

# Red Hat OpenStack Administration III: Networking and NFV

Learn via: **Classroom**

Duration: **5 Gün**

<https://bilginc.com/tr/egitim/red-hat-openstack-administration-iii-networking-and-nfv-521-egitimi/>

## Overview

The Red Hat OpenStack Administration III (CL310) course provides extensive hands-on training for experienced system administrators in how to use the distributed storage features of Red Hat® Ceph Storage and the networking capabilities of OpenStack® Neutron. Students will set up a Ceph environment and its configuration as a back end for OpenStack, and configure and use the advanced features of OpenStack Neutron.

This course is based on Red Hat OpenStack Platform 6.

### Course overview

Students will set up a Ceph environment and its configuration as a back end for OpenStack, and configure and use the advanced features of OpenStack Neutron.

## Target Audience

Experienced Linux® system administrators responsible for managing OpenStack environments who want to learn:

- To configure scalable and distributed storage as a storage back end for OpenStack
- The advanced features offered by OpenStack Neutron

Not sure if you have the correct skill-set knowledge? Find out by passing the [online skills assessment](#).

## Prerequisites

Exam candidates should:

- Hold a current RHCSA in Red Hat OpenStack certification at the time the exam is taken.
- Have taken the Red Hat OpenStack Administration I (CL110), Red Hat OpenStack Administration II (CL210), and Red Hat OpenStack Administration III (CL310) courses or have equivalent experience.
- Understand that real-world system administration experience is also an important aspect of preparation for the exam.
- Review exam objectives for the RHCE in OpenStack exam.

Please note: In order to provision you with your courseware and lab access for this course QA must share several items of basic personal information with our partner (usually your full name and email address). For more information on this please visit our [QA Partner data sharing page](#). If you have any questions or concerns please contact your QA account manager.

## What You Will Learn

## Learning Outcomes

### Course content summary

- Deploy Red Hat Ceph Storage
- Manage snapshots in Red Hat Ceph Storage
- Access Ceph Storage through Ceph block device (RBD) and Ceph object gateway (RADOSGW)
- Configure Red Hat Ceph Storage as a storage back end for OpenStack Services
- Manage networks based on VXLAN, VLAN and GRE
- Deploy and using load-balancer-as-a-service (LBaaS) in OpenStack Neutron
- Troubleshoot Neutron issues

## Impact on the organization

This course is intended to develop the skills needed to design and deploy OpenStack for high performance networking environments. These skills are suitable for organizations seeking to virtualize their network infrastructure, saving costs in maintaining aging hardware and speeding up provisioning of network services.

Red Hat has created this course in a way intended to benefit our customers, but each company and infrastructure is unique, and actual results or benefits may vary.

## Impact on the individual

As a result of attending this course, students should be able to manage the life cycle of Red Hat OpenStack Platform.

Students should be able to demonstrate the following skills:

- Understand the concepts of undercloud, overcloud, and Heat templates.
- Manage internal Red Hat OpenStack Platform communication.
- Build custom disk images.
- Manage Red Hat Ceph Storage and Swift.

## Outline

### Course Outline

#### Introduction to Red Hat Ceph Storage

Introduce Red Hat Ceph Storage architecture, components, and attributes.

#### Describe Red Hat Ceph Storage components and features

Describe the components and features of Red Hat Ceph Storage.

#### Deploy and access Red Hat Ceph Storage

Create snapshots and clones for Red Hat Ceph Storage.

#### Create snapshots and clones

Manage snapshots and clones of a Ceph Block Device (RBD).

#### Ceph with the Glance Image service

Integrate Ceph with the Glance image service, the Cinder block storage service, and the Nova compute service.

#### Introduce networking fundamentals

Explain standard networking concepts and OpenStack Neutron networking concepts and services.

#### Implement virtual bridging

Install and manage virtual network bridges.

#### Implement virtual network devicesCreate and deploy virtual network devices.

Implement network namespacesManage network interfaces manually (using the ip command) and persistently.

#### Manage neutron services

Verify and manage the configuration of Neutron networking service.Provisioning project networksProvision project networks using VXLAN tunnels, GRE tunnels, and VLANs.

#### Implementing load-balancer-as-a-service (LBaaS)

Implement LbaaS.

#### Troubleshoot Neutron networking services

Diagnose and troubleshoot issues with the Neutron networking service.

#### Comprehensive Review

Review tasks from the Red Hat OpenStack III course.