

# **Red Hat OpenStack Administration I: Core Operations for Domain Operators (CL110VT)**

**Modality:** Virtual Classroom

**Duration:** 5 Days

## **About this course:**

### **Introduction to Red Hat OpenStack Platform and the deployment of virtual cloud servers and applications**

Red Hat OpenStack Administration I: Core Operations for Cloud Operators (CL110) is designed for system administrators who are intending to implement a cloud computing environment using OpenStack. You will learn how to configure, use, and maintain Red Hat® OpenStack Platform.

This course is based on Red Hat Enterprise Linux 7.5 and Red Hat OpenStack Platform 13.0.

## **Course Objective:**

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.

- 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:**

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

## **Prerequisite:**

- 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 autoscaling.

## **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.