

Introduction To Linux

Course 101 – 24 Hours

Overview

Linux is a powerful and versatile operating system found in a wide variety of computers including mobile phones, desktop computers, servers and various consumer devices.

This course explores Linux from basic operations and commands to basic scripts and application programming.

Course Objectives

Upon completion of this training, the student should have a good working knowledge of Linux from both a graphical perspective as well as from the command line, allowing them to navigate with ease through any of the major Linux distributions. With the acquired skill set, the student will be able to continue their progress as a user, system administrator or developer.

Who Should Attend

Anyone wishing to take their first steps with Linux OS.

Prerequisites

No

Course Contents

Linux Introduction

- Linux Overview
- Linux Distributions
- OS structure
 - Linux kernel
 - Kernel modules and device drivers
 - C library
 - System libraries
 - Application libraries
 - User applications
- File system
 - File system structure
 - Useful paths
- Useful commands
 - Getting help
 - Man pages
 - File handling
 - Installing new software
 - Process management

- Basic system admin
 - Networking commands
 - Mounting devices
 - Virtual file systems
 - Users, groups and permissions
 - Installing and troubleshooting device drives
- Boot process

Writing Shell Scripts

- Scripts Overview
- Variables
- Configuration files
- Conditions
- Loops
- Regular expressions
- Debugging

Linux Native Programming

- Linux API
- Processes and threads
- Synchronization objects
- IPC
- Tool-chains and IDEs
- Makefiles and make
- Debugging with GDB
- More tools
- Kernel programming overview