

LP-LPIC1

LINUX PROFESSIONAL INSTITUTE CERTIFICATION ADMINISTRATOR



DURATION	LEVEL	TECHNOLOGY	DELIVERY METHOD	TRAINING CREDITS
5 Days	Intermediate	Linux OS	Instructor Led	NA

INTRODUCTION

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. 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. Topics such as the Linux command-line tools, software management, hardware configuration, filesystems, the X Window System, the boot process, scripts, security, documentation, administration and networking will be covered in this course.

AUDIENCE PROFILE

- Anyone with little or no experience with Linux and who are seeking a fundamental understanding of the Linux operating system
- Anyone wishing to prepare for the LPI 101 and 102 exams

PREREQUISITES

Before attending this course, delegates must have:

- Knowledge about Linux, what it is, and about Linux commands
- Basic computer skills, such as how to use a keyboard and how to work with basic removable medias like Flash Drives.

COURSE OBJECTIVES

To become LPIC-1 certified the candidate must be able to:

- Understand the architecture of a Linux system
- Install and maintain a Linux workstation, including X11 and setup it up as a network client
- Work at the Linux command line, including common GNU and Unix commands
- Handle files and access permissions as well as system security
- Perform easy maintenance tasks: help users, add users to a larger system, backup and restore, shutdown and reboot.

COURSE CONTENT

PART 1: EXAM 101-500

Module 1: System Architecture

- Determine and configure hardware settings
- Boot the system
- Change runlevels / boot targets and shutdown or reboot system

Module 2: Linux Installation and Package Management

- Design hard disk layout

- Install a boot manager
- Manage shared libraries
- Use Debian package management
- Use RPM and YUM package management
- Linux as a virtualization guest

Module 3: GNU and Unix Commands

- Work on the command line

- Process text streams using filters
- Perform basic file management
- Use streams, pipes and redirects
- Create, monitor and kill processes
- Modify process execution priorities
- Search text files using regular expressions

- Basic file editing

Module 4: Devices, Linux Filesystems, Filesystem Hierarchy Standard

- Create partitions and filesystems
- Maintain the integrity of filesystems
- Control mounting and unmounting of filesystems
- Manage file permissions and ownership
- Create and change hard and symbolic links
- Find system files and place files in the correct location

[PART 2: EXAM 102-500](#)

Module 5: Shells and Shell Scripting

- Customize and use the shell environment
- Customize or write simple scripts

Module 6: User Interfaces and Desktops

- Install and configure X11 and Ownership
- Graphical Desktops and Accessibility

Module 7: Administrative Tasks

- Manage user and group accounts and related system files
- Automate system administration tasks by scheduling jobs
- Localisation and internationalisation

Module 8: Essential System Services

- Maintain system time
- System logging
- Mail Transfer Agent (MTA) basics
- Manage printers and printing

Module 9: Networking Fundamentals

- Fundamentals of internet protocols
- Persistent network configuration
- Basic network troubleshooting
- Configure client-side DNS

Module 10: Security

- Perform security administration tasks
- Setup host security
- Securing data with encryption

ASSOCIATED CERTIFICATIONS & EXAM

This course will prepare delegates to write the LPIC-1 exams 101-500 and 102-500. Successfully passing the above-mentioned exams will result in the attainment of the LPIC-1 Linux Administrator Certification. On successful completion of this course students will receive an attendance certificate.

Candidates wishing to write these LPI exams, must register online to receive the LPI Identification number before enrolling for these exams. This Identification number must be presented at our exam centres together with the booking form. Registration is free of charge and is completed on the LPI website (www.lpi.org)