CL 310 Syllabus

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 OpenStack Glance Image service to store OpenStack images in Ceph.

Ceph with the Cinder Block Storage service

Integrate Ceph with the OpenStack Cinder Block Storage service to provide OpenStack volumes in Ceph.

Ceph with the Nova compute service
Integrate Ceph with the OpenStack Nova compute service to store instance data in Ceph.

**Introduce networking fundamentals**

Review networking concepts and deploy OpenStack with a separate Neutron networking node.

**Network interfaces**

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

**Virtual bridging**

Install and manage virtual network bridges.

**Virtual network devices**

Create and deploy virtual network devices.

**Network namespaces**

Manage and implement networks inside a network namespace.

**Neutron services**

Verify and manage the Neutron services.

**Provisioning tenant networks**

Provision tenant networks using VXLAN tunnels, GRE tunnels, and VLANs.

**Implementing load-balancer-as-a-service (LBaaS)**
Implement LbaaS.

**Neutron networking services**

Diagnose and troubleshoot issues with the Neutron networking service.

**Comprehensive Review**

Review tasks from the Red Hat OpenStack III course.