

Linux Training: The Complete Linux Course (LIN301X, 4 jours)

Description

The course The Complete Linux Course (Linux Training) is like no other course you have ever taken. This complete Linux course provides a hands-on exploration of the planning, installation, maintenance, management and use of Linux in a production environment. You acquire the skills required to understand the hardware & software aspects of a Linux installation. The discussion includes the kernel, shell commands, security, scripting & system configuration on a production Linux environment. Participants will learn how to create scripts, manage users & groups, and to configure security to count only a few.

Tarifs

- Tarification: \$3,750/person
- Rabais de 10% lorsque vous inscrivez 3 personnes.

Plan de cours

Linux Overview

History and Fundamentals of Linux

Understanding the Linux Architecture

The Linux Kernel

The Linux Boot Process

Understanding the init Process

Beginning and Ending a Linux Session

The Linux File System

Introduction to the File System

Files, Directories and Commands

The home and root Directories

Understanding Linux Files and Directories

Working with Directories

System Directory Structure

Navigating the File System

Linux Configuration Files

Working with vi/vim

What is vi/vim

vi Modes

Navigation within vi/vim

Data Manipulation - Insert Text

Data Manipulation - Delete Text

Data Manipulation - Create Blank Lines

Data Manipulation - Cut/Copy/Paste

Data Manipulation - Buffering

Data Manipulation - Modify Text

Data Manipulation - The Undo/Redo Option

Data Manipulation - Save/Abort Work

Data Manipulation - Search Text

Reading, Writing and Appending Files

Some vi Tips/Tricks

Customize vi Work Environment

The vim Environment

Users and Groups

The Linux Users/Groups Security Architecture

Defining and Working with Users

The /etc/passwd file

The /etc/shadow file

The /etc/group file

Managing Users Accounts Manually

User Management Commands

Debian User Management Tools

File System Management

Understanding inodes

Block and Character Devices

Understanding Disk Devices

File Systems Management

Configuring a Block Device

Formatting Disks

Managing Mount Points

Tuning Disks

Linux Security

The Security Architecture

The root and Super User

About User Accounts and User Groups

Changing Permissions plus Special permissions

Advanced Security

Controlling Processes and Jobs

Controlling Linux Services

Managing Processes

Job Control

Services and Daemons

Linux Shell Scripting

About Scripting Options

BASH Scripting Basics

Understanding Wildcards (Metacharacters)

Understanding stdin/ stdout/ stderr

Understanding the Shell

Regular Expressions

Variables

Conditional Statements

Loops/Flow Control

Customize the User Environment

A Few Interesting Scripts

BusyBox Shell

Networking

TCP-IP Overview

Configuring Network Adapters

Linux Wireless Network

Using Remote Commands

Windows/Linux Interoperability

Using the Secure Shell(ssh)

Internet Services

Network Security

Some Common Network Commands

Installation, Startup and Shutdown

Preparing For and Planning the Installation

Installing Fedora

System Initialization

Kernel Parameters

Linux Configuration Files

Shutdown Techniques and Options

Working in Single User Mode

Linux Disks and Partitions

Linux Disk Architectures

About Disk Management

Planning Disk Requirements for a Linux Installation

Understanding Linux Platforms

Planning for Linux Partitions

Auditing and Logging

Auditing and the Audit Log

The Log Files

lastlog File

The utmp and wtmp Files

The last Program

The loginlog File

The acct/pacct Process Accounting File

Backup Your Logs!

Embedded Linux

About Embedded Linux

Embedded Linux installation and Tools

Flash Memory

The Start-up Process in an Embedded System

Use of Memory in an Embedded System

External Storage in an Embedded System

Definitive Troubleshooting Techniques

Troubleshooting Methodologies

Linux/Unix Utilities

Troubleshooting Linux Start-up

Troubleshooting Files and Directories

Troubleshooting Security

Troubleshooting Network Services

Troubleshooting Wireless Network

The GUI Tools

The KDE Desktop

System Tools

The GNOME Desktop Environment

Using YAST

A Few Power Tools

Appendix A - Installing Applications

The Installation Process

Packages and Installation

Installing Applications

Appendix B - Additional vi/vim Information

vi Cheat Sheet

vi Quick References

Appendix C - grep/egrep Reference

The grep Family

Some grep Options/Switches

Appendix D - Regular Expression

Before Regular Expression Usage

Regular Expressions

Some Advanced Generic Regular Expression Functionalities

Appendix E - The find Utility

Searching Files by Name and other Attributes

xargs command with/without find

Appendix F - Useful Tips and Tricks

Maximizing Linux Commands Functionalities

Archiving and Compression

Networking

Set/ Math Operations

Calendar/ Locales

Disk Space

Monitoring/ Debugging

System Information