Solution

Deploying Red Hat Ceph Storage

In this lab, you will deploy a Red Hat Ceph Storage cluster.

Outcomes

You should be able to deploy a new Ceph cluster.

Before You Begin

As the `student` user on the `workstation` machine, use the `lab` command to prepare your system for this exercise.

```
[student@workstation ~]$ lab start deploy-review
```

This command confirms that the local container registry for the classroom is running and deletes the prebuilt Ceph cluster so it can be redeployed with the steps in this exercise.

Important

This lab start script immediately deletes the prebuilt Ceph cluster and takes a few minutes to complete. Wait for the command to finish before continuing.

Instructions

Deploy a new cluster with `serverc`, `serverd`, and `servere` as MON, MGR, and OSD nodes. Use `serverc` as the deployment bootstrap node. Add OSDs to the cluster after the cluster deploys.

1. Use `serverc` as the bootstrap node. Log in to `serverc` as the `admin` user and switch to the `root` user. Run the `cephadm-preflight.yml` playbook to prepare the cluster hosts.

   1.1. Log in to `serverc` as the `admin` user and switch to the `root` user.

```
[student@workstation ~]$ ssh admin@serverc
[admin@serverc ~]$ sudo -i
[root@serverc ~]#
```

   1.2. Run the `cephadm-preflight.yml` playbook to prepare the cluster hosts.

```
[root@serverc ~]# cd /usr/share/cephadm-ansible
[root@serverc cephadm-ansible]#  ansible-playbook -i /tmp/hosts \
cephadm-preflight.yml --extra-vars "ceph_origin="
...output omitted...
```

2. Create a services specification file called `initial-cluster-config.yaml`.