

Red Hat Ceph 3 Storage Architecture and Administration (CEPH125)

Category: Networking & Security | **Vendor:** Red Hat

Duration: 40.00 hours (5 days)

32.5 CPD Hours

Rating: ★ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

This course supports you in providing unified storage for enterprise servers and Red Hat® OpenStack Platform with Red Hat Ceph Storage. Learn to use a Ceph storage cluster to provide servers and cloud resources with object storage compatible with the Amazon S3 or OpenStack Swift APIs, Ceph-native or iSCSI-based block storage, and file storage using CephFS. This course is for you if you are a storage administrator or cloud operator who intends to deploy Red Hat Ceph Storage to your production data center environment or OpenStack installation.

About This Course

This course supports you in providing unified storage for enterprise servers and Red Hat® OpenStack Platform with Red Hat Ceph Storage. Learn to use a Ceph storage cluster to provide servers and cloud resources with object storage compatible with the Amazon S3 or OpenStack Swift APIs, Ceph-native or iSCSI-based block storage, and file storage using CephFS. This course is for you if you are a storage administrator or cloud operator who intends to deploy Red Hat Ceph Storage to your production data center environment or OpenStack installation.

Who Should Attend

This course is intended for storage administrators, cloud operators, and cloud developers who want to learn how to deploy and manage Red Hat Ceph Storage. Become a Red Hat Certified System Administrator (RHCSA) or demonstrate equivalent experience Some experience with storage administration is recommended, but not required

Learning Outcomes

Upon successful completion of this course, participants will be able to:

Upon completion, students will be able to: - Explain the architecture of a Ceph cluster - Deploy a Red Hat Ceph Storage cluster using Ansible - Manage operations on a Red Hat Ceph Storage cluster - Provide servers with storage from the Ceph cluster using block, object, and file-based access methods - Integrate Red Hat Ceph Storage as backend storage for Red Hat OpenStack Platform

Detailed Course Outline

1 - PREPARE FOR RED HAT CEPH STORAGE

- Identify challenges faced by traditional storage and explain how Ceph addresses them.

2 - DEPLOY RED HAT CEPH STORAGE

- Deploy and expand the storage capacity of a new Red Hat Ceph Storage cluster.

3 - CONFIGURE RED HAT CEPH STORAGE

- Manage how Ceph stores data with pools, configure Red Hat Ceph Storage using its configuration file, and configure users for Ceph clients that may access the Ceph storage cluster.

4 - PROVIDE BLOCK STORAGE WITH RBD

- Configure Ceph to provide block storage for clients by using RADOS block devices (RBDs).

5 - PROVIDE OBJECT STORAGE WITH RADOSGW

- Configure Ceph to provide object storage for clients by using a RADOS gateway (RADOSGW or RGW).

6 - PROVIDE FILE STORAGE WITH CEPHFS

- Configure Ceph to provide file storage for clients using the Ceph Filesystem (CephFS).

7 - CONFIGURE THE CRUSH MAP

- Adjust the CRUSH map—which controls how data is stored, replicated, and distributed across OSDs in the Ceph cluster—in order to optimize resiliency and performance.

8 - MANAGE AND UPDATE THE CLUSTER MAPS

- Explain how the monitor and OSD maps are managed in order to maintain cluster operation, quorum, and consistency.

9 - MANAGE A RED HAT CEPH STORAGE CLUSTER

- Check Ceph cluster status, troubleshoot Ceph daemon problems, and upgrade Ceph software.

10 - TUNE AND TROUBLESHOOT RED HAT CEPH STORAGE

- Identify the key performance metrics for a Ceph cluster and use them to help tune and troubleshoot the operating system and Ceph software for optimal performance.

11 - INTEGRATE RED HAT CEPH STORAGE WITH OPENSTACK

- Configure an OpenStack cloud to use Ceph to provide image, block, object, and file storage.

Frequently Asked Questions

Q: What delivery options are available for Red Hat Ceph 3 Storage Architecture and Administration (CEPH125)?

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: How many CPD hours does this course provide?

The 5-day Red Hat Ceph 3 Storage Architecture and Administration (CEPH125) course provides up to 32.5 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Red Hat Ceph 3 Storage Architecture and Administration (CEPH125) training?

The training takes place over 5 day(s), with each day lasting approximately 40.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Red Hat Ceph 3 Storage Architecture and Administration (CEPH125)?

Yes, we provide corporate training, dedicated training, and closed classes for Red Hat Ceph 3 Storage Architecture and Administration (CEPH125). 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.

Q: Why choose Nexus Human for Red Hat Ceph 3 Storage Architecture and Administration (CEPH125)?

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

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Red Hat Ceph 3 Storage Architecture and Administration (CEPH125) 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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