

CL110

Red Hat OpenStack Administration I: Core Operations for Cloud Operators

Course overview

The focus of Red Hat OpenStack Administration I: Core Operations for Cloud Operators (CL110) will be managing OpenStack using both the web-based dashboard and the command-line interface, in addition to managing instances and installing a proof-of-concept environment using Red Hat OpenStack Platform (RHOSP) director. Essential skills covered in the course include configuring Red Hat OpenStack Platform (using the director UI); managing users, projects, flavors, roles, images, networking, and block storage; setting quotas; and configuring images at instantiation.

Course content summary

- Launch an instance.
- Manage projects, quotas, and users.
- Manage networks, subnets, routers, and floating IP addresses.
- Create and manage block and object storage in the OpenStack framework.
- Customize instances with cloud-init.
- Deploy scalable stacks.
- Deploy Red Hat OpenStack Platform using RHOSP director.

Audience and prerequisites

This course is designed for Linux system administrators, cloud administrators, and cloud operators interested in, or responsible for, maintaining a private or hybrid cloud.

Prerequisites for this course

Become a Red Hat Certified System Administrator (RHCSA) or demonstrate equivalent experience

Course Outline

Introduce launching an instance

Launch an instance and describe the OpenStack architecture and use cases.

Organize people and resources

Manage projects, users, roles, and quotas.

Describe cloud computing

Describe the changes in technology and processes for cloud computing.

Manage Linux networks

Administer Linux networks and bridges.

Prepare to deploy an instance with public access

Manage images, flavors, and private networks in preparation for launching an instance.

Deploy an instance

Launch and verify an instance.

Manage block storage

Manage ephemeral and persistent block storage.

Manage object storage

Administer object storage.

Prepare to deploy an external instance

Manage external networks and security in preparation for launching an instance with public access.

Deploy an instance with public access

Launch and verify an instance with public access.

Customize instances

Customize an instance with cloud-init.

Deploy scalable stacks

Deploy a stack and configure auto scaling.

Install an OpenStack overcloud

Install an OpenStack proof of concept using the director UI and provisioning service templates.

Lab: Comprehensive review of CL110

Review tasks in the Red Hat OpenStack Administration I: Core Operations for Cloud Operators course.

Recommended next exam or course

Red Hat OpenStack Administration II (CL210)

- Choose to learn the OpenStack version that matches your company's infrastructure, either as currently built or as planned for upgrade in the near future.
- Red Hat strongly recommends pursuing the same Red Hat OpenStack Platform version when scheduling each course and exam in the OpenStack curriculum path. Red Hat OpenStack Administration II is based on OpenStack 13, with the title of Red Hat OpenStack Administration II: Infrastructure Configuration for Cloud Administrators (CL210)

Red Hat Ceph Storage Architecture and Administration (CEPH125)