RH254

**Red Hat System Administration III**

**Overview**

## Course description

Red Hat System Administration III (RH254) 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.

###  Course content summary

* Network port security and link aggregation
* iSCSI initiator and target configuration
* DNS troubleshooting and caching name server
* Providing NFS and SMB file servers
* Apache HTTPD web server management
* MariaDB SQL database configuration
* Postfix SMTP nullclient for servers
* Bash scripting for automation

### 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

**Outcome**

## Impact on the organization

This course is intended to develop the skills needed to improve infrastructure performance, increase system utilization and security, and boost responsiveness to system failures by introducing advanced administration tasks and techniques. The result should be improved infrastructure security, lower costs of infrastructure services, more robust IT infrastructure, faster deployment of open source technologies, and improved quality of infrastructure services and products.

Red Hat has created this course in a way intended to benefit our customers, but each company and infrastructure is unique, and actual results or benefits may vary.

## Impact on the individual

As a result of attending this course, you should be able to perform the key tasks needed as a full-time Linux system engineer or consultant. This course introduces enterprise Linux advanced administration topics, including service and daemon control, network configuration and troubleshooting, NFS and SAMBA file server configuration, Apache HTTP web server management, MariaDB SQL database configuration, Postfix SMTP configuration, DNS troubleshooting, and bash scripting.

You should be able to demonstrate these skills:

* Control services and daemons.
* Manage networking.
* Configure link aggregation, bridging, teaming, and bonding.
* Configure filters with firewalls.
* Permit and reject access to network services using SELinux.
* Manage DNS servers.
* Configure SMTP email delivery.
* Provide iSCSI block storage.
* Configure NFS and SAMBA file-based storage.
* Configure MariaDB SQL database.
* AConfigure Apache HTTPD with TLS-enabled virtual hosts.
* Write simple bash automation scripts.

## Recommended next exam or course

* Red Hat OpenStack Administration (CL210)
* Red Hat OpenShift Administration (DO280)
* Configuration Management with Puppet (DO405)
* Red Hat Certified Engineer exam (EX300)
* Red Hat Enterprise System Monitoring and Performance Tuning exam (EX442)
* Red Hat Virtualization (RH318)
* Red Hat Enterprise Clustering and Storage Management (RH436)