
RHCE Certification Lab

Duration: 4 Days **Course Code: RH299**

Overview:

Prepare for the Red Hat Certified Engineer exam (EX300)

The RHCE® Certification lab (RH299) is a facilitated lab environment for students to work at their own pace through a hands-on review prior to taking the Red Hat Certified Engineer (RHCE) exam (EX300).

Students attending this lab should have already completed their classroom training and simply be preparing to take or retake the exam. The delivery is focused primarily on lab time.

During the 4-day lab, students will work on their own through the complete set of labs from both the RHCSA (Red Hat Certified System Administrator) Rapid Track (RH199) and Red Hat System Administration III (RH254). The RHCE Certification Lab includes a few lectures designed to review key technologies such as systemd, firewalld, and IPv6. For the classroom and virtual classroom versions of this lab, a facilitator will be available throughout the week to assist students as they work through the exercises.

Target Audience:

This course is most suitable for: RHCEs on Red Hat Enterprise Linux 6 or earlier who wish to recertify on Red Hat Enterprise Linux 7 Students who previously attempted the RHCE exam, did not pass, and wish to retake the exam Students who have completed the RHCE track courses (Red Hat System Administration I (RH124), Red Hat System Administration II (RH134), and Red Hat System Administration III (RH254) or equivalent) and would like additional hands-on practice prior to taking the RHCE exam

Objectives:

- Completion of this course will provide you with hands-on lab experience to help prepare you for the Red Hat Certified Engineer exam (EX300) exam, specifically:
 - Managing and troubleshooting systemd services during the boot process
 - Network configuration and basic troubleshooting
 - Managing local storage, creating and using file systems
 - Firewall management with firewalld
 - Automating installation of Red Hat Enterprise Linux® using kickstart
 - Manage SELinux settings
 - Using NFS and Samba shared filesystems
 - iSCSI initiator and target configuration
 - Domain Name System (DNS) troubleshooting and caching name server
 - Providing Network File System (NFS) and Server Message Block (SMB) file servers
 - Apache HTTPD web server management
 - MariaDB SQL database configuration
 - Postfix Simple Mail Transfer Protocol (SMTP) nullclient for servers
 - Bash scripting for automation
-

Prerequisites:

- Meet the requirements for attending Red Hat System Administration I, II, and III courses.
- Have the same skill set as an RHCT/RHCSA.
- RH124 - Red Hat System Administration I
- RH134 - Red Hat System Administration II
- RH254 - Red Hat System Administration III: Data Center Services for RHEL 7

Testing and Certification

This course helps you prepare for the Red Hat Certified Engineer exam (EX300)

Alternatively you can attend the RH300 course that includes the RHCSA and RHCE Exams (EX200 & EX300)

Follow-on-Courses:

- CL110 - Red Hat OpenStack Administration I: Core Services and Operations
 - CL210 - Red Hat OpenStack Administration II: Infrastructure Configuration
 - DO180 - Introduction to Containers, Kubernetes, and Red Hat OpenShift
 - DO280 - OpenShift Enterprise Administration
 - DO405 - Configuration Management with Puppet
 - DO407 - Cloud Automation with Ansible
 - RH318 - Red Hat Enterprise Virtualization
 - RH342 - Red Hat Linux Diagnostics and Troubleshooting
 - RH403 - System Management with Red Hat Satellite 6
 - RH436 - Red Hat High Availability Clustering
 - RH442 - Red Hat Enterprise Performance Tuning
-

Content:

Subjects covered this outline are from Red Hat System Administration I (RH124), Red Hat System Administration II (RH134), and Red Hat System Administration III (RH254), but all may not be covered in your lab session.	Network configuration Configure basic IPv4 networking on Red Hat Enterprise Linux systems.	Permit and reject access to network services using advanced SELinux and firewalld filtering techniques. Managing DNS for Servers
Local and remote logins	System logging and ntp	Set and verify correct DNS records for systems and configure secure-caching DNS.
Review methods for accessing the system and engaging Red Hat Support.	Locate and accurately interpret relevant system log files for troubleshooting purposes.	Configuring E-mail Delivery
File system navigation	Logical volume management	Relay all e-mail sent by the system to a SMTP gateway for central delivery.
Copy, move, create, delete, link, and organize files while working from the Bash shell prompt.	Create and manage logical volumes from the command line.	Providing block-based storage
Users and groups	Scheduled processes	Provide and use networked iSCSI block devices as remote disks.
Manage Linux users and groups and administer local password policies.	Schedule tasks to automatically execute in the future.	Providing file-based storage
File permissions	Mounting network file systems	Provide NFS exports and SMB file shares to specific systems and users.
Control access to files and directories using permissions and access control lists (ACLs).	Use autofs and the command line to mount and unmount network storage with NFS and SMB.	Configuring MariaDB databases
SELinux permissions	Firewall configuration	Provide a MariaDB SQL database for use by programs and database administrators.
Manage the SELinux behavior of a system to keep it secure in case of a network service compromise.	Configure a basic firewall.	Providing Apache HTTPD Web Service
Process management	Virtualization and kickstart	Configure Apache HTTPD to provide Transport Layer Security (TLS)-enabled websites and virtual hosts.
Evaluate and control processes running on a Red Hat Enterprise Linux system.	Automate the installation of Red Hat Enterprise Linux on virtual machines with kernel-based virtual machine (KVM) and libvirt.	Writing Bash scripts
Updating software packages	Managing IPv6 networking	Write simple shell scripts using Bash.
Download, install, update, and manage software packages from Red Hat and yum package repositories.	Configure and troubleshoot basic IPv6 networking on Red Hat Enterprise Linux systems.	Bash conditionals and control structures
Creating and mounting file systems	Configuring link aggregation and bridging	Use Bash conditionals and other control structures to write more sophisticated shell commands and scripts.
Create and manage disks, partitions, and filesystems from the command line.	Configure and troubleshoot advanced network	Configuring the shell environment

Service management and boot troubleshooting	interface functionality including bonding, teaming, and local software bridges.	Customize Bash startup and use environment variables, Bash aliases, and Bash functions.
Control and monitor system daemons and troubleshoot the Red Hat Enterprise Linux boot process.	Controlling network port security	

Additional Information:

Red Hat Learning Subscriptions:

The Red Hat Learning Subscription is an exclusive program that provides users with 12-months access to all Red Hat Online Learning and video classroom courses. All subscribers will receive unlimited access to online learning content, up to 400 hours of hands-on lab time and more than 300 recorded instructor videos.

There are two versions available: Basic and Standard. These are also available in an Enterprise variant for large companies. The Standard is the most extensive subscription and offers access to Red Hat exams as an extra.

For more information please see LS120 and LS220 below

https://www.globalknowledge.com/en-GB/Products/Red_Hat/LS120

https://www.globalknowledge.com/en-GB/Courses/Red_Hat/Operating_Systems/LS220

Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

info@globalknowledge.co.uk

www.globalknowledge.com/en-gb/

Global Knowledge, Mulberry Business Park, Fishponds Road, Wokingham Berkshire RG41 2GY UK