RH-EX210 Red Hat Certified System Administrator in Red Hat OpenStack exam

Exam description

The Red Hat Certified System Administrator in Red Hat OpenStack exam (EX210) tests the skills, knowledge, and abilities needed to create, configure, and manage private clouds using Red Hat® Enterprise Linux® and Red Hat® OpenStack Platform. The exam validates the skills, knowledge, and abilities needed to create, configure, and manage private clouds using these platforms.

By passing this exam, you become a Red Hat Certified System Administrator in Red Hat Openstack, which also counts toward becoming a Red Hat Certified Architect (RHCA®).

This exam is based on Red Hat OpenStack Platform 13.0.

Audience for this exam

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

Prerequisites for this exam

- Be a Red Hat Certified System Architect or Red Hat Certified Engineer, or demonstrate comparable work experience and skills
- Attend Red Hat OpenStack Administration I (CL110) and Red Hat OpenStack Administration II (CL210) courses, or demonstrate comparable work experience using Red Hat Enterprise Linux and Red Hat OpenStack Platform
- Review the objectives for this exam

Study points for the exam

To become a Red Hat Certified System Administrator in Red Hat OpenStack, you will validate your ability to perform these tasks:

Understand and work with director-based deployments

- Use identity environment files to connect to the undercloud
- Use identity environment files to connect to the overcloud
- Use template files, environment files, and other resources to obtain information about an OpenStack environment
- Work with containerized services

Configure OpenStack domains

- Create projects
- Create groups
- Create users
- Manage quotas

Create resources

- Create virtual machine flavors
- Add existing images to an overcloud
- Create security groups
- Create key pairs

Configure networking

- Create and assign networks to projects
- Configure network routers
- Configure software-defined networks
- Work with Open Virtual Networks

Configure floating IP addresses

- Configure an instance to use a floating IP address
- Configure a service to be accessible via a floating IP address

Manage block storage

- Create a block storage volume
- Attach block storage volumes to an instance
- Snapshot a storage volume

Work with Red Hat® Ceph Storage

- Configure Ceph storage
- Monitor Ceph Storage
- Diagnose and troubleshoot Ceph Storage issues

Work with object storage

- Create a Swift container
- Utilize a Swift container

Work with shared storage

- Create shared file systems
- Configure instances to use shared file systems

Manage instances

- Launch instances
- Associate instances with specified projects and networks
- Use key pairs to connect to instances
- Configure an instance during deployment

Create a Heat stack

- Create a Heat template
- Diagnose and correct a broken Heat template
- Launch a Heat stack

Work with images

- Modify an existing image
- Create and associate flavors to customized images
- Launch an instance from a customized image
- Launch an instance on a second compute node

Work with OpenStack services

- Manage Identity Service tokens
- Enable tracing in RabbitMQ
- Display statistics using Ceilometer

Preparation

We encourage you to consider attending Red Hat OpenStack Administration I: Core Operations for Cloud Operators (CL110) and Red Hat OpenStack Administration II: Infrastructure Configuration for Cloud Administrators (CL210) to help prepare. Attendance in these classes is not required; students can choose to take just the exam.

While attending Red Hat classes can be an important part of your preparation, 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 products are available. We do not endorse any of these materials as preparation guides for exams. Nevertheless, you may find additional reading helpful to deepen your understanding.

Exam format

This exam is a performance-based evaluation of Red Hat OpenStack skills and knowledge. You will be asked to perform a number of systems administration tasks focused on configuring and administering an OpenStack cloud and will be evaluated on whether you have met specific objective criteria. Performance-based testing means that you must perform tasks similar to what you will perform on the job. This exam consists of one section lasting 4 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 US business days.

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

Recommended next exam or course

- Red Hat OpenStack Administration III: Networking & Foundations of NFV (CL310)
- Red Hat Certified Engineer in Red Hat OpenStack exam (EX310)

For hybrid cloud engineers who want to learn more about Red Hat® CloudForms and become a cloud architect.

- Red Hat Ceph Storage Architecture and Administration (CEPH125)
- Red Hat Certified Specialist in Ceph Storage Administration exam (EX125)

For OpenStack administrators who want to learn more about Red Hat Ceph Storage and become a networking engineer.

- Red Hat CloudForms Hybrid Cloud Management (CL220)
- Red Hat Certified Specialist in Hybrid Cloud Management exam (EX220)