Solution

Deploying CephFS

In this review, you will deploy CephFS on an existing Red Hat Ceph Storage cluster using specified requirements.

Outcomes

You should be able to deploy a Metadata Server, provide storage with CephFS, and configure clients for its use.

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-review3
```

This command ensures that all cluster hosts are reachable.

1. Create a CephFS file system `cl260-fs`. Create an MDS service called `cl260-fs` with an MDS instance on `serverc` and another on `serverd`. Create a data pool called `cephfs.cl260-fs.data` and a metadata pool called `cephfs.cl260-fs.meta`. Use replicated as the type for both pools. Verify that the MDS service is up and running.

   1.1. Log in to `clienta` and use `sudo` to run the `cephadm` shell.

```
[student@workstation ~]$ ssh admin@clienta
[admin@clienta ~]$ sudo cephadm shell
[ceph: root@clienta /]#
```

   1.2. Create a data pool called `cephfs.cl260-fs.data` and a metadata pool called `cephfs.cl260-fs.meta` for the CephFS service.