Solution

Providing Block Storage Using RADOS Block Devices

In this lab you will configure Red Hat Ceph Storage to provide block storage to clients using RADOS block devices (RBDs). You will import and export RBD images to and from the Ceph cluster.

Outcomes

You should be able to:

- Create and prepare an RBD pool.
- Create, manage, and use RBD images.
- Export and import RBD images.

Before You Begin

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

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

This command verifies the status of the cluster and creates the `rbd` pool if it does not already exist.

Instructions

Perform the following steps on your `clienta` admin node, which is a client node to the primary 3-node Ceph storage cluster.

1. Log in to `clienta` as the `admin` user. Create a pool called `rbd260`, enable the `rbd` client application for the Ceph block device, and make it usable by the RBD feature.

   1.1. Log in to `clienta`, as the `admin` user and use `sudo` to run the `cephadm` shell.

   Verify that the primary cluster is in a healthy state.

```
[student@workstation ~]$ ssh admin@clienta
...output omitted...
[admin@clienta ~]$ sudo cephadm shell
...output omitted...
[ceph: root@clienta /]# ceph health
HEALTH_OK
```

   1.2. Create a pool called `rbd260` with 32 placement groups. Enable the `rbd` client application for the Ceph Block Device and make it usable by the RBD feature.