



# Red Hat Enterprise Linux 8 – RHCE Syllabus

## RH124 - Red Hat System Administration I

- **Get started with Red Hat Enterprise Linux**
  - Describe and define open source, Linux distributions, and Red Hat Enterprise Linux.
- **Access the command line**
  - Log into a Linux system and run simple commands using the shell.
- **Manage files from the command line**
  - Copy, move, create, delete, and organize files while working from the bash shell.
- **Get help in Red Hat Enterprise Linux**
  - Resolve problems by using local help systems.
- **Create, view, and edit text files**
  - Manage text files from command output or in a text editor.
- **Manage local users and groups**
  - Create, manage, and delete local users and groups, as well as administer local password policies.
- **Control access to files**
  - Set Linux file system permissions on files and interpret the security effects of different permission settings.
-



- **Monitor and manage Linux processes**
  - Evaluate and control processes running on a Red Hat Enterprise Linux system.
- **Control services and daemons**
  - Control and monitor network services and system daemons using systemd.
- **Configure and secure SSH**
  - Configure secure command line service on remote systems, using OpenSSH.
- **Analyze and store logs**
  - Locate and accurately interpret logs of system events for troubleshooting purposes.
- **Manage networking**
  - Configure network interfaces and settings on Red Hat Enterprise Linux servers.
- **Archive and transfer files**
  - Archive and copy files from one system to another.
- **Install and update software**
  - Download, install, update, and manage software packages from Red Hat and yum package repositories.
- **Access Linux files systems**
  - Access, inspect, and use existing file systems on storage attached to a Linux server.



- **Analyze servers and get support**
- Investigate and resolve issues in the web-based management interface, getting support from Red Hat to help solve problems.
- **Comprehensive review**
- Review the content covered in this course by completing hands-on exercises.

## RH134 - Red Hat System Administration II

- **Improve command line productivity**
  - Run commands more efficiently by using advanced features of the bash shell, shell scripts, and various utilities provided by Red Hat Enterprise Linux.
- **Schedule future tasks**
  - Schedule commands to run in the future, either one time or on a repeating schedule.
- **Tune system performance**
  - Improve system performance by setting tuning parameters and adjusting scheduling priority of processes.
- **Control access to files with ACLs**
  - Interpret and set access control lists (ACLs) on files to handle situations requiring complex user and group access permissions.
- **Manage SELinux security**
  - Protect and manage the security of a server by using SELinux.
- **Maintain basic storage**
  - Create and manage storage devices, partitions, file systems, and swap spaces from the command line.
- **Manage logical volumes**
  - Create and manage logical volumes containing file systems and swap spaces from the command line.



- **Implement advanced storage features**
  - Manage storage using the Stratis local storage management system and use VDO volumes to optimize storage space in use.
- **Access network-attached storage**
  - Use the NFS protocol to administer network-attached storage.
- **Control the boot process**
  - Manage the boot process to control services offered and to troubleshoot and repair problems.
- **Manage network security**
  - Control network connections to services using the system firewall and SELinux rules.
- **Install Red Hat Enterprise Linux**
  - Install Red Hat Enterprise Linux on servers and virtual machines.

## RH294 - Red Hat System Administration III

- **Introduce Ansible**
  - Describe Ansible concepts and install Red Hat Ansible Engine.
- **Deploy Ansible**
  - Configure Ansible to manage hosts and run ad hoc Ansible commands.
- **Implement playbooks**
  - Write a simple Ansible Playbook and run it to automate tasks on multiple managed hosts.
- **Manage variables and facts**
  - Write playbooks that use variables to simplify management of the playbook and facts to reference information about managed hosts.
- **Implement task control**
  - Manage task control, handlers, and task errors in Ansible Playbooks.
- **Deploy files to managed hosts**
  - Deploy, manage, and adjust files on hosts managed by Ansible.
- **Manage large projects**
  - Write playbooks that are optimized for larger, more complex projects.
- **Simplify playbooks with roles**
  - Use Ansible roles to develop playbooks more quickly and to reuse Ansible code.
  -



- **Troubleshoot Ansible**
  - Troubleshoot playbooks and managed hosts.
- **Automate Linux administration tasks**
  - Automate common Linux system administration tasks with Ansible.