

Red Hat System Administration III (RH254)

Duration: 4 days

Course Description:

Red Hat® System Administration III (RH254), related to Red Hat Enterprise Linux,® 7, is designed for experienced Linux system administrators who hold a Red Hat Certified System Administrator (RHCSA®) certification or equivalent skills and who want to broaden their ability to administer Linux systems at an enterprise level

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 firewall 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 certification 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 RHCSA Rapid Track Course (RH199).

Audience:

Red Hat System Administration III 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. Students in this course should have earned their RHCSA or have equivalent skills.

Prerequisites:

- 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.

Course content:

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

Linux containers preview

Preview the capabilities of Linux containers, Docker, and other related technologies in Red Hat Enterprise Linux 7

Comprehensive review

Practice and demonstrate knowledge and skills learned in Red Hat System Administration III