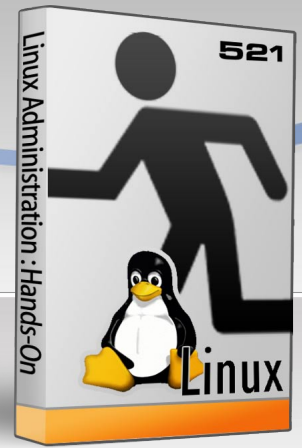


# ACTIVE LEARNING



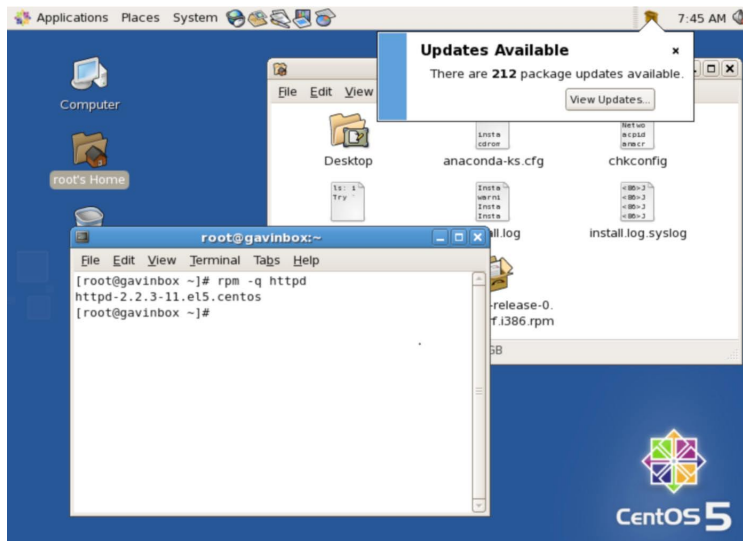
## Linux System Administration

Course: 521    Type: Hands-On Training    Duration: 4 days



### Course benefits:

Linux is the open source operating system of choice for deployment throughout the enterprise. With its rapid expansion, there is an increasing demand for skilled users who can exploit the features of this powerful platform to their organization's advantage. In this course, you gain the essential knowledge and skills required to leverage the wide range of Linux graphical and command line tools.



### You will learn how to:

- Manage users and their environments
- Monitor, control, and terminate processes
- Manage disks and file systems (including quotas)
- Perform user and group administration
- Schedule tasks, monitor logs, and perform backups
- Install Linux and layout the file system using well-known standards
- Install and update software using YUM and RPM

### Who should attend:

This Linux training course is designed for individuals who are interested in gaining in depth knowledge of how to administer a Linux server. Extensive experience (several years) using Intel x86 computers, including a strong knowledge of hardware components and their interaction with basic operating system (OS) components are assumed.

### Your course tuition entitles you to...

- Class participation
- Team workshops
- Use of in-class and hands-on equipment
- Comprehensive course materials
- Morning and afternoon refreshments
- Course Completion Certificate
- CentOS Installation DVD

### Testimonials

*"We met our objectives in acquiring the course. Will make this part of our required trainings for new members."*

**Emanuelle Millan**  
Smart Communications, Inc.

*"I'm very satisfied with what I've learned. Very well organized course. The exercises after every chapter helped the students to fully understand and retain the learnings. The instructor is very effective and really knows what he teaches."*

**William Marino**  
Procter & Gamble

*"Instructor is very approachable and has the experience and knowledge to teach. Very good. Challenging specially the tricky part. Easy to locate and very good refreshments."*

**Jeffrey Inovero**  
Jardine Direct

**ENROLL NOW**

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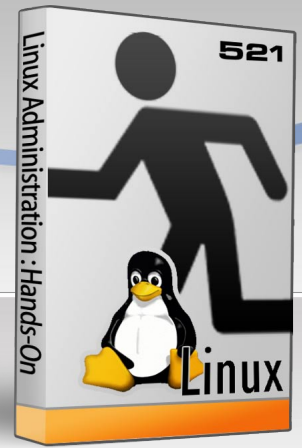
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## Linux System Administration

Course: 521    Type: Hands-On Training    Duration: 4 days



### Course Contents:

#### Overview and Introduction

- The Linux Operating System
- System Architecture
- Basic Terminology
- CentOS

#### Accessing Your System

- Logging In and Out
- Changing Your Password
- Shutting Down and Rebooting the System

#### Documentation

- man, info, apropos, whatis

#### Navigating the File System

- Absolute and Relative Path Names
- Displaying the Current Directory
- Changing Directories
- Listing Directory Contents
- Wildcards
- Creating and Removing Directories

#### File Commands

- Copying Files
- Moving and Renaming Files
- Deleting Files
- Creating Symbolic Links
- Displaying Files with cat, less, head, tail
- Creating Empty Files
- Compressing and Decompressing Files

#### Locating Files in the System

- The File System Hierarchy
- locate, updatedb, find, whereis

#### Regular Expressions

- Anchoring
- Expressing Repetition
- Subexpressions
- Character Sets
- Using grep

#### Metacharacters and Redirection

- Entering Multiple Commands in One Line
- Entering String Patterns in Commands
- Redirecting Output to a File
- Appending Data to an Existing File
- Using a File as Input to a Command
- Piping Commands

#### The GNOME Desktop Environment

- Using GNOME
- Nautilus

#### Using the vi Editor

- vi Modes
- Insert Commands
- Positioning Commands
- Editing Commands
- Copying and Pasting
- Saving and Quitting
- Advanced Editing Options

#### Shell and Environment Variables

- Shell vs Environment Variables
- Creating Variables
- Displaying Variables
- Unsetting Variables

#### Configuring Bash

- The PATH Environment Variable
- The which Command
- Viewing Previously Entered Commands
- Re-executing Commands
- Creating Aliases
- Displaying Aliases
- Deleting Aliases
- Customizing the Prompt
- Other Shell Options

#### Administration of Initialization Files

- Shell Initialization Files
- Login Sequence
- Default User Initialization Files

#### User Security

- Users and Groups
- Displaying User and Group Information
- Displaying Group Information
- Becoming the Superuser
- Becoming a Different User
- Changing File Ownership
- Changing a File's Group Ownership
- Learning Who is Logged In

#### Managing Users

- Essential files for users and groups
- Adding and deleting user accounts
- Managing groups
- Password aging
- The /etc/skel directory
- Locking an account
- Graphical user and group administration

#### File Security

- Permission Categories
- Permission Types
- Changing Permissions

#### File System Management

- File System Types
- Device Naming Scheme
- Mounting File Systems
- Monitoring Disk Space
- Checking File System Integrity

#### Disk Quotas

- Disk Quotas
- Limits
- Steps to Enable Quotas
- Viewing Quota Usage

#### Backups

- Backup Methods
- Backup Tools

#### Process Control

- Job Control
- Keeping Track of Jobs
- Running a Job in the Foreground
- Running a Job in the Background
- Monitoring Processes
- Sending Signals to Processes
- Terminating Processes
- Process Priorities

#### Scheduling Tasks

- The at Command
- The cron Daemon
- Controlling Access to cron

#### Booting Up

- The Boot Sequence
- The init Process
- Runlevels
- Changing Runlevels
- Changing the Default Runlevel

#### Log Files

- Configuring Logging
- Log Rotation

#### Installing Linux

- Hardware Requirements
- Downloading CentOS
- Planning the Disk Layout
- The Installation Process

#### Boot Managers

- LILO
- GRUB

#### Installing Software

- RPMs
- Installing packages using RPM
- Removing packages using RPM
- YUM
- Graphical Tools

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