

# LPI 102. Linux administration and networking (code: LPI-102)

#### **Overview**

The fundamental topics in Linux and network administration: shell script language Bash, users and permissions, processes, boot scripts, programs, basic server services, protocols - including TCP/IP, addressing and routing. Training is authorized by **Linux Professional Institute** 

This training is a second part of our LPIC-1 certification path - a followup to the LPI-101 training. Learning material covered by these two training courses allows to pass the LPIC-1 exam.

After LPI 102, we suggest:

- (if you took the LPI 101 course or mastered the material on your own) taking the LPIC-1 exam.
- continuing learning on LPIC-2 level through the complete Advanced Linux Administrator course, or LPI 201 and LPI 202 training courses.

To persons interested in acquiring the complete knowledge required by LPIC-1 exam from the very basics, we recommend our long course Linux Administrator. It not only covers all the material covered by LPI 101 and LPI 102 training courses it has also a module on selected network services, and costs less than the two training courses combined.

This training is equivalent to days 5-8 of the Linux Administrator course.

#### **Duration**

5 days

# **Agenda**

- 1. Automating work: shell scripts
  - operations on text, variables
  - conditions
  - loops
  - functions
- 2. Users
  - users, groups adding, deleting, configuring
  - pam
  - administrators sudo
- 3. Finding files
- 4. SQL fundamentals topics important for a future administrator
  - databases (tables, data types)
  - SOL basics (SELECT, INSERT, UPDATE, DELETE)
- 5. X-window
  - basic configuration (support tools)
  - architecture (incl. networking) with examples
  - basic tools and smart features
- 6. System customization
  - language, regional settings
  - graphical environment settings
  - accessibility
- 7. Encryption
- 8. Fundamental services

#### Ask for details

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#### **Coming courses**

2025-10-26 (Online (English))



- logs
- cron and at
- printing
- NTP
- 9. Basic e-mail configuration
  - sending e-mails
  - redirecting and aliases
- 10. Basic network configuration
- 11. Computer networks an overview
  - topologies
  - network hardware and technologies
- 12. TCP/IP and ISO/OSI model
  - local area networks and the problem of connecting networks
  - addresses, ARP and RARP
  - IP protocol (IPV4 and IPV6) and routing
  - ICMP
  - TCP and UDP
- 13. Configuring network interfaces
  - scripts
  - manual setting up interfaces (ip command)
  - tools such as ping, traceroute, mtr, whois
  - resolving names. DNS.
- 14. DHCP
  - how the protocol and the services work
  - basic configuration of the server and the client
- 15. Remote working
  - ssh (keys, X forwarding, ports, scp and sftp)
- 16. Security fundamentals
  - identifying devices (nmap, server version identification)
  - basic intrusion techniques (buffer overflow, string format)
  - critical rules
- 17. Identifying and solving problems
  - prevention: backup strategies and methods
  - what to do in case of a catastrophe

# Target audience and prerequisites

Basic familiarity with Linux, ability to use the command line and familiarity with the shell.

#### **Certificates**

Course participants receive completion certificates signed by ALX.

#### Locations

- Warsaw (English) Jasna 14/16A
- Online (English) your home, office or wherever you want
- any other location (London, UK, EU) on request

# **Price**

840 EUR

The price includes:

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## **Coming courses**

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- course materials,
- snacks, coffee, tea and soft drinks,
- course completion certificate,
- one-time consultation with the instructor after course completion.

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# **Coming courses**

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