OpenStack Administration: Control Plane Management

Duration: 2 Days Course Code: CL170

Overview:

Use Red Hat OpenStack Services on OpenShift and RHEL compute nodes that run VM-based workloads.
Organizations can achieve seamless installation, rapid deployments, and centralized management from the core to the edge.
OpenStack Administration: Control Plane Management (CL170) helps Red Hat OpenStack cluster administrators to manage the health and performance of OpenStack control plane services, to troubleshoot issues by inspecting Kubernetes operators and workloads, and to configure OpenStack control plane services by using Kubernetes custom resources.
As a result of taking this course, Red Hat OpenStack administrators will be empowered to monitor the health of OpenStack data planes and configure compute nodes by using the transformative capabilities of Kubernetes custom resources and Ansible Playbooks.
This course is based on Red Hat OpenStack Services on Openshift 18.
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:

Platform Engineers, Cloud Administrators, and System Administrators interested in managing, tuning, and troubleshooting Red Hat OpenStack clusters.

Objectives:

- After this course participants should be able to:
- Check the health of OpenStack operators and workloads and identify disabled or misconfigured services
- Collect troubleshooting information from OpenStack control and data planes for customer support requests
- Enable and customize OpenStack control plane services by configuring the control plane custom resource
- Check the health of OpenStack compute notes and identify missing or misconfigured data plane services
- Remove and replace or reprovision failed compute nodes

Prerequisites:

- Successful completion of Red Hat System Administration I (RH124) is recommended
- Recommended, but not required:
- Red Hat System Administration II (RH134) and Red Hat Enterprise Linux Automation with Ansible (RH294) or demonstrate equivalent skills
- Red Hat OpenShift Administration I: Operating a Production Cluster (DO180) or demonstrate equivalent skills
- Basic data center storage concepts: storage protocols, NAS, and SAN
- Data center networking concepts: ISO model, VLANs, firewalls, and Internet protocols, including but not limited to ICMP, IP, and HTTP
- Basic object storage concepts, such as experience with AWS S3, are useful but not required
- Ceph administration skills are useful but not required

Testing and Certification

Take Red Hat free assessment to gauge whether this offering is the best fit for your skills Red Hat Skills Assessment

Follow-on-Courses:

None

Content:

Introduction to Red Hat OpenShift Container Platform

Identify the Red Hat OpenShift architecture and resources, navigate the graphical and command-line interfaces, and find information about commands.

Inspecting OpenStack Services on OpenShift

Identify OpenStack services on OpenShift and assess the health of the OpenStack operator and its dependent resources.

Customizing OpenStack Services

Enable and disable OpenStack services and customize them.

Verifying OpenStack API Connectivity

Identify the resources that connect an OpenStack control plane to its data plane.

Verifying Connectivity to OpenStack Cell Services

Verify that an OpenStack cell is connected to its database and messaging services, and validate the additional services that enable connections to it from compute nodes.

Accessing Storage Resources in OpenStack

Verify the status and connectivity of OpenStack storage resources.

Verifying Reliable OpenStack Services

Configure and assess high availability of an OpenStack control plane and its supporting services.

Verifying Network Encryption for OpenStack Services

Inspect the configuration of OpenStack components and verify that the network communication uses certificate-based encryption.

Inspecting Data Plane Services and Compute Nodes

Identify OpenStack data plane resources and assess their health.

Customizing an OpenStack Data Plane

Apply custom configuration to data plane node sets and verify the applied settings.

Additional Information:

Official course book provided to participants

Further Information:

For More information, or to book your course, please call us on 00 20 (0) 2 2269 1982 or 16142

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