

Red Hat Certified Engineer (RHCE) Exam (EX-300)

Exam Description

Red Hat Certified Engineer (RHCE) is earned by a Red Hat Certified System Administrator (RHCSA) who has demonstrated the knowledge, skill and ability required of senior system administrator for Red Hat Enterprise Linux systems.

RHCSA certification is required in order to earn Red Hat Certified Engineer (RHCE).

Duration

4 hours

Exam Audience

- Experienced Linux IT professionals who currently have RHCSA certification and are interested in earning an RHCE certification
- Experienced Red Hat Enterprise Linux system administrators seeking validation of their skills
- Students who have attended the Red Hat System Administration I, II, and III courses or the RHCE Rapid Track course
- Experienced Linux system administrators who require a certification either by their organization or based on a mandate (DOD 8570 directive)
- An RHCE who is non current and has passed the RHCSA exam

Exam Overview

The RHCE exam is a hands-on, practical exam that lasts 4 hours. Candidates are eligible to take the RHCE exam without first having passed the RHCSA exam, but RHCE will not be issued until both credentials are earned by a candidate.

Candidates will be emailed exam results within three US business days following the exam.

Exam Prerequisites

- RHCE Rapid Track Course, System Administration I, II, or III or equivalent experience
- Real-world system administration experience

Exam Requirements

- The RHCE exam objectives provide authoritative guidance on the knowledge and skills candidates will need to demonstrate in the RHCE exam. They also provide more specific information on the exam format and coverage. All candidates are urged to use this information to evaluate their readiness for the exam.
- Red Hat Certified Engineer (RHCE) is earned by a Red Hat Certified System Administrator (RHCSA) who has demonstrated the knowledge, skill and ability required of senior system administrator for Red Hat Enterprise Linux systems.
- An RHCSA certification is required in order to earn Red Hat Certified Engineer (RHCE).

Exam Objectives

RHCE exam candidates should be able to accomplish the following without assistance. These have been grouped into several categories.

System Configuration and Management

- Route IP traffic and create static routes
- Use iptables to implement packet filtering and configure network address translation (NAT)
- Use /proc/sys and sysctl to modify and set kernel run-time parameters
- Configure system to authenticate using Kerberos
- Build a simple RPM that packages a single file
- Configure a system as an iSCSI initiator that persistently mounts an iSCSI target
- Produce and deliver reports on system utilization (processor, memory, disk, and network)
- Use shell scripting to automate system maintenance tasks
- Configure a system to log to a remote system
- Configure a system to accept logging from a remote system

Network Services

Network services are an important subset of the exam objectives. RHCE candidates should be capable of meeting the following objectives for each of the network services listed below:

- Install the packages needed to provide the service
- Configure SELinux to support the service
- Configure the service to start when the system is booted
- Configure the service for basic operation
- Configure host-based and user-based security for the service

RHCE candidates should also be capable of meeting the following objectives associated with specific services:

HTTP/HTTPS

- Configure a virtual host
- Configure private directories

- Deploy a basic CGI application
- Configure group-managed content

DNS

- Configure a caching-only name server
- Configure a caching-only name server to forward DNS queries

Note: Candidates are not expected to configure master or slave name servers

FTP

- Configure anonymous-only download

NFS

- Provide network shares to specific clients
- Provide network shares suitable for group collaboration

SMB

- Provide network shares to specific clients
- Provide network shares suitable for group collaboration

SMTP

- Configure a mail transfer agent (MTA) to accept inbound email from other systems
- Configure an MTA to forward (relay) email through a smart host



SSH

- Configure key-based authentication
- Configure additional options described in documentation

NTP

- Synchronize time using other NTP peers