

# Red Hat Linux Networking and System Administration

الفئة المستهدفة:

- 1- خريجو كلية هندسة الكمبيوتر
- 2- خريجو كلية الهندسة الكهربائية
- 3- خريجو كلية تكنولوجيا المعلومات

عدد ساعات الدورة: 80 ساعة تدريبية (40 ساعة لكل جزء)

1. Red Hat Linux System Administration (40hrs.)
2. Managing Network Services and Security (40hrs.)

Micro Data™

لمزيد من المعلومات والاستفسار، لا تترددوا بالاتصال عبر:

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**Course Outline:**

**1. Red Hat Linux System Administration (40 hrs.)**

- 1.1 Linux Overview
- 1.2 Red Hat Linux Hardware and Installation
- 1.3 Using the bash Shell
  - 1.3.1 Understanding shells
  - 1.3.2 Using the Command Line
  - 1.3.3 Environment Variables and Settings
  - 1.3.4 Managing Processes
- 1.4 Processing Text
  - 1.4.1 Redirection, Pipes, tee and xargs
  - 1.4.2 Modifying Text with Filters
  - 1.4.3 Enhancing Searches with regular Expressions
- 1.5 Using Shells and Scripts
  - 1.5.1 Using vi
  - 1.5.2 Customizing the Shell Environment
  - 1.5.3 Writing Simple Scripts
- 1.6 Managing Files
  - 1.6.1 File management commands
  - 1.6.2 Understanding File System Hierarchy
  - 1.6.3 Locating Files
  - 1.6.4 File Access Permissions
  - 1.6.5 Creating Files Links
  - 1.6.6 Using compression tools
- 1.7 Managing Users and Groups
  - 1.7.1 Configuring User Accounts
  - 1.7.2 Configuring Groups
  - 1.7.3 Account Security
- 1.8 Using Partitions and File Systems
  - 1.8.1 Linux File System Overview
  - 1.8.2 Creating Partitions and File Systems
  - 1.8.3 Checking the File System
  - 1.8.4 Mounting and Un-mounting File Systems
  - 1.8.5 Disk Management with user Quotas
- 1.9 Installing Software
  - 1.9.1 Installing software from source code (tarball files)
  - 1.9.2 Red Hat Package Manager (RPM)
  - 1.9.3 Managing Shared Libraries

1.10 Working with the Kernel

- 1.10.1 Kernel Overview
- 1.10.2 Reconfiguring and Installing a new Kernel

**2. Managing Network Services and Security (40hrs.)**

2.1 Configuring a Squid Proxy Server

- 2.1.1 Basic Squid Configuration
- 2.1.2 Configuring Parent Squid
- 2.1.3 Configuring Squid Web Proxy Cache
- 2.1.4 Configuring Squid with Access Control Lists
- 2.1.5 Configuring Security and Password Authentication

2.2 Configuring the Domain Name Server DNS

- 2.2.1 Understanding DNS: Zones and Domains
- 2.2.2 The Berkeley Internet Name Domain BIND Utilities
- 2.2.3 Configuring a Caching-Only Name Server
- 2.2.4 Configuring a Slave Name Server
- 2.2.5 Configuring a Forwarding-Only Name Server

2.3 Configuring Apache Web Server

- 2.3.1 Basic Apache Configuration for a simple Web Server
- 2.3.2 Apache and Security Arrangements
- 2.3.3 Configuring Apache for SSI and CGI Scripts
- 2.3.4 Configuring Web Access to Home Directories
- 2.3.5 Virtual Hosts

2.4 Configuring Mail Services

- 2.4.1 Mail Transport Agent, Mail Delivery Agent and Mail User Agents
- 2.4.2 Reception with Dovecot
- 2.4.3 Configuring Send mail
- 2.4.3 Configuring and Activating Postfix
- 2.4.4 Advanced configuration of MySQL-based Mail Server with Postfix

2.5 Configuring Network File Sharing Services

- 2.5.1 Network File System NFS
- 2.5.2 File Transfer Protocol and VSFTP
- 2.5.3 Samba Services

2.6 Other Networking Services

- 2.6.1 The Extended Internet Services Daemon (Xinetd)
- 2.6.2 The Secure Shell Package; SSH and SCP
- 2.6.3 Dynamic Host Configuration Protocol DHCP
- 2.6.4 Common UNIX Printing System CUPS