

LPIC-2 LINUX ENGINEER



DURATION	LEVEL	TECHNOLOGY	DELIVERY METHOD	TRAINING CREDITS
5 days	Advanced	Linux OS	Instructor Led	NA

INTRODUCTION

LPIC-2 is the second certification in LPI's multi-level professional certification program. The LPIC-2 will validate the candidate's ability to administer small to medium-sized mixed networks. The candidate must have an active LPIC-1 certification to receive LPIC-2 certification, but the LPIC-1 and LPIC-2 exams may be taken in any order. Students will learn how to advise management on automation and purchases. In this course students will learn how to plan, implement, keep consistent, secure and troubleshoot a small mixed (Microsoft, Linux) network, including a:

- LAN server (Samba, NFS, DNS, DHCP, client management)
- Internet Gateway (firewall, VPN, SSH, web cache/proxy, mail)
- Internet Server (web server and reverse proxy, FTP server)

AUDIENCE PROFILE

- Anyone who is already familiar with Linux and material covered in LPIC-1 Linux Administrator course
- Anyone wishing to prepare for the LPIC-2 Linux Engineer Exams 201-450 and exam 202-450

PREREQUISITES

Before attending this course, delegates must have attended any of the following courses:

- LPIC-1 Linux Administrator course
- CompTIA Linux+ Powered by LPI
- Red Hat Certified System Administrator (RHCSA)

COURSE OBJECTIVES

To become LPIC-2 certified the candidate must be able to:

- Perform advanced system administration, including common tasks regarding the Linux kernel, system start-up and maintenance;
- Perform advanced Management of block storage and file systems as well as advanced networking and authentication and system security, including firewall and VPN
- Install and configure fundamental network services, including DHCP, DNS, SSH, Web servers, file servers using FTP, NFS and Samba, email delivery; and Supervise assistants and advise management on automation and purchases.

COURSE CONTENT

Part 1: Exam 201-450

Module 1 Capacity Planning

- Measure and Troubleshoot Resource Usage
- Predict Future Resource Needs

Module 2 Linux Kernel and System Startup

- Kernel Components
- Compiling a kernel
- Kernel runtime management and troubleshooting
- Customizing SysV-init system startup
- System Recovery
- Alternate Bootloaders

Module 3 Filesystem and Devices

- Operating the Linux filesystem
- Maintaining a Linux filesystem
- Creating and configuring filesystem options

Module 4 Advanced Storage Device Administration

- Configuring RAID
- Adjusting Storage Device Access
- Logical Volume Manager

Module 5 Network Configuration

- Basic networking configuration
- Advanced Network Configuration and Troubleshooting

- Troubleshooting Network Issues

Module 6 System Maintenance

- Make and install programs from source
- Backup operations
- Notify users on system-related issues

Part 2: 202-450

Module 7 Domain Name Server

- Basic DNS server configuration
- Create and maintain DNS zones
- Securing a DNS server

Module 8 Web Services

- Implementing a web server
- Apache configuration for HTTPS
- Implementing a proxy server
- Implementing Nginx as a web server and a reverse proxy

Module 9 File Sharing

- **SAMBA Server Configuration**
- **NFS Server Configuration**

Module 10 Network Client Management

- DHCP configuration
- PAM authentication
- LDAP client usage
- Configuring an OpenLDAP server

Module 11 E-Mail Services

- Using e-mail servers
- Managing E-Mail Delivery

- Managing Remote E-Mail Delivery

Module 12 System Security

- Configuring a router
- Securing FTP servers
- Secure shell (SSH)
- Security tasks
- OpenVPN

ASSOCIATED CERTIFICATIONS & EXAM

This course will prepare delegates to write the LPIC-2 exams, 201-450 and 202-450. Successfully passing exams 201-450 and 202-450 will result in the attainment of the LPIC-2 Linux Engineer 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)