
Red Hat Training

CL210

CL210 - Red Hat OpenStack Administration II: Day 2 Operations for Cloud Operators

Audience	: IT Professionals
This Revision	: A
Delivery Method	: Online/Classroom
Length	: 4 Days

Course Overview

Build advanced skills for performing Red Hat OpenStack Platform day 2 operations and management of hybrid cloud infrastructure

Red Hat OpenStack Administration II: Day 2 Operations for Cloud Operators (CL210) is designed for cloud operators, service administrators, and automation engineers who operate and manage a full-featured hybrid and private cloud-computing environment using Red Hat OpenStack Platform. You will learn how to manage, monitor, troubleshoot, and scale a Red Hat OpenStack Platform infrastructure. This course focuses on using the OpenStack Client command-line user interface to configure metrics, policies, and architecture in order to support enterprise cloud applications and daily operations.

This course is based on Red Hat OpenStack version 16.1 and Red Hat Enterprise Linux version 8.2

Audience

- Cloud operators responsible for managing daily operations and automation.
- Infrastructure architects interested in or responsible for maintaining a large-scale private or hybrid cloud.

At Course Completion

- Gain familiarity with overcloud service containerization technology.
- Learn about Open Virtual Networking (OVN) enhancement to OVS.
- Use identity service v3 (keystone) with external Red Hat IdM store.
- Manage the core control plane, including Pacemaker.
- Customize images, with techniques for multiple use cases.
- Manage block and object storage.
- Manage compute nodes, including tuning and hyperconvergence.
- Deploy multi-container stacks.
- Troubleshoot OpenStack.

Course Outline

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.