Fundamental of Linux

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About this course

Now a days, Linux is everywhere of the world, it is being run in most of the servers powering the Internet, the majority of financial trades worldwide and smartphone devices.

This course explores the various topics that is commonly used by Linux system administrators and end users to achieve their day-to-day work in a Linux environment. It is designed for people who have limited or no previous exposure to Linux, but want to interested to learn Linux.

After completion of this training you should have a good understanding of Linux, from both theoretical and practical knowledge that allowing you to work in an individual or enterprise environment. You will be able to continue your progress as either a user, system administrator or developer using the acquired skill set.

Enrol yourself in this training! Learn Linux!

Prerequisites

Basic understanding of OS would be good.

What are you going to get from this course? (AT A GLANCE)

- 1. To gain deep understanding of Open Source
- 2. To learn basics of OS
- 3. To gain deep understanding of Linux/UNIX
- 4. Efficient Linux OS installation
- 5. To carry out and learn the concept of Linux file structure
- 6. To learn application installation in Linux
- 7. System configurations and GUI of Linux
- 8. To gain deep understanding of basic commands
- 9. To carry out and learn the concept of user permission in Linux
- 10. To understand features of Linux
- 11. Demo of useful applications
- 12. Idea about Linux terminal many more......

Topics:

Introduction:

- 1. What is Open Source
- 2. What is Linux
- 3. Kernel and OS
- 4. Linux distribution -> Ubuntu, the most popular free OS
- 5. Linux and Unix
- 6. Linux/Unix commands
- 7. GNU
- 8. Difference between Linux and Windows (aka FOSS vs Proprietary)
- 9. Linux features
- 10. Linux file structure
- 11. Linux security
- 12. File permissions

Hands On:

First Week

- 1. Basic overview of Operating system
- 2. Partition concept
- 3. Rebooting into windows and do the necessary stuffs
- 4. Rebooting into live session
- 5. Installation
- 6. Run levels
- 7. Different types of run levels
- 8. Processes and Filters

Second Week

- 1. Booting + logging in
- 2. User interface -> Unity
- 3. Bash
- 4. Terminal -> xterm, gnome-terminal, konsole
- 5. Setting up software sources
- 6. Troubleshooting
- 7. User management
- 8. Administration of users and groups

Third Week

- 1. CLI editors -> nano, vi editor
- 2. Common applications of Linux
- 3. Web browser -> Firefox
- 4. Libreoffice
- 5. Graphics -> Shotwell, GIMP, Inkscape
- 6. Software installation -> APT package manager, Ubuntu software center, Synaptic
- 7. Install from source code
- 8. Install from package
- 9. working with apt-get
- 10. Working with different types of backups

Forth Week

- 1. Basic commands using the terminal
- 2. Programming in Linux: Vim, Emacs, Kate; GCC, Make, CMake; Qt, Gtk+; Geany QtCreator, Netbeans, Eclipse, Embedded Systems, Device Drivers, Socket
- 3. User access, root, sudo, gksu, File permission
- 4. Regular expressions
- 5. Shell sripting
- 6. Super user powers
- 7. Basic Networking debugging
- 8. Network Configuration
- 9. Finding Linux Documentation
- 10. Conclusion