounting and unmounting of filesystems.
104.4	Manage disk quotas.
104.5	Manage file permissions and ownership.
104.6	Create and change hard and symbolic links.
104.7	Find system files and place files in the correct location.

**Exam Topics for CompTIA Linux+ (LX0-104) and LPIC-1 (102-400)**

Topic 105: Shells, Scripting, and Data Management

<b>Topic No.</b>	<b>Description</b>
105.1	Customize and use the shell environment.
105.2	Customize or write simple scripts.
105.3	SQL data management.

High School Technology Services  
myhsts.org  
Certification Courses

Topic 106: User Interfaces and Desktops

<b>Topic No.</b>	<b>Description</b>
106.1	Install and configure X11.
106.2	Set up a display manager.
106.3	Accessibility.

Topic 107: Administrative Tasks

<b>Topic No.</b>	<b>Description</b>
107.1	Manage user and group accounts and related system files.
107.2	Automate system administration tasks by scheduling jobs.
107.3	Localization and internationalization.

Topic 108: Essential System Services

<b>Topic No.</b>	<b>Description</b>
108.1	Maintain system time.
108.2	System logging.
108.3	Mail Transfer Agent (MTA) basics.
108.4	Manage printers and printing.

High School Technology Services  
myhsts.org  
Certification Courses

Topic 109: Networking Fundamentals

<b>Topic No.</b>	<b>Description</b>
109.1	Fundamentals of Internet protocols.
109.2	Basic network configuration.
109.3	Basic network troubleshooting.
109.4	Configure client-side DNS.

Topic 110: Security

<b>Topic No.</b>	<b>Description</b>
110.1	Perform security administration tasks.
110.2	Set up host security.
110.3	Securing data with encryption.