

## ► Guided Exercise

# Managing Shared File Storage

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

## Outcomes

You should be able to manage CephFS and create snapshots.

## 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-manage
```

## 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 set up as your admin node server and you use it to install the Metadata Server (MDS) on `serverc`.
- The `mycephfs` CephFS file system is mounted on the `/mnt/mycephfs` folder with the key ring for the `admin` user.

- 1. Log in to `clienta` as the `admin` user.

```
[student@workstation ~]$ ssh admin@clienta
[admin@clienta ~]$
```

- 2. Create a `/mnt/mycephfs/dir1` directory. Create an empty file `/mnt/mycephfs/dir1/ddtest`. Modify the `ceph.dir.layout.stripe_count` layout attribute for the `/mnt/mycephfs/dir1` directory. Verify that the attribute change does not affect existing files within the directory, but that any newly created files inherit it. The `attr` package is preinstalled for you.

- 2.1. Use the `getfattr` command to create and verify the layout of the `/mnt/cephfs/dir1` directory. This command should not return any layout attribute that is associated with this directory.

```
[admin@clienta ~]$ mkdir /mnt/mycephfs/dir1
[admin@clienta ~]$ touch /mnt/mycephfs/dir1/ddtest
[admin@clienta ~]$ getfattr -n ceph.dir.layout /mnt/mycephfs/dir1
/mnt/mycephfs/dir1: ceph.dir.layout: No such attribute
```