✅ RHCSA EX200 Exam Overview

- **Exam Code:** EX200
- **Duration:** 3 hours
- **Passing Score:** 210 out of 300 (70%)
- **Mode:** Performance-based, practical exam
- **Environment:** Red Hat Enterprise Linux 9 (as of latest update)

🧭 Exam Syllabus Overview

RHCSA tests your ability to **perform system administration tasks** on RHEL, including:

1. Understand and Use Essential Tools

- cd, ls, cp, mv, rm, touch, cat, less, grep, etc.
- Use vim or nano
- Use tar, gzip, bzip2
- SSH, scp
- find, locate

2. Operate Running Systems

- Boot into multi-user, rescue, emergency targets
- Use systemd tools (systemctl, journalctl, etc.)
- Manage processes (ps, top, kill)
- Configure and troubleshoot networking

3. Configure Local Storage

- Partitioning with fdisk, parted
- Format with mkfs, xfs, ext4
- Create and mount file systems
- Logical Volume Manager (LVM)

4. Create and Configure File Systems

- Create and mount file systems
- fstab entries
- Auto-mount with autofs
- Permissions, ACLs, Sticky Bit

5. Deploy, Configure and Maintain Systems

- Boot process and GRUB2
- Install software with yum, dnf, or rpm
- Schedule tasks with cron, at
- Configure time/date with timedatectl

6. Manage Users and Groups

- Create/delete users and groups
- Set passwords and manage password aging
- File ownership and permissions

7. Security

- Configure firewall with firewalld
- Manage SELinux (getenforce, setenforce, restorecon, semanage)
- Use sudo

8. Networking

- Configure static IP, hostname, DNS
- Interface configuration files
- Use nmcli, nmtui

9. Containers (RHEL 9 Specific)

- Run containers using podman
- Create and manage container images
- Persist data using volumes
- Use registry.redhat.io

🎯 Tips to Crack RHCSA

🧠 1. Practice is King

- Set up a RHEL 9 virtual machine or use a cloud VM.
- Practice **hands-on daily**, especially commands and configurations.

⏱️ 2. Time Management in Exam

- The exam is time-sensitive. Don't get stuck on a single task.
- If one task is not working, skip and come back later.

💾 3. Save Your Work

- After every major task, **save your configuration**:
    - Use sync, w, history > history.txt
    - Reboot and check if settings are persistent.

📝 4. Understand, Don't Memorize

- Red Hat checks **real-world usage**, not rote learning.
- Understand *why* each step is done, not just *how*.

📂 5. Documentation Usage

- Man pages are your friends: man <command>
- Use --help flag when stuck.

🔒 6. SELinux and Firewalld

- Check both if services or configurations don't work.
- Commands:
    - getsebool, semanage port, firewall-cmd --list-all

🧩 7. Containers (New Addition)

- Practice with podman, especially:
    - Running containers with volume mapping

- Installing images from registry.redhat.io
- Creating your own image from a container

📁 8. Don't Reboot Without Reason

- Don’t reboot unless asked.
- Use systemctl restart or --now flag with dnf install or nmcli.

🧰 Recommended Practice Labs

- LVM Creation, Extension, and Reduction
- User and group creation with password expiry
- Scheduling cron/at jobs
- Mounting file systems and auto-mounting
- Configuring firewall and SELinux for services
- Setting up containers with podman

✅ DOs (Things You Should Do In Exam)

1. Read Questions Carefully

- Understand what the task is asking before jumping to a solution.
- Some tasks may have multiple steps—don't miss any!

2. Save Your Work

- After configuring or editing files, **save and test immediately**.
- Use sync and history > /root/history.txt at the end for backup.

3. Check Your Configuration

- Test your tasks using systemctl status, ping, lsblk, mount, getfacl, etc.
- If a question requires persistence across reboot, **reboot and test** it!

4. Use Man Pages or --help

- It’s allowed to use man, --help, and documentation within the system.

5. Know the Default Locations

- Know where config files are stored (e.g., /etc/fstab, /etc/firewalld/, /etc/containers/).
- Use find or locate to search for files if needed.

6. Be Calm and Use Your Time Wisely

- You get 2.5 hours, which is enough **if you don't panic**.
- Skip tricky tasks and come back to them later.

7. Verify Each Task

- Use tools like getent, ip a, firewall-cmd, nmcli, etc., to confirm correct setup.

8. Stay Organized

- Use /root/ to keep backup copies or scripts if needed.
- Keep a terminal open for man or logs like journalctl -xe.

❌ **DON'Ts (Common Mistakes to Avoid In Exam)**

1. Don't Reboot Unnecessarily

- Unless the question requires a reboot, **avoid it**.
- Some misconfigurations can lock you out or change system behavior.

2. Don't Guess Commands

- If unsure, use man, --help, or refer to the already-installed documentation.
- Avoid "trial and error" approach—it wastes time and can break things.

3. Don't Leave Tasks Half-Done

- Incomplete configuration = zero marks for that task.
- Double-check each task is fully done **before moving on**.

4. Don't Touch Unrelated Files

- Modify **only what the question tells you**.
- Changing unrelated files can cause system issues or cost marks.

5. Don't Forget Firewalld or SELinux

- If a service isn't working, **check firewalld and SELinux** before troubleshooting deeper.

6. Don't Panic if Something Fails

- Move to the next task and come back later.
- Sometimes solving later tasks can help you realize earlier mistakes.

7. Don't Lock Yourself Out

- Be careful when setting root password, editing /etc/fstab, or modifying boot targets.
- Misconfigurations here can make the system unbootable.