# LPI 101. An introduction to Linux administration (code: LPI-101)

#### **Overview**

The basics of using Linux as an administrator and the fundamental tools an administrator needs : console, commands, text editors, system architecture, permissions, system setup, configuration. Training is authorized by **Linux Professional Institute** 

This training is a first part of our LPIC-1 certification path - the suggested continuation is the LPI-102 training. Learning material covered by these two training courses allows to pass the LPIC-1 exam.

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 the first four days of the Linux Administrator course.

#### Duration

5 days

## Agenda

- 1. Linux console: the basics
  - the most important commands
  - basic administration tools at a glance: mc and vim
- 2. The file system where and what to look for
- 3. General principles of the system
- users, groups and access rights (basics)
  - processes
  - boot procedure
  - how system components are connected:
    - pseudo-files
    - network ports
    - configuration files and logs
    - signals
    - static and dynamic links
  - names, functions and characteristics of each part of the system
  - how to setup the system (configuration via GUI, text and scripts)
- 4. Working in the shell:
  - shell scripts
  - core-utils
  - sed
- 5. Regular Expressions
- 6. Vim
- 7. The boot process
  - differences between the distributions
  - lilo and grub
  - kernel parameters
  - init and inittab, upstart
  - startup scripts
  - launch services

Ask for details

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Coming courses

2025-09-20 (Online (English))

# #!/ALX

#### 8. Controlled installation

- installing the example distribution in expert mode
- nuances: authentication, partitioning
- 9. Software installation
  - configure, make, make install
  - rpm and deb
  - apt and yum
- 10. Processes
  - outline of the operating systems theory
  - system monitoring
  - signals
- loading libraries, tracking execution
- 11. Operating System vs Hardware:
  - device files, logging
  - lspci, lsusb, hotplug
  - udev
- 12. Administrator's view on system architecture
  - kernel, modules, libraries
  - providing context for the rest of the course
- 13. Administrator's view on the filesystem
  - where to find binaries, libraries, configuration files, logs, data, documentation etc.
  - /proc file system
- 14. The file system
  - file types
  - permissions (suid etc.)
  - creating a file system (mkfs. \*, mkisofs)
  - mount practical aspects: fat and other file systems, -o loop, choosing a file system

# Target audience and prerequisites

From participants we do not require any experience with Linux, but only general familiar with Windows (efficient system management, common programs and the Internet).

# 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:

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

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