



# Red Hat OpenStack Administration II: Infrastructure Configuration

**Duration: 4 Days** Course Code: CL210

#### Overview:

Introduction to Red Hat OpenStack Platform configuration and administration of private cloud infrastructure using core OpenStack services Red Hat OpenStack Administration II: Infrastructure Configuration for Cloud Administrators (CL210) teaches you how to implement a full-featured cloud computing environment using OpenStack. You will learn how to configure, administer, and manage Red Hat® OpenStack Platform infrastructure. The lessons and objectives taught in this course will prepare you for the Red Hat Certified System Administrator in Red Hat OpenStack exam (EX210).

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

The focus of this course is on managing and using the OpenStack client command-line interface and the director and dashboard graphical web user interfaces to securely manage server instances, compute and storage resources, and user identities.

## **Target Audience:**

This course is intended for Linux system administrators, cloud administrators, cloud operators, and infrastructure architects interested in, or responsible for, maintaining a private or hybrid cloud

## Objectives:

- As a result of attending this course, you will know how to configure and manage an OpenStack installation featuring all of the common, core features and services used by enterprise private/hybrid cloud customers. You will also be able to choose and customize compute, storage, networking, deployment, and application support resources and services tailored to your enterprise needs.
- Students should be able to demonstrate the following skills:
- Navigate and manage the control plane on the undercloud and the overcloud.
- Work with containerized overcloud infrastructure services.

- Manage necessary authentication, authorization, and security administration.
- Navigate and describe all network layers in an laaS and all aspects of SDN design and management.
- Manage compute node and storage resource, including hyperconvergence.
- Troubleshoot typical OpenStack operations.

### Prerequisites:

- Be a Red Hat Certified System Administrator (RHCSA), or demonstrate equivalent experience by passing the online skills assessment
- Attend Red Hat OpenStack Administration I: Core Operations for Cloud Operators (CL110), or demonstrate equivalent experience
- CL110 Red Hat OpenStack Administration I: Core Services and Operations

#### **Testing and Certification**

This course helps you prepare for the following exams:

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

#### Follow-on-Courses:

- CEPH125 Red Hat Ceph Storage Architecture and Administration
- CL220 Red Hat Cloudforms Hybrid Cloud Management
- CL310 Red Hat OpenStack Administration III: Networking & Foundations of NFV

#### Content:

Navigate the Red Hat OpenStack Platform architecture

Describe the classroom environment, support systems, functions of the undercloud components, and more.

Describe the OpenStack control plane

Identify the shared services running on a controller node and describe service endpoint configuration and security.

Integrate identity management

Describe the installation and architecture of a Red Hat Identity Management back end for the OpenStack identity service.

Perform image operations

Build an image using diskimage-builder and customize launched instances during deployment using cloud-init.

Manage storage

Explain persistent storage options for use in OpenStack, focusing on the expanding capabilities of the default Red Hat® Ceph Storage.

Manage OpenStack networking

Explain the different network types available to the OpenStack networking service and improve network performance with Open Virtual Network.

Manage compute resources

Perform common compute node administration tasks, including live migration, evacuation, and enabling and disabling compute nodes. Automate cloud applications

Explain the orchestration architecture required to deploy application stacks and write templates using the Heat Orchestration Template (HOT) language.

Troubleshoot OpenStack operations

Discuss recommended diagnostic and troubleshooting tools and techniques.

Comprehensive review

Build a custom image and launch an instance using the custom image.

### 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

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