

Exam : EX260

**Title : Red Hat Certified Specialist
in Ceph Cloud Storage**

Version : DEMO

1.Install a containerized Red Hat Ceph Storage server on a physical system using Ansible playbooks. Verify the installation.

Answer:

Solution:

1. Install required

packages: yum install

ceph-ansible -y

2. Edit the Ansible inventory file (inventory.yml):

[mons]

node1 ansible_host=192.168.0.10

[osds]

node2 ansible_host=192.168.0.11

3. Deploy the Ceph cluster:

ansible-playbook -i inventory.yml site.yml

4. Verify the cluster

status: ceph -s

Explanation:

Ansible playbooks automate the setup of a containerized Ceph Storage cluster. Verifying with ceph -s ensures the cluster is operational.

2.Deploy a virtualized Red Hat Ceph Storage server using Podman and Ceph container images. Verify the containerized services are running.

Answer:

Solution:

1. Install Podman:

yum install podman

-y

2. Pull the Ceph container image:

podman pull

quay.io/ceph/ceph:v16

3. Run the container for Ceph Monitor:

podman run --name ceph-mon -d quay.io/ceph/ceph:v16 mon

4. Verify the running

container: podman ps

Explanation:

Using Podman to deploy Ceph containers is ideal for virtualized environments. The podman ps command confirms that the services are running.

3.Modify Red Hat Ansible Automation Platform installation files to configure the Ceph Storage cluster and deploy it using Ansible.

Answer:

Solution:

1. Navigate to the Ansible

directory: cd /etc/ansible

2. Edit the configuration file (group_vars/all.yml):

ceph_origin: repository

ceph_repository: community

ceph_repository_type: cdn

3. Run the Ansible playbook:

ansible-playbook -i inventory.yml site.yml

4. Verify the installation:

ceph status

Explanation:

Customizing Ansible configuration files allows flexibility in deploying Ceph clusters. Ensuring the configuration matches the environment is crucial for successful installation.

4. Install and configure Red Hat Ceph Storage on a physical system using Ansible roles. Verify the health of the cluster.

Answer:

Solution:

1. Install Ansible Galaxy roles for Ceph:

ansible-galaxy install ceph-ansible

2. Create a playbook to include the roles:

- hosts:

all

roles:

- ceph-ansible

3. Run the playbook:

ansible-playbook -i inventory.yml site.yml

4. Check the Ceph cluster

health: ceph health

Explanation:

Using roles simplifies the deployment process, allowing you to manage reusable configurations. The ceph health command confirms the cluster's health.

5. Deploy a Ceph Storage server with OSDs configured on specific disks using Ansible playbooks.

Answer:

Solution:

1. Update the inventory file:

[osds]

node1 ansible_host=192.168.0.10 device=/dev/sdb

2. Modify the playbook to include OSD configuration:

osd_scenario: lvm

osd_objectstore: bluestore

3. Run the playbook:

ansible-playbook -i inventory.yml site.yml

4. Verify the OSD

status: ceph osd tree

Explanation:

OSDs are the backbone of Ceph Storage. Properly configuring them ensures efficient storage and retrieval of data in the cluster.