

Red Hat Certified System Administrator (RHCSA) Exam (EX-200)

Exam Description

The RHCSA certification exam consists of one half-day session. The exam is performance-based, meaning that candidates must perform tasks on a live system, rather than answering multiple choice questions.

The RHCSA Exam objects provides authoritative guidance on the knowledge and skills candidates will need to demonstrate in the RHCSA exam. It also provides more specific information on the exam format and coverage. All candidates are urged to use this information to evaluate their readiness for the exam.

Candidates will be emailed exam results within three US business days following the exam.

Duration

2.5 hours

Exam Audience

- Experienced Red Hat Enterprise Linux system administrators seeking validation of their skills
- Students who have attended Red Hat System Administration I and II and are on the path to earn RHCSA certification
- Experienced Linux system administrators who require a certification either by their organization or based on a mandate (DOD 8570 directive)
- IT professionals who are on the path to earn RHCE certification

- An RHCE who is noncurrent or who is about to become noncurrent and wants to recertify as an RHCE

Exam Requirements

- To earn RHCSA credential, candidates must demonstrate the skills required to be a successful Linux administrator through a hands-on, half-day exam (EX200).
- An RHCSA certification is required in order to earn Red Hat Certified Engineer (RHCE).

Exam Prerequisites

Candidates for this exam should:

- Have either taken the Red Hat System Administration I (RH124) and II (RH134) courses or else the RHCSA Rapid Track Course (RH199) or have comparable work experience as a system administrator on Red Hat Enterprise Linux
- Review the Red Hat Certified System Administrator exam (EX200) objectives

Exam Objectives

RHCSA exam candidates should be able to accomplish the tasks below without assistance. These have been grouped into several categories.

Understand and Use Essential Tools

- Access a shell prompt and issue commands with correct syntax
- Use input-output redirection (>, >>, |, 2>, etc.)
- Use grep and regular expressions to analyze text
- Access remote systems using ssh and VNC
- Log in and switch users in multi-user runlevels
- Archive, compress, unpack and uncompress files using tar, star, gzip, and bzip2

- Create and edit text files
- Create, delete, copy and move files and directories
- Create hard and soft links
- List, set and change standard ugo/rwx permissions
- Locate, read and use system documentation including man, info, and files in /usr/share/doc

Operate Running Systems

- Boot, reboot, and shut down a system normally
- Boot systems into different runlevels manually
- Use single-user mode to gain access to a system
- Identify CPU/memory intensive processes, adjust process priority with renice, and kill processes
- Locate and interpret system log files
- Access a virtual machine's console
- Start and stop virtual machines
- Start, stop and check the status of network services

Configure Local Storage

- List, create, delete and set partition type for primary, extended, and logical partitions
- Create and remove physical volumes, assign physical volumes to volume groups, create and delete logical volumes
- Create and configure LUKS-encrypted partitions and logical volumes to prompt for password and mount a decrypted file system at boot
- Configure systems to mount file systems at boot by Universally Unique ID (UUID) or label
- Add new partitions, logical volumes and swap to a system non-destructively

Create and Configure File Systems

- Create, mount, unmount and use ext2, ext3 and ext4 file systems
- Mount, unmount and use LUKS-encrypted file systems
- Mount and unmount CIFS and NFS network file systems
- Configure systems to mount ext4, LUKS-encrypted and network file systems automatically
- Extend existing unencrypted ext4-formatted logical volumes
- Create and configure set-GID directories for collaboration
- Create and manage Access Control Lists (ACLs)
- Diagnose and correct file permission problems

Deploy, Configure and Maintain Systems

- Configure networking and hostname resolution statically or dynamically
- Schedule tasks using cron
- Configure systems to boot into a specific runlevel automatically
- Install Red Hat Enterprise Linux automatically using Kickstart
- Configure a physical machine to host virtual guests
- Install Red Hat Enterprise Linux systems as virtual guests
- Configure systems to launch virtual machines at boot
- Configure network services to start automatically at boot
- Configure a system to run a default configuration HTTP server
- Configure a system to run a default configuration FTP server
- Install and update software packages from Red Hat Network, a remote repository, or from the local file system
- Update the kernel package appropriately to ensure a bootable system
- Modify the system bootloader



Manage Users and Groups

- Create, delete, and modify local user accounts
- Change passwords and adjust password aging for local user accounts
- Create, delete and modify local groups and group memberships
- Configure a system to use an existing LDAP directory service for user and group information

Manage Security

- Configure firewall settings using system-config-firewall or iptables
- Set enforcing and permissive modes for SELinux
- List and identify SELinux file and process context
- Restore default file contexts
- Use boolean settings to modify system SELinux settings
- Diagnose and address routine SELinux policy violations