



RH254 Red Hat System Administration III

Course description

Broaden your ability to administer Linux systems and prepare for your Red Hat Certified Engineer (RHCE) exam

Red Hat System Administration III: Data Center Services for Red Hat Enterprise Linux 7 (RH254) is designed for experienced Linux® system administrators who hold a Red Hat Certified System Administrator (RHCSA®) credential or possess equivalent skills and want to broaden their ability to administer Linux systems at an enterprise level.

This course is based on Red Hat® Enterprise Linux 7.

The course is focused on deploying and managing network servers running caching domain name service (DNS), MariaDB, Apache HTTPD, Postfix SMTP nullclients, network file **sharing with network file system (NFS) and server message block (SMB), iSCSI initiators** and targets, advanced networking and firewalld configurations, and the use of bash shell scripting to help automate, configure, and troubleshoot the system. Through lectures and hands-on labs, students who have already earned the RHCSA credential will be exposed to all competencies covered by the Red Hat Certified Engineer (RHCE) exam (EX300).

Note: This course does not cover all RHCSA tasks. Students who need a review of RHCSA skills are encouraged to attend the RHCSA Rapid Track course (RH199).

Audience for this course

This course is intended for experienced Linux administrators wishing to learn enterprise-level automation techniques through scripting, how to deploy and secure network services, and how to manage other key security features of Red Hat Enterprise Linux. Prior to taking this course, you should have earned your RHCSA or possess equivalent skills.

Prerequisites for this course

- RHCSA certification or equivalent experience
- For candidates who have not earned their RHCSA certification, confirmation of the correct skills and knowledge can be obtained by passing the online skills assessment



Outline for this course

Control services and daemons

Review how to manage services and the boot-up process using systemctl.

Manage IPv6 networking

Configure and troubleshoot basic IPv6 networking on Red Hat Enterprise Linux systems.

Configure link aggregation and bridging

Configure and troubleshoot advanced network interface functionality including bonding, teaming, and local software bridges.

Control network port security

Permit and reject access to network services using advanced SELinux and firewalld filtering techniques.

Manage DNS for servers

Set and verify correct DNS records for systems and configure secure DNS caching.

Configure email delivery

Relay all email sent by the system to an SMTP gateway for central delivery.

Provide block-based storage

Provide and use networked iSCSI block devices as remote disks.

Provide file-based storage

Provide NFS exports and SMB file shares to specific systems and users.

Configure MariaDB databases

Provide a MariaDB SQL database for use by programs and database administrators.

Provide Apache HTTPD web service

Configure Apache HTTPD to provide Transport Layer Security (TLS)-enabled websites and virtual hosts.

Write bash scripts

Write simple shell scripts using bash.

Bash conditionals and control structures

Use bash conditionals and other control structures to write more sophisticated shell commands and scripts.

Configure the shell environment

Customize bash startup and use environment variables, bash aliases, and bash functions.



InspiringWays Training



Comprehensive review

Practice and demonstrate knowledge and skills learned in this course.