



## Linux Essentials

Duration: 2 days LIVE Online

### Course Overview

This course will be run LIVE online only.

Linux Essentials is for people using the Linux Operating system for the first time. It lays the necessary foundations, enabling candidates to acquire a good working knowledge of the command line including shell scripting. The course also introduces Linux scripting, using help commands and working with Linux files and file directories. Ideal for a business analyst, test analyst or software engineer working in a Linux environment.

### Who should attend?

This course is suitable for anyone coming to Linux for the first time. It is designed for users who are new to the Linux operating system.

### Prerequisites & pre-reading guidelines

- Basic understanding of IT and programming concepts.
- Good internet connection.
- Ability to download and install a 4GB Virtual Machine.

### How certification is earned

Upon completion of the course the delegate will receive an Expleo certificate

### Course Objectives

By the end of the course attendees, through instructor-led online presentations and exercises, will be able to

- Understand Linux as an operating system
- Acquire basic knowledge of working with Linux
- Learn basic Linux command line skills
- Learn how to use help commands and navigate help systems when using Linux
- Basics of how to work with Linux files and directories
- Searching and extracting data from Linux files
- Basic understanding of the concept of scripting
- Identifying various types of users on a Linux system
- Creating users and groups on a Linux system
- Managing Linux file permissions and ownership
- Understanding special Linux directories and files

### Context

This course will provide a solid background on the basics needed to start using Linux commands to perform the more common tasks.

### Related courses

- Java Fundamentals
- DASA Certified Devops Fundamentals
- ISAQB Certified Professional for Software Architecture – Foundation Level
- Using Selenium in CSharp with workshop

## Course Outline

### Introduction to Linux

- History of Unix
- Representative Unix systems
- O/S Architecture

### The command line

- Work on the command line
- Terms and utilities
- The shell
- Command options and arguments

### Processing text streams

- Browsing text files
- Searching for patterns using grep
- Displaying the start/end of the file
- Counting and sorting

### Basic file management

- Key knowledge areas
- Changing, creating and deleting directories
- Copying, renaming and deleting files
- Symbolic links
- archiving

### Filter

- Standard input and output
- Redirecting standard input
- Redirecting standard output and errors
- Pipelines

### File permissions

- The Linux security model
- Users and Groups
- Changing file permissions
- Changing ownership

### Finding files

- File types
- Filesystem Hierarchy Standard
- Root, bin and boot directories
- Dev and etc configuration files

### Shell scripting

- Create shell scripts
- Use variables and environment variables
- Pass parameters to shell scripts
- Use branches and loops within scripts
- Define aliases
- Use shell startup files

### System monitoring and logging

- Monitor system load
- Monitor disk usage
- Monitor log files

### Process management

- Processes and process concepts
- Examining processes
- Adjusting process priority and job control
- Signals, orphans and zombies

### Package management

- What are packages and repositories?
- Debian package management
- Software distribution

### Mounting/unmounting

- Mount options and the fstab file
- Mounting removable media

## Contact

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