

RH124

Red Hat System Administration I

Get started building skills to perform the key tasks needed to become a full-time Linux administrator.

Red Hat System Administration I (RH124) is designed for IT professionals without previous Linux system administration experience. The course provides students with Linux administration competence by focusing on core administration tasks. This course also provides a foundation for students who plan to become full-time Linux system administrators by introducing key command-line concepts and enterprise-level tools.

This course is the first of a two-course series that helps a computer professional without Linux system administration knowledge to become a fully capable Linux administrator. These concepts are further developed in the follow-on course, Red Hat System Administration II (RH134).

This course is based on Red Hat® Enterprise Linux 10.0.

Following course completion, hands-on lab access will remain available for up to 45 days for any live course that includes a virtual environment.

Note: This course is offered as a five day in person class, a five day virtual class or is self-paced. Durations may vary based on the delivery.

Recommended training

- Basic familiarity with computer systems as a user. Previous experience as a Linux user or with system administration of other operating systems might be beneficial.

Course Outline

Introduction to Red Hat Enterprise Linux

Define and explain the following concepts: open source, Linux, Linux distributions, and Red Hat Enterprise Linux.

Accessing the Command Line

Log in to a Linux system and run simple commands by using the shell.

Getting Help from Local Documentation

Resolve problems by using information in local help systems and documentation.

Registering Systems for Red Hat Support

Register a system by using your Red Hat account to get support services and software that Red Hat provides.

Getting AI-assisted Help with RHEL Lightspeed

Get AI-driven guidance and suggestions to efficiently manage a RHEL server by using Red Hat Enterprise Linux Lightspeed.

Navigating the File-system Hierarchy

Describe the organization of files in the Linux file-system hierarchy and specify files by name, by using relative paths or absolute paths.

Managing Files from the Command Line

Copy, move, create, delete, and organize files from the command line.

Editing Text Files

Create, view, and edit text files from the command line.

Redirecting Shell Input and Output

Redirect the output of commands and input to commands, by using Bash.

Managing Local Users and Groups

Obtain superuser access to a system; create, manage, and delete local users and groups; and administer local password policies.

Controlling Access to Files

Set standard permissions on files and interpret the security effects of different permission settings.

Installing and Updating Software with RPM

Download, install, update, and manage software packages from Red Hat and DNF package repositories.

Installing and Updating Applications by Using Flatpak

Install, upgrade, and use desktop software from the Red Hat Ecosystem Catalog by using Flatpak.

Accessing Removable Media

Access file systems on removable media devices by mounting them on a directory in the file-system hierarchy.

Monitoring and Managing Linux Processes

Investigate, control, and terminate processes that run on a Red Hat Enterprise Linux system.

Controlling Services and Daemons

Control and monitor the system services and daemons that systemd starts.

Introduction to Networking

Describe basic TCP/IP networking concepts and investigate the current network configuration and functionality on a server.

Managing Network Configuration

Configure network interfaces and settings on Red Hat Enterprise Linux servers.

Configuring and Securing SSH

Protect SSH communication by managing host keys and by implementing key-based authentication for users.

Comprehensive Review

Practice skills learned in Red Hat System Administration I.