# OpenStack Administration: Control Plane Management - Red Hat Learning Subscription Course (CL170LS)

**Category:** Software Development & Programming | **Vendor:** Red Hat

**Duration:** 24.00 hours (3 days) **19.5 CPD Hours** **Rating:** ⭐ 4.6 (5,878 reviews)

## Course Information

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| **Delivery Format:** | Instructor Led - Online |
| **Related Exam:** | OpenStack Administration: Control Plane Management; Red Hat; CL170 |

## Course Overview

Use Red Hat OpenShift to manage OpenStack services and RHEL compute nodes that run VM-based workloads. 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. This course is based on Red Hat OpenShift Services on OpenStack 18. RHLS Course Includes: 365-Day RHLS Subscription - Full year of access starting from your purchase date. Official Red Hat Training Curriculum - Learn directly from Red Hat’s validated, up-to-date course materials. Hands-On Labs (100 Hours per Course) - Build practical, real-world skills through extensive lab time. One Certification Exam + Free Retake - Includes exam readiness resources to help you prepare with confidence. One Virtual, Instructor-Led Class - Attend a live online class through the Red Hat portal (self-enrollment required using your RHID).

## About This Course

Use Red Hat OpenShift to manage OpenStack services and RHEL compute nodes that run VM-based workloads. 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. This course is based on Red Hat OpenShift Services on OpenStack 18. RHLS Course Includes: 365-Day RHLS Subscription - Full year of access starting from your purchase date. Official Red Hat Training Curriculum - Learn directly from Red Hat's validated, up-to-date course materials. Hands-On Labs (100 Hours per Course) - Build practical, real-world skills through extensive lab time. One Certification Exam + Free Retake - Includes exam readiness resources to help you prepare with confidence. One Virtual, Instructor-Led Class - Attend a live online class through the Red Hat portal (self-enrollment required using your RHID).

## Who Should Attend

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

### Prerequisites & Entry Requirements

**General Prerequisites:**

- Take our free assessment to gauge whether this offering is the best fit for your skills
- 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
- 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

## Learning Outcomes

**Upon successful completion of this course, participants will 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

## Detailed Course Outline

### 1 - 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.

### 2 - Inspecting OpenStack Services on OpenShift

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

### 3 - Customizing OpenStack Services

- Enable and disable OpenStack services and customize them.

### 4 - Verifying OpenStack API Connectivity

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

### 5 - 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.

### 6 - Accessing Storage Resources in OpenStack

- Verify the status and connectivity of OpenStack storage resources.

### 7 - Verifying Reliable OpenStack Services

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

## 8 - Verifying Network Encryption for OpenStack Services

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

## 9 - Inspecting Data Plane Services and Compute Nodes

- Identify OpenStack data plane resources and assess their health.

## 10 - Customizing an OpenStack Data Plane

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

# Frequently Asked Questions

### Q: What delivery options are available for OpenStack Administration: Control Plane Management - Red Hat Learning Subscription Course (CL170LS)?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
- Traditional Instructor-Led Classroom Training (ILT)
- On-site delivery at your offices anywhere in United Kingdom
- Private dedicated courses customized for your team

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### Q: Which exam does this course prepare me for?

This course prepares you for the OpenStack Administration: Control Plane Management; Red Hat; CL170 official exam. You can take this exam at any exam center across United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online wherever you are located.

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### Q: How many CPD hours does this course provide?

The 3-day OpenStack Administration: Control Plane Management - Red Hat Learning Subscription Course (CL170LS) course provides up to 19.5 CPD hours of structured learning. CPD certificates can be provided upon request.

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### Q: What is the duration of the OpenStack Administration: Control Plane Management - Red Hat Learning Subscription Course (CL170LS) training?

The training takes place over 3 day(s), with each day lasting approximately 24.00 hours including breaks for lunch and refreshments.

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### Q: Do you provide corporate training for OpenStack Administration: Control Plane Management - Red Hat Learning Subscription Course (CL170LS)?

Yes, we provide corporate training, dedicated training, and closed classes for OpenStack Administration: Control Plane Management - Red Hat Learning Subscription Course (CL170LS). Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

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### Q: Why choose Nexus Human for OpenStack Administration: Control Plane Management - Red Hat Learning Subscription Course (CL170LS)?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

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### Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your OpenStack Administration: Control Plane Management - Red Hat Learning Subscription Course (CL170LS) training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.


## Nexus Human

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