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Cloud Storage With Red Hat Ceph Storage and Exam

Duration: 5 Days Course Code: CL261

Overview:

Build skills to manage hybrid cloud Red Hat Ceph Storage for medium and mass-scale enterprise applications and for Red Hat OpenStack

Cloud Storage with Red Hat Ceph Storage with exam (CL261) is designed for storage administrators and cloud operators who deploy Red Hat Ceph Storage in a production data center environment or as a component of a Red Hat OpenStack Platform infrastructure. Learn how to deploy, manage, and scale a Ceph storage cluster to provide hybrid storage resources, including Amazon S3 and OpenStack Swift-compatible object storage, Ceph-native and iSCSI-based block storage, and shared file storage.

The Red Hat Certified Specialist in Ceph Cloud Storage (EX260) exam is included in this offering. This course is based on Red Hat Ceph Storage version 4.2.

Target Audience:

This course is intended for storage administrators and cloud operators who want to learn how to deploy and manage Red Hat Ceph Storage for use by servers in an enterprise data center or within a Red Hat OpenStack Platform environment. Developers writing applications who use cloud-based storage will learn the distinctions of various storage types and client access methods.

Objectives:

- Deploy and manage a Red Hat Ceph Storage cluster on commodity servers using Red Hat Ansible Automation Platform.
- Create, expand, and control access to storage pools provided by the Ceph cluster.
- Access Red Hat Ceph Storage from clients using object, block, and file-based methods.
- Analyze and tune Red Hat Ceph Storage performance.
- Integrate Red Hat OpenStack Platform image, object, block, and file storage with a Red Hat Ceph Storage cluster.

Testing and Certification

Red Hat OpenStack Administration III: Distributed Architecture and Scaling For Edge Computing (CL310)

Content:

Introducing Red Hat Ceph Storage architecture

Managing the storage maps

Managing a Red Hat Ceph Storage cluster

Goal: Describe Red Hat Ceph Storage architecture, including data organization, distribution and client access methods.

Manage and adjust the CRUSH and OSD maps to optimize data placement to meet the performance and redundancy requirements of cloud applications.

Goal: Manage an operational Ceph cluster using tools to check status, monitor services, and properly start and stop all or part of the cluster. Perform cluster maintenance by replacing or repairing cluster components, including MONs, OSDs, and PGs.

Deploying Red Hat Ceph Storage

Providing block storage with RBD

Tuning and troubleshooting Red Hat Ceph Storage

Goal: Deploy a new Red Hat Ceph Storage cluster and expand the cluster capacity.

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

Storage

Configuring a Red Hat Ceph Storage cluster

devices (RBDs).

Providing object storage with RGW

Goal: Identify the key Ceph cluster performance metrics and use them to tune and troubleshoot Ceph operations for optimal performance.

Goal: Manage the Red Hat Ceph Storage configuration, including the primary settings, the use of monitors, and the cluster network layout.

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

Managing Red Hat OpenStack Platform storage with Red Hat Ceph Storage

Managing object storage cluster components

Providing file storage with CephFS

Goal: Manage an OpenStack infrastructure to use Red Hat Ceph Storage to provide image, block, volume, object, and shared file storage.

Create and manage the components that comprise the object storage cluster, including OSDs, pools, and the cluster authorization method.

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

Comprehensive review

Goal: Review tasks from Cloud Storage with Red Hat Ceph Storage.

Additional Information:

Technology considerationsNo special requirements. Not BYOD. Internet access not required. **Impact on the organization**

This course develops the skills needed to deploy a software-defined storage system on commodity hardware, permitting distributed, scalable, and fault-tolerant object, block, and file data storage. Red Hat Ceph Storage deployment infrastructure can grow at the same pace as your expanding data and processing requirements, allowing scaled and managed investment to accommodate business growth.

Impact on the individual

As a result of attending this course, students will be able to deploy, operate, and manage a Red Hat Ceph Storage cluster. Students will learn that Red Hat Ceph Storage is the standard, integrated cloud storage solution for Red Hat OpenStack Platform. Developer students will learn to implement each available storage type and method offered by Red Hat Ceph Storage, and be able to choose the correct type and method for their enterprise storage scenarios and applications. Administrators and operators will be able to perform Ceph cluster management, including configuration, daily operations, troubleshooting, performance tuning, and scaling.

Further Information:

For More information, or to book your course, please call us on 00 971 4 446 4987

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