Summary

In this chapter, you learned:

- You can distinguish the different characteristics for file-based, block-based, and object-based storage.
- CephFS is a POSIX-compliant file system that is built on top of RADOS to provide file-based storage.
- CephFS requires at least one Metadata Server that is separate from file data.
- Deploying CephFS requires multiple steps:
  - Create two pools, one for CephFS data and another for CephFS metadata.
  - Start the MDS service on the hosts.
  - Create a CephFS file system.
- You can mount CephFS file systems with either of the two available clients:
  - The kernel client, which does not support quotas but is faster.
  - The FUSE client, which supports quotas as ACLs but is slower.
- NFS Ganesha is a user space NFS file server for accessing Ceph storage.
- CephFS supports multisite geo-replication with snapshots.
- You can determine which OSDs store a file's objects.
- You can modify the RADOS layout to control how files are mapped to objects.
- CephFS enables asynchronous snapshots by creating a folder in the hidden `.snap` folder.
- You can schedule snapshots for your CephFS file system.