

## ► Guided Exercise

# Deploying Shared File Storage

In this exercise, you configure a shared file client access with CephFS.

## Outcomes

You should be able to deploy a Metadata Server (MDS) and mount a CephFS file system with the kernel client and the Ceph-Fuse client. You should be able to save the file system as persistent storage.

## 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 fileshare-deploy
```

## Instructions

- The `serverc`, `serverd`, and `servere` nodes are an operational 3-node Ceph cluster. All three nodes operate as a MON, a MGR, and an OSD host with at least one colocated OSD.
- The `clienta` node is your admin node server and you will use it to install the MDS on `serverc`.

- 1. Log in to `clienta` as the admin user. Deploy the `serverc` node as an MDS. Verify that the MDS is operating and that the `ceph_data` and `ceph_metadata` pools for CephFS are created.

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

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

- 1.2. Create the two required CephFS pools. Name these pools `mycephfs_data` and `mycephfs_metadata`.

```
[ceph: root@clienta /]# ceph osd pool create mycephfs_data
pool 'mycephfs_data' created
[ceph: root@clienta /]# ceph osd pool create mycephfs_metadata
pool 'mycephfs_metadata' created
```

- 1.3. Create the CephFS file system with the name `mycephfs`. Your pool numbers might differ in your lab environment.

```
[ceph: root@clienta /]# ceph fs new mycephfs mycephfs_metadata mycephfs_data
new fs with metadata pool 7 and data pool 6
```