Red Hat OpenStack Administration I: Core Operations for Domain Operators

Duration: 5 Days Course Code: CL110

Overview:

Learn to operate a Red Hat® OpenStack Platform private cloud and manage domain resources to secure and deploy modern, scalable cloud applications, networks and storage
Red Hat OpenStack Administration I: Core Operations for Domain Operators (CL110) teaches you how to operate and manage a production Red Hat OpenStack Platform (RHOSP) single-site overcloud. You will learn how to create secure project environments in which to provision resources and manage security privileges that cloud users need to deploy scalable cloud applications.
You will learn about OpenShift integration with load balancers, identity management, monitoring, proxies, and storage. You will also develop more troubleshooting and Day 2 operations skills in this course.
Red Hat OpenStack Administration I: Core Operations for Domain Operators (CL110) course will focus on performing both routine and specialized tasks that are necessary to manage a production OpenStack overcloud domain. You will manage OpenStack using both web-based and command-line interfaces.
This release brings major enhancements and stabilization, including service containerization, new installation and management tools, a newly designed application load balancing component, and a significant expansion of features supported by the OpenStack CLI.
This course is based on Red Hat OpenStack Platform 16.1.
Note : *Starting January 1, 2026, Red Hat introduces RHLS-Course — a flexible subscription model now included with this catalog offering. This replaces the previous direct virtual class enrollment from Global Knowledge.*
When you purchase this item, you'll receive an RHLS subscription at the course level, giving you the freedom to choose the schedule that works best and self-enroll in your selected class.
Your RHLS subscription includes:
• One live, instructor-led virtual session
• 12 months of self-paced learning access
• One certification exam with a free retake
Onsite Classroom-based sessions and closed course options remain unchanged.
Updated Jan2026

Target Audience:

This course is designed for cloud users who deploy application instances and stacks, domain operators who manage resources and security for cloud users, and any other cloud personnel interested in, or responsible for, maintaining applications on private or hybrid OpenStack clouds. Any cloud persona, or personnel with roles that include performing technology evaluation, should attend this course to learn RHOSP operation and application deployment methods.

Objectives:

- After this course participants should be able to:
- Launch instances to satisfy various use case examples.
- Manage domains, projects, users, roles, and quota in a multitenant environment.
- Manage networks, subnets, routers, and floating IP addresses.
- Manage instance security with group rules and access keys.
- Create and manage block, object and shared storage within OpenStack.
- Perform instance launch customization with cloud-init.
- Deploy scalable applications using stack templates.

Prerequisites:

- Pass Red Hat Certified System Administrator (RHCSA®) in Red Hat Enterprise Linux® certification or have equivalent experience

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Testing and Certification

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Follow-on-Courses:

- Red Hat OpenStack Administration II: Day 2 Operations for Cloud Operators (CL210)
- Cloud Storage with Red Hat Ceph Storage (CL260)

Content:

Introduction to Red Hat OpenStack Platform: Describe OpenStack personas, launch an instance, and describe the OpenStack components and architecture.

Manage application projects in a multitenant cloud: Create and configure projects with secure user access and sufficient resources to support cloud user application deployment requirements.

Manage OpenStack networking: Describe how IP networks are implemented in OpenStack, including fundamental TCP/IP stack behavior, software-defined networking elements, and the common types of networks available to self-service cloud users.

Configure resources to launch a non-public instance: Configure the requisite resource types for launching a basic non-public instance, including vCPUs, memory, and a system disk image, and launch an instance of an application component that runs in a tenant network with no public access.

Configure virtual machine system disks: Identify the available choices for configuring, storing and selecting block-based virtual machine (VM) system disks, including the choice of ephemeral or persistent disks for specific use cases.

Provide additional storage strategies: Identify the available choices for additional cloud storage techniques, including object-based storage, network file sharing, and volumes sourced from a file sharing service.

Configure resources to launch an instance with public access: Identify and configure the additional resource types required to launch instances with public access for specific use cases, including networking and access security elements.

Automate customized cloud application launches: Configure and deploy a typical multi-tier cloud application stack, defined as an architected template of scalable VM instances, including per-instance launch customizations.

Manage cloud application placement: Introduce overcloud layouts more complex than a single site, and explain the management resources to control the placement of launched instances, including segregation elements such as cells and availability zones, and placement attributes such as requisite compute node resources.

Additional Information:

Official course book provided to participants

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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