Cloud Networking

Red Hat OpenStack Administration (CL210)

What you need to know

Preparation for the Red Hat Certified System Administrator in Red Hat OpenStack

Red Hat encourages all candidates for the Red Hat Certified System Administrator in Red Hat OpenStack to consider taking the Red Hat OpenStack Administration (CL210) course. Attendance in this class is not required, so one can choose to take just the exam.

While attending Red Hat classes can be an important part of one's preparation to take this exam, attending class does not guarantee success on the exam. Previous experience, practice, and native aptitude are also important determinants of success.

Many books and other resources on system administration for Red Hat's products are available. Red Hat does not officially endorse any as preparation guides for its exam. Nevertheless, you may find additional reading deepens understanding and can prove helpful.

Exam format

This exam is a performance-based evaluation of Red Hat OpenStack skills and knowledge. Candidates perform a number of systems administration tasks focused on configuring and administering an OpenStack cloud and are evaluated on whether they have met specific objective criteria. Performance-based testing means that candidates must perform tasks similar to what they perform on the job.

This exam consists of one section lasting 3 hours.

Scores and reporting

Official scores for exams come exclusively from Red Hat Certification Central. Red Hat does not authorize examiners or training partners to report results to candidates directly. Scores on the exam are usually reported within 3 U.S. business days.

Exam results are reported as section scores. Red Hat does not report performance on individual items, nor will it provide additional information upon request

In preparation to earn a Red Hat Certified System Administrator in Red Hat OpenStack, Red Hat recommends the following:

Courses:

- Red Hat OpenStack Administration (CL210)

EX210 - Red Hat Certified System Administrator in Red Hat OpenStack exam
Demonstrate your ability to build and manage private clouds using Red Hat Enterprise Linux OpenStack Platform.

In preparation

Study points for the exam

Red Hat reserves the right to add, modify, and remove objectives. Such changes will be made public in advance through revisions to this document.

Candidates for the Red Hat Certified System Administrator in Red Hat OpenStack should be able to perform the following tasks:

- Install and configure Red Hat Enterprise Linux OpenStack Platform
- Manage users
- Manage projects
- Manage flavors
- Manage roles
- Set quotas
- Manage images
- Configure images at instantiation
- Add additional compute nodes
- Manage Swift storage
- Manage networking
- Manage Cinder storage

As with all Red Hat performance-based exams, configurations must persist after reboot without intervention

Audience and prerequisites

The following audiences may be interested in earning the Red Hat Certified System Administrator in Red Hat OpenStack:

- System administrators who want to demonstrate their use of Red Hat Enterprise Linux OpenStack Platform skills.
- Red Hat Certified Engineers who wish to pursue Red Hat Certified Architect (RHCA).

Prerequisites for this exam

Candidates for this exam should:

- Be Red Hat Certified System Administrators or have comparable work experience and skills (Red Hat Certified Engineer would be even better)
- Have taken the Red Hat OpenStack Administration (CL210) course or have comparable work experience using Red Hat Enterprise Linux OpenStack Platform
- Review the Red Hat Certified System Administrator in Red Hat OpenStack exam (EX210) Objectives

Course overview

Through hands-on labs, students will explore fault-tolerant and redundant configurations of Red Hat Enterprise Linux OpenStack® Platform, and will also look at the future plans of the OpenStack development community.

This course can also help you prepare for the <u>Red Hat Certified System Administrator in Red Hat OpenStack exam (EX210)</u>.

Course content summary

- Get an overview of the Red Hat Enterprise Linux OpenStack Platform architecture
- Install Red Hat Enterprise Linux OpenStack Platform using packstack and Foreman
- Deploy each Red Hat Enterprise Linux OpenStack Platform service manually
- Manage users and projects
- Deploy instances, and use Heat to deploy and customize instances

Read the entire course outline for more details.

Note: Red Hat OpenStack Administration is one of our emerging technology courses. This series of courses focuses on Red Hat's evolving technologies. Emerging technology courses are feature-and functionality-focused and are conducted like guided labs.

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Audience and prerequisites

- Linux system administrators and cloud administrators interested in, or responsible for, maintaining a private cloud
- <u>Red Hat Certified System Administrator (RHCSA)</u> or requisite level of knowledge highly recommended

Prerequisites for this course

- certification or equivalent knowledge and experience

Outline for this course

Red Hat Enterprise Linux OpenStack Platform architecture
 Understand Red Hat Enterprise Linux OpenStack Platform features and terminology.
Red Hat Enterprise Linux OpenStack Platform installation
 Install Red Hat Enterprise Linux OpenStack Platform using packstack and Foreman.
 Create an instance with the Horizon web front-end.
Qpid message broker

Install and configure the Qpid message broker service.

Secure Qpid using authentication and encryption.

Keystone identity service

Install, configure, and use the Keystone authentication services.

Swift object storage service

Install, configure, and use the Swift object storage service.

Glance image service

Install and use the Glance image service.

Cinder block storage service

Install the Cinder block storage service.

Manage Cinder volumes.

Networking service

Install, configure, and manage Red Hat Enterprise Linux OpenStack Platform networking service.

Nova compute and controller services

Install Nova compute and controller services.

Deploy an instance from the command line.

Implement an additional compute node

Learn to add and remove additional Nova compute nodes.

Heat orchestration service

Install the Heat orchestration service.

Launch a stack using preconfigured templates.

Ceilometer metering service

Install and manage the ceilometer metering service.

The future of the OpenStack development community

Learn about the future of OpenStack.

Comprehensive review

Review the installation and management of Red Hat Enterprise Linux OpenStack Platform.

Recommended next exam

Red Hat Certified System Administrator in Red Hat OpenStack exam (EX210)

Demonstrate your ability to build and manage private clouds using Red Hat Enterprise Linux OpenStack Platform.

Red Hat Certified System Administrator in Red Hat OpenStack

Demonstrate your ability to build and manage private clouds using Red Hat Enterprise Linux OpenStack Platform.