
Red Hat Linux System Administration

Längd: 4 Days Kurskod: RH131

Sammanfattning:

For users of Linux (or UNIX) who want to start building skills in systems administration on Red Hat Linux, to a level where they can attach and configure a workstation on an existing network.

Rekommenderade förstudier via e-Learning inför Linuxkursen. Inför denna Red Hat System administrations kurs rekommenderar vi vissa förkunskaper inom UNIX, vilka du bäst erhåller i vår UNIX Level I kurs. Denna kan vi nu även erbjuda via självstudier över Internet (s.k. Self-Paced e-Learning). Som ett paketerbjudande när du köper RH-131 kursen erbjuder vi denna e-Learning kurs till endast 2.500 kr. Klicka här för mer information om denna självstudiekurs.

Webbaserade förtester Använd gärna de webbaserade förtester vi erbjuder. Testerna är kostnadsfria och ger dig direkt respons på vilka kunskaper du redan besitter och, kanske än viktigare, vilka kunskapsluckor som finns. Baserat på resultatet från detta kan vi ge en god rekommendation om lämplig utbildning. [Klicka här](#) och läs mer.

Målgrupp:

Linux or UNIX users, who understand the basics of Red Hat Linux, that desire further technical training to begin the process of becoming a system administrator.

Förkunskaper:

[RH033 Red Hat Linux Essentials](#) or equivalent experience with Red Hat Linux. To assist you in determining whether you have equivalent experience, take the [RH033 Pre-assessment Questionnaire](#).

Innehåll:

Unit 1 - System Initialization

- Objectives
- Boot Sequence Overview
- Boot Loader Components
- GRUB and grub.conf
- Starting the Boot Process: GRUB
- Kernel Initialization
- init Initialization
- Run Levels
- /etc/rc.d/rc.sysinit
- /etc/rc.d/rc
- System V run levels
- /etc/rc.d/rc.local
- Controlling Services
- Hands-on Lab 1 Managing Startup

Unit 2 - Package Management

- RPM Package Manager
- Installing and Removing Software
- Updating a Kernel RPM
- rpm Queries
- rpm Verification
- About yum
- Using yum
- Searching packages/files
- Configuring Additional Repositories
- Creating a private repository
- Red Hat Network
- Red Hat Network Server
- Entitlements
- Red Hat Network Client
- Hands-on Lab 2: Working with packages

Unit 3 - Kernel Services

- Objectives
- The Linux Kernel
- Kernel Images and Variants
- Kernel Modules
- Kernel Module Utilities
- Managing the initrd Image
- Accessing Drivers Through /dev
- Device Node Examples
- Managing /dev With udev
- Adding Files Under /dev
- Kernel Configuration With /proc
- /proc Examples
- sysctl : Persistent Kernel Configuration
- Exploring Hardware Devices
- Monitoring Processes and Resources
- Hands-on Lab 3: Configuring the kernel

Unit 4 - System Services

- Network Time Protocol
- System Logging
- syslog Configuration
- XOrg: The X11 Server
- XOrg Server Configuration
- XOrg in runlevel 3
- XOrg in runlevel 5
- Remote X Sessions

Unit 5 - User Administration

- Adding a New User Account
- User Private Groups
- Modifying / Deleting User Accounts
- Group Administration
- Password Aging Policies
- Switching Accounts
- sudo
- Network Users
- Authentication Configuration
- Example: NIS Configuration
- Example: LDAP Configuration
- SUID and SGID Executables
- SGID Directories
- The Sticky Bit
- Default File Permissions
- Access Control Lists (ACLs)
- SELinux
- SELinux: Targeted Policy
- SELinux: Management

Unit 6 - Filesystem Management

- Objectives
- Overview: Adding New Filesystems to the Filesystem Tree
- Device Recognition
- Disk Partitioning
- Managing Partitions
- Making Filesystems
- Filesystem Labels
- tune2fs
- Mount Points and /etc/fstab
- Mounting Filesystems with mount
- Unmounting Filesystems
- mount By Example
- Handling Swap Files and Partitions
- Mounting NFS Filesystems
- Automounter
- Direct Maps
- gnome-mount
- Hands-on Lab 6: Adding New Filesystems to the Filesystem Tree

Unit 7 - Advanced Filesystem Management

- Configuring the Quota System
- Setting Quotas for Users
- Reporting Quota Status
- What is Software RAID?
- Software RAID Configuration
- Software RAID Testing and Recovery
- What is Logical Volume Manager (LVM)?
- Creating Logical Volumes
- Resizing Logical Volumes
- Logical Volume Manager Snapshots
- Using LVM Snapshots
- Archiving tools: tar
- Archiving Tools: dump/restore
- Archiving Tools: rsync
- Hands-on Lab 7: Advanced Filesystem Management

Unit 9 - Installation

- Anaconda, the Red Hat Enterprise Linux Installer
- First Stage: Starting the Installation
- First Stage: Boot Media
- Accessing the Installer
- First Stage: Installation Method
- Network Installation Server
- Second Stage: Installation Overview
- Configuring File Systems
- Advanced Partitioning
- Package Selection
- First Boot: Post-Install Configuration
- Kickstart
- Starting a Kickstart Installation
- Anatomy of a Kickstart File
- Kickstart: Commands Section
- Kickstart: Commands section
- Kickstart: Packages Section
- Kickstart: %pre, %post
- Hands-on Lab 9: Installation and System-Initialization

Unit 10 - Virtualization with Xen

- Virtualization with Xen
- Hardware Considerations
- Preparing Domain-0
- Virtual Resources
- Domain-U Configuration
- Installing a new Domain-U
- Domain Management with xm
- Activating Domains on boot
- Hands-on Lab 10: Exploring Virtualization

Unit 11 - Troubleshooting

- Method of Fault Analysis
- Fault Analysis: Gathering Data
- Things to Check: X
- Things to Check: Networking
- Order of the Boot Process
- Filesystem Corruption
- Filesystem Recovery
- Recovery Run-levels
- Rescue Environment
- Rescue Environment Utilities
- Rescue Environment Details
- Hands-on Lab 11: System Rescue and Troubleshooting

- SSH: Secure Shell
- VNC: Virtual Network Computing
- cron
- Controlling Access to cron
- System crontab Files
- Daily Cron Jobs
- The anacron System
- CUPS
- Hands-on Lab 4: System Services

Unit 8 - Network Configuration

- Objectives
- Network Interfaces
- Driver Selection
- Speed and Duplex Settings
- IPv4 Addresses
- Dynamic IPv4 Configuration
- Static IPv4 Configuration
- Device Aliases
- Routing Table
- Default Gateway
- Configuring Routes
- Verify IP Connectivity
- Defining the Local Host Name
- Local Resolver
- Remote Resolvers
- Verify DNS Connectivity
- Network Configuration Utilities
- Transparent Dynamic Configuration
- Implementing IPv6
- IPv6: Dynamic Interface Configuration
- IPv6: StaticInterface Configuration
- IPv6: Routing Configuration
- New and Modified Utilities
- Hands-on Lab 8: Manage Network Settings

Övrig information:

För mer information eller kursbokning, vänligen kontakta oss på telefon.020-73 73 73

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