

## Red Hat Certified System Administrator (RHCSA) exam (EX200)

**Modality:** Virtual Classroom

**Duration:** 1 Day

### **About this course:**

The supports of Red Hat is for all applicants for RHCSA to consider taking at least one of its official instructional courses to help get ready. Participation in these classes isn't required, and they can decide to give only a test. Numerous successful students who have attended a class previously having significant abilities and information report that the class had a beneficial outcome for them. While going to Red Hat's classes can be a significant piece of one's planning, going to class doesn't ensure accomplishment on the test. Past practice, experience, and native fitness are likewise significant determinants of achievement. Numerous books and different resources on framework administration for Red Hat's items are accessible. Red Hat doesn't support any of it as the guides for any tests. In any case, up-and-comers may discover extra perusing develops understanding and can demonstrate supportively. The exam of RHCSA is a performance-based assessment of the Red Hat Enterprise Linux framework organization aptitudes and information. Applicants play out various routine tasks of system administration and are assessed on whether they have met explicit target criteria. Performance-based testing implies that up-and-comers must perform projects like what they should perform at work.

The exam of RHCSA is a practical, hands-on exam that keeps going 2.5 hours. Access to the internet isn't given during the exam. No materials from outside are allowed. During the exam documentation that ships with Red Hat Enterprise Linux are accessible. Red Hat has all the authority to make changes to format, including policies and the timing above. These changes will be made open ahead of time through updates to this report.

The Red Hat Administrator pay is **\$72,762** every year.

### **Course Objective:**

- Compress, archive, unpack, and uncompressed files using star, tar, bzip2, and gzip.
- Use redirection of input-yield (>, >>, |, 2>, and so on.)
- Access the systems of remote with SSH
- Discover, read, and utilize the documentation of system including info, man, and files in /share/user/doc
- Interrupt the process of a boot in order to get access to a system
- Make and edit text documents
- Access a shell quick and make commands with the right syntax
- Create, copy, delete, and transfer directories and files.
- Create soft and hard links
- Set, list, and change the permissions of standard ugo/rwx.
- Make and remove physical volumes, allocate physical volumes to the groups of volume, and make and erase logical volumes
- Function running systems

- For the system, perform boot, reboot, and shut down normally
- Boot systems into various targets manually
- Sign in and control users in multiuser targets
- Identify intensive processes of CPU/memory, process priority adjustment with a kill and renice processes
- Plan tasks using at and cron
- Get the console of a virtual machine
- Stop and Start virtual machines
- Stop, Start, and check the network services status
- Strongly transfer records between systems
- Configure local storage
- List, make and erase partitions on GPT and MBR disks
- Trace and interpret log files and journals of the system
- Systems configuration to mount systems for the file at boot by label or Universally Unique ID (UUID)
- Make new logical volumes and partitions, and swap to a system non-destructively
- Develop and configure file systems
- Build, mount, unmount, and utilize ext4, vfat, and xfs file systems
- Unmount and mount NFS and CIFS network file systems
- Spread current logical volumes
- Make and configure set-GID directories for collaboration
- Develop and manage Access Control Lists (ACLs)
- Identify and correct permission problems of the file
- Configure, deploy, and maintain systems
- Configure hostname and networking resolution dynamically or statically
- Create, delete, and modify group memberships and local groups
- Stop and start services and configure services to begin by design at boot
- Systems configuration to boot into a definite target automatically
- Using Kickstart, Install Red Hat Enterprise Linux automatically
- To host virtual guests, configure a physical machine
- Install systems of Red Hat Enterprise Linux as virtual guests
- Systems configuration to launch virtual machines at boot
- Configure the services of a network to start automatically at boot
- Configure a system to utilize the services of time
- Update and install software packages from the Network of Red Hat, from the local file system, or a remote repository.
- Update the package of kernel properly to ensure a bootable system
- Modify the system bootloader
- Manage groups and users
- Delete, create, and modify local user accounts
- Restore default file contexts
- Set permissive and enforcing modes for SELinux
- To use an existing authentication service, configure a system for group and user information
- Manage security
- Configure SSH key-based authentication.
- Configure the settings of firewalls using firewall-config, iptables or firewall-cmd.
- Identify and list the SELinux process and file context
- Adjust password and change passwords aging for local user accounts

- Utilize settings of Boolean to modify the settings of system SELinux
- Diagnose and address policy violations of routine SELinux

## **Audience:**

This course is anticipated for:

The professionals of IT who are on the path to earning the certification of RHCE

## **Prerequisites:**

Have similar work understanding as a system administrator on Red Hat Enterprise Linux

## **Suggested prerequisites courses:**

Red Hat System Administration II (Virtual Training) (RH134VT-EC)

Red Hat System Administration I (RH124)

## **Course Outline:**

### **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
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- 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, adjust process priority with renice, and kill processes
  - Locate and interpret system log files and journals
  - Access a virtual machine's console
  - Start and stop virtual machines
  - 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, and 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 CIFS and NFS network file systems
- Extend existing 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 at and cron
- Start and stop services and configure services to start automatically at boot
- Configure systems to boot into a specific target 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 use time services
- 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 authentication service for user and group information

## Manage security

- Configure firewall settings using firewall-config, firewall-cmd, or iptables
- 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