

Fundamentals of Linux

Level: foundation

Length: 20 hours

Course Objective: familiarize attendees to use the Linux operating system for day to day tasks

What You Will Learn

- How to install and manage Linux
- Usual administration required by a common user
- How to interact with Linux, how to use its resources

Who can attend: anyone who wants to use Linux

Prerequisites: basics for using other operating system, usually Windows

Required Infrastructure: VGA projector, whiteboard, personal computer with Windows and Internet connection

Bibliography

- Linux Administration: A Beginner's Guide (5th Edition), 2009, Wale Soyinka, McGraw Hill
- Linux Command Line and Shell Scripting Bible (2nd Edition), 2011, Richard Blum, Christine Bresnahan, Wiley Publishing Inc.
- Linux Bible, Christopher Negus, Christine Bresnahan, 2012, Wiley Publishing Inc.

Related Courses: Programming Linux

Description

The course is targeted to regular users, programmers or system administrators. It is shown how to install Linux, how to use it for solving regular tasks. Linux is compared with other operating systems, especially Windows. Usual scenarios of using Linux are presented, also potential problems and their solutions.

The course is highly oriented towards practice, the goal is assure transition to Linux starting from other operating system, usually Windows.

A vertical blue grid pattern on the left side of the page, consisting of a grid of squares that tapers towards the top.

Contents

1. Introduction to virtualization solutions vs. containers vs. physical machines
2. Introduction to Linux. Linux vs. Windows.
3. Common Linux commands for working with the file system and disks, for editing text files
4. Users and groups management
5. Access control to files and directories – ownership, rights to read, write, execute
6. Management of software packages (yum, rpm, apt). Installing and configuring applications (for example MySQL, Apache, etc.)
7. Secured remote connection, remote work with ssh, sftp, scp. Remote authentication without password
8. Commands for processes management
9. Management of services – starting, stopping, get status, automatic starting
10. Cron services