Red Hat

RHCE-Playlist

RHCE -RedHat Certified Engineer (EX294)

1. Overview of the RHCE Exam

- **Exam Code**: EX294
- **Duration**: 4 hours
- Total marks: 300
- Passing Marks: 210
- **Format**: Performance-based
  - Tasks are practical and performed on a **Red Hat Enterprise Linux (RHEL)** system.
  - You'll complete **20-30 tasks** related to system administration and configuration.
  - You will need to use the **command line** (Terminal) and perform system administration tasks in real-time.

---

2. Exam Objectives

The **RHCE exam** focuses on essential Red Hat Linux system management tasks, including:

Key Areas:

1. **System Configuration**:
   - Configure **network settings** (e.g., IP addresses, DNS).
   - Set up and manage **SSH** access and system services using systemctl.

2. **Storage Management**:
    - Configure and manage **disks, partitions**, and **LVM** (Logical Volume Manager).
    - Mount/unmount file systems via /etc/fstab.
3. **Package Management**:
    - Install, remove, and update software packages using dnf or yum.
4. **User Management**:
    - Create and manage users, groups, and permissions.
    - Implement **sudo** for system access.
5. **Security**:
    - Configure and manage **SELinux** and **firewall** settings.
    - Set up system-level security configurations.
6. **Ansible Automation**:
    - Automate repetitive tasks (e.g., installing packages, configuring services) using **Ansible** playbooks.
    - Manage tasks across multiple systems.
7. **System Monitoring**:
    - Use tools like top, vmstat, iostat for performance monitoring.
    - Diagnose and troubleshoot system issues using logs and system commands.

8. **Networking**:
    - Configure **network interfaces** and services (e.g., NFS, Samba).
    - Troubleshoot network problems.

---

3. Exam Instructions and Tips

Exam Structure:

- **Number of Tasks**: Approximately 20-30 tasks.
- **Difficulty**: Tasks range from basic configuration to advanced troubleshooting.
- **Automation**: **Ansible** will be used to automate system administration tasks (e.g., user creation, file management).

During the Exam:

- **Time Management**:
    - Allocate time wisely. Don’t get stuck on one task for too long.
    - Prioritize tasks you are familiar with first, then focus on the more complex ones.
- **Double-Check Configuration**: Always verify configurations before moving to the next task.
- **Automate with Ansible**: If multiple systems need configuration, write **Ansible playbooks** to automate the tasks.

Common Commands to Know:

- **Service Management**: systemctl, firewall-cmd
- **Package Management**: dnf, yum, rpm
- **Disk Management**: lvcreate, pvcreate, vgcreate, mkfs

- **Ansible**: ansible-playbook, ansible, ansible-pull
- **Networking**: nmcli, ip, hostnamectl
- **SELinux**: getenforce, setsebool, semanage

---

4. Preparation Tips

1. **Practice in a Lab Environment**:
    - Set up a local RHEL lab or use virtual machines to simulate the exam environment.
    - Practice key tasks like creating users, managing services, and setting up storage.
2. **Familiarize with Ansible**:
    - Learn to write **simple Ansible playbooks** to automate tasks.
    - Focus on automating system configurations (e.g., installing packages, setting up firewalls).
3. **Understand Red Hat Documentation**:
    - Know where to find key information (e.g., storage configuration, service management).
    - Use the **Red Hat Documentation** during the exam to confirm configurations.

4.Key Tools to Practice:

- **Network Configuration**: Practice configuring static IPs, DNS settings, and troubleshooting with nmcli or ip.
- **Firewall Management**: Practice using firewalld and iptables to configure and secure networks.

- **Disk Management**: Get comfortable with LVM (lvcreate, lvextend, vgcreate), file system creation, and mounting/unmounting drives.

---

5. Exam Tips

1. **Read Each Task Carefully**:
   - Ensure you understand what each task requires before proceeding.
   - Some tasks may seem similar, but small details can affect your approach.
2. **Keep Calm**:
   - If you run into a problem, **don’t panic**. Use logs (/var/log/messages), journalctl, and systemctl to troubleshoot.
   - Move on to other tasks if you're stuck, and return later if time allows.
3. **Review Your Work**:
   - Before submitting, review your configurations to ensure everything is set as per the task requirements.
   - Double-check system services are running correctly (e.g., systemctl status).

---

6. Exam Results and Attempts

- **Pass/Fail**: You'll receive a **pass/fail** result at the end of the exam.
- **Re-attempts**: If you fail, you can schedule another attempt, but you'll need to wait a specific period before re-taking the exam. Contact Red Hat for the re-exam policy.

The RHCE Exam (EX294) is a hands-on, performance-driven assessment designed to evaluate practical skills essential for effective system administration. It covers tasks related to system configuration, automation with Ansible, user management, security, and networking. Success in the exam relies on both hands-on experience and a deep understanding of Red Hat's tools and configurations.

Thank you !

RHCE-Playlist

RHCE

Linux Free Bootcamp