

# LPIC-1: Linux Server Professional Certification

## **The world's largest and most recognized Linux Certification**

LPIC-1 is the first certification in LPI's multi-level Linux professional certification program. The LPIC-1 will validate the candidate's ability to perform maintenance tasks on the command line, install and configure a computer running Linux and configure basic networking.

The LPIC-1 is designed to reflect current research and validate a candidate's proficiency in real world system administration. The objectives are tied to real-world job skills, which we determine through job task analysis surveying during exam development.

**Current Version:** 4.0 (Exam codes 101-400 and 102-400)

**Prerequisites:** There are no prerequisites for this certification

**Requirements:** Passing exams 101 and 102

**Validity Period:** 5 years

## **LPIC-1 Exam 101 Topics**

- System Architecture
- Linux Installation and Package Management
- GNU and Unix Commands
- Devices, Linux Filesystems, Filesystem Hierarchy Standard

## **LPIC-1 Exam 102 Topics**

- Shells, Scripting and Data Management
- Interfaces and Desktops
- Administrative Tasks
- Essential System Services
- Networking Fundamentals
- Security

## Topic 101: System Architecture

101.1 Determine and configure hardware settings

101.2 Boot the system

101.3 Change runlevels / boot targets and shutdown or reboot system

## Topic 102: Linux Installation and Package Management

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

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

## Topic 104: Devices, Linux Filesystems, Filesystem Hierarchy Standard

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

## Topic 105: Shells, Scripting and Data Management

105.1 Customize and use the shell environment

105.2 Customize or write simple scripts

105.3 SQL data management

## Topic 106: User Interfaces and Desktops

106.1 Install and configure X11

106.2 Setup a display manager

106.3 Accessibility

## Topic 107: Administrative Tasks

107.1 Manage user and group accounts and related system files

107.2 Automate system administration tasks by scheduling jobs

107.3 Localisation and internationalisation

## Topic 108: Essential System Services

108.1 Maintain system time

108.2 System logging

108.3 Mail Transfer Agent (MTA) basics

108.4 Manage printers and printing

## Topic 109: Networking Fundamentals

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

110.1 Perform security administration tasks

110.2 Setup host security

110.3 Securing data with encryption