

Red Hat Certified System Administrator (RHCSA) («EX200»)

The performance-based RHCSA® exam (EX200) tests your knowledge and skill in areas of system administration common across a wide range of environments and deployment scenarios.

Duration: 3 hours

Price: 550.–

Content

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
- Log in and switch users in multiuser targets
- 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

Create simple shell scripts

- Conditionally execute code (use of: if, test, , etc.)
- Use Looping constructs (for, etc.) to process file, command line input
- Process script inputs (\$1, \$2, etc.)
- Processing output of shell commands within a script
- Processing shell command exit codes

Operate running systems

- Boot, reboot, and shut down a system normally
- Boot systems into different targets manually
- Interrupt the boot process in order to gain access to a system
- Identify CPU/memory intensive processes and kill processes
- Adjust process scheduling
- Manage tuning profiles
- Locate and interpret system log files and journals
- Preserve system journals
- Start, stop, and check the status of network services
- Securely transfer files between systems

Configure local storage

- List, create, delete partitions on MBR and GPT disks
- Create and remove physical volumes
- Assign physical volumes to volume groups
- Create and delete logical volumes
- Configure systems to mount file systems at boot by universally unique ID (UUID) or label

- Add new partitions and logical volumes, and swap to a system non-destructively

Create and configure file systems

- Create, mount, unmount, and use vfat, ext4, and xfs file systems
- Mount and unmount network file systems using NFS
- Extend existing logical volumes
- Create and configure set-GID directories for collaboration
- Configure disk compression
- Manage layered storage
- Diagnose and correct file permission problems

Deploy, configure, and maintain systems

- Schedule tasks using at and cron
- Start and stop services and configure services to start automatically at boot
- Configure systems to boot into a specific target automatically
- Configure time service clients
- Install and update software packages from Red Hat Network, a remote repository, or from the local file system
- Work with package module streams
- Modify the system bootloader

Manage basic networking

- Configure IPv4 and IPv6 addresses
- Configure hostname resolution
- Configure network services to start automatically at boot
- Restrict network access using firewall-cmd/firewall

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 superuser access

Manage security

- Configure firewall settings using firewall-cmd/firewalld
- Create and use file access control lists
- Configure key-based authentication for SSH
- 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

Manage containers

- Find and retrieve container images from a remote registry
- Inspect container images
- Perform container management using commands such as podman and skopeo
- Perform basic container management such as running, starting, stopping, and listing running containers
- Run a service inside a container
- Configure a container to start automatically as a systemd service
- Attach persistent storage to a container

As with all Red Hat performance-based exams, configurations must persist after reboot without intervention.

Red Hat reserves the right to add, modify, and remove objectives. Such changes will be made public in advance through revisions to this document.

Methodology & didactics

The RHCSA exam is a performance-based evaluation of Red Hat Enterprise Linux system administration skills and knowledge. Candidates perform a number of routine system administration tasks and are evaluated on whether they have met specific objective criteria. Performance-based testing means that candidates must perform tasks similar to what they must perform on the job.

The RHCSA exam is a hands-on, practical exam that lasts 2.5 hours. Internet access is not provided during the exam. Outside materials are not permitted. Documentation that ships with Red Hat Enterprise Linux is available during the exam. Red Hat reserves the right to make changes to format, including timing and the policies above. Such changes will be made public in advance through revisions to this document.

This exam can also be taken virtually as part of our remote testing format. Find out [more about remote exams](#) to see if this is the right choice for you.

For the remote exam, please choose [EX200R](#).

Target 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
- DevOps professionals who wish to demonstrate their expertise with the fundamentals of container technology

Certification

Official scores for exams come exclusively from Red Hat Certification Central. Red Hat does not authorize examiners or training partners to report results to candidates directly. Scores on the exam are usually reported within 3 U.S. business days.

Exam results are reported as section scores. Red Hat does not report performance on individual items, nor will it provide additional information upon request.

Additional information

We encourage all candidates for RHCSA to consider taking one or more of its official training courses to help prepare. Attendance in these classes is not required, and one can choose to take just an exam. Many successful candidates who have come to class already possessing substantial skills and knowledge report that the class made a positive difference for them.

To help you determine the best courses to take, we provide an [online skills assessment](#).

While attending Red Hat classes can be an important part of one's preparation, attending class does

not guarantee success on the exam. Previous experience, practice, and native aptitude are also important determinants of success.



Many books and other resources on system administration for Red Hat's products are available. We do not endorse any as preparation guides for any exams. Nevertheless, candidates may find additional reading deepens understanding and can prove helpful.

Any questions?

We are happy to advise you on +41 44 447 21 21 or info@digicomp.ch. You can find detailed information about dates on www.digicomp.ch/courses-it-provider/red-hat/red-hat-exams/exam-red-hat-certified-system-administrator-rhcsa