

RH131 Red Hat Linux System Administration

Course Summary

Description

This course is designed for users of Linux (or UNIX) who want to start building skills in systems administration on Red Hat Enterprise Linux 5, to a level where they can attach and configure a workstation on an existing network.

Objectives

At the end of this course, students will be able to:

- Install, configure, and attach a new Red Hat Linux workstation to an existing network

Topics

- Package Management
- System Initialization
- Kernel Services
- System Services
- Filesystem Management
- User Administration
- Network Configuration
- Advanced User Administration
- Advanced Filesystem Management
- Installation
- Virtualization with Xen
- Troubleshooting

Audience

This course is designed for 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.

Prerequisites

Students should have take course RH033 Red Hat Linux Essentials or have equivalent experience with Red Hat Linux.

Duration

Four days

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Course Outline

- I. Package Management**
 - A. Manage software on system using yum, Red Hat Network, and rpm.
- II. USystem Initialization**
 - A. Define boot process, recover system, and manage service startup.
- III. Kernel Services**
 - A. Explore kernel modules and variants, tune kernel parameters, manage devices, and monitor processes and resources.
- IV. System Services**
 - A. Configure and access various consoles to manage system logging, time synchronization, printers, and task automation.
- V. Filesystem Management**
 - A. Expand storage by adding new filesystems and swap space.
 - B. Configure autofs for on-demand network storage.
- VI. User Administration**
 - A. Create, modify and delete users, groups, and policy.
 - B. Escalate privileges.
 - C. Establish collaborative group directories.
- VII. Network Configuration**
 - A. Configure dynamic and static network settings for both IPv4 and IPv6.
- VIII. Advanced User Administration**
 - A. Revisit user administration by connecting to network directory services like NIS and LDAP.
 - B. Protect users and groups through ACLs, quotas, and SELinux.
- IX. Advanced Filesystem Management**
 - A. Back up your data. Manage filesystems using Software RAID and Logical Volume Management.
- X. Installation**
 - A. Perform both interactive and automated installations of Red Hat Enterprise Linux.
- XI. Virtualization with Xen**
 - A. Install the xen environment and create a para-virtualized user domain running Red Hat Enterprise Linux.
- XII. Troubleshooting**
 - A. Explore troubleshooting methodologies while defining standard things to check. Maintain system from different runlevels.
 - B. Utilize the rescue environment of anaconda.