

► Lab

Deploying and Configuring Block Storage with RBD

In this review, you will configure a Red Hat Ceph Storage cluster for RBD using specified requirements.

Outcomes

You should be able to:

- Deploy and configure Red Hat Ceph Storage for RBD mirroring.
- Configure a client to access RBD images.
- Manage RBD images, RBD mirroring, and RBD snapshots and clones.

Before You Begin

If you did not reset your classroom virtual machines at the end of the last chapter, save any work you want to keep from earlier exercises on those machines and reset the classroom environment now.



Important

Reset your environment before performing this exercise. All comprehensive review labs start with a clean, initial classroom environment that includes a pre-built, fully operational Ceph cluster. All remaining comprehensive reviews use the default Ceph cluster provided in the initial classroom environment.

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

```
[student@workstation ~]$ lab start comprehensive-review4
```

This command ensures that production and backups clusters are running and have the RBD storage pools called `rbd`, `rbdpoolmode`, and `rbdimagemode` in both clusters, also creates the data image in the `rbd` pool in the production cluster.

Specifications

- Deploy and configure a Red Hat Ceph Storage cluster for RBD mirroring between two clusters:
 - In the production cluster, create an RBD image called `vm1` in the `rbdpoolmode` pool configured as one-way `pool-mode` and with a size of 128 MiB. Create an RBD image called `vm2` in the `rbdimagemode` pool configured as one-way `image-mode` and with a size of 128 MiB. Both images should be enabled for mirroring.
 - Production and backup clusters should be called `production` and `bck`, respectively.
 - Map the image called `rbd/data` using the kernel RBD client on `clienta` and format the device with an XFS file system. Store a copy of the `/usr/share/dict/words` at the root of