

Red Hat System Administration II

Course Duration: 40 Hours

Course Code: RH124

1. Course Overview

The **Red Hat System Administration II (RH134)** course is the second part of the **RHCSA (Red Hat Certified System Administrator)** training track. It builds on the foundation of **Red Hat System Administration I (RH124)** and focuses on the core tasks of Linux system administration at an enterprise level.

This hands-on training teaches advanced Linux administration skills, including **network configuration, security, storage management, process automation, and shell scripting**, all of which are essential for passing the **RHCSA (EX200) certification exam**.

2. What You'll Learn?

By completing this course, participants will gain skills to:

- Manage and configure **system services and security policies**.
- Work with **storage management**, including LVM (Logical Volume Manager).
- Automate system administration tasks using **bash shell scripting**.
- Configure and secure **network services**.
- Manage **system performance and processes**.
- Troubleshoot and control **boot processes and system services**.
- Prepare for the **RHCSA certification exam**.

3. Target Audience

This course is ideal for:

- **Linux system administrators** who have completed RH124.
- IT professionals seeking **RHCSA certification**.
- Administrators responsible for managing **RHEL systems in production**.
- Candidates who want to advance toward **Red Hat Certified Engineer (RHCE)**.

4. Pre-Requisites

- Completion of **Red Hat System Administration I (RH124)**.
- Or equivalent knowledge of Linux system administration basics.

5. Course Content

Module 1: Improving Command-Line Productivity

- Advanced bash command-line features.
- Using shell variables, quoting, and expansion.
- Managing command history and aliases.

6. Module 2: Managing Security and Firewalls

- Understanding Selina basics and troubleshooting.
- Configuring and managing firewall.
- Enforcing security policies for services.

Module 3: Configuring Storage and File Systems

- Partitioning and formatting disks.
- Configuring and managing **Logical Volume Manager (LVM)**.

- Managing swap space and persistent mounts.

Module 4: Managing Users and Authentication

- Configuring password aging and account policies.
- Delegating administrative privileges with **Sudo**.
- Centralized authentication basics.

Module 5: Controlling Services and the Boot Process

- Managing system services with **system**.
- Configuring and troubleshooting the boot process.
- Recovering from boot and system errors.

Module 6: Automating Administration with Shell Scripting

- Writing and executing basic bash shell scripts.
- Automating administrative tasks.
- Using conditionals, loops, and variables in scripts.

Module 7: Networking Configuration and Management

- Configuring IPv4 and IPv6 networking.
- Managing static and dynamic network settings.
- Troubleshooting network connectivity.

Module 8: Managing Processes and System Performance

- Monitoring and controlling system processes.
- Managing system resources and priorities.
- Collecting and analyzing system performance data.

Module 9: Installing and Updating Software

- Configuring repositories.
- Installing and managing software packages with YUM/DNF.
- Verifying software and system updates.

Module 10: System Logging and Monitoring

- Configuring system logs.
- Using journals for log management.
- Implementing system monitoring and alerts.

Module 11: Preparing for RHCSA Exam

- Review of RH124 and RH134 key skills.
- Hands-on practice with exam-style scenarios.
- Exam preparation tips and best practices.

