After the prerequisites are satisfied, enable the Ceph MGR NFS module:

```
[ceph: root@server /]# ceph mgr module enable nfs
```

Then, create the NFS Ganesha cluster:

```
[ceph: root@server /]# ceph nfs cluster create cluster-name "node-list"
```

The `node-list` is a comma-separated list where the daemon containers are deployed.

Next, export the CephFS file system:

```
[ceph: root@server /]# ceph nfs export create cephfs fs-name
 \
cluster-name pseudo-path
```

The `pseudo-path` parameter is the pseudo root path.

Finally, mount the exported CephFS file system on a client node.

```
[root@node ~]# mount -t nfs -o port=ganesha-port node-name:_pseudo-path_ path
```

MDS Autoscaler

CephFS shared file systems require at least one active MDS service for correct operation, and at least one standby MDS to ensure high availability. The MDS autoscaler module ensures the availability of enough MDS daemons.

This module monitors the number of ranks and the number of standby daemons, and adjusts the number of MDS daemons that the orchestrator spawns.

To enable the MDS autoscaler module, use the following command:

```
[ceph: root@server /]# ceph mgr module enable mds_autoscaler
```

Replicating CephFS on Another Ceph Cluster

Red Hat Ceph Storage 5 supports CephFS multi-site configuration for geo-replication. Thus, you can replicate the CephFS file system on another Red Hat Ceph Storage cluster. With this feature, you can fail over to the secondary CephFS file system and restart the applications that use it. The CephFS file system mirroring feature requires the `cephfs-mirror` package.

Note

Both the source and target clusters must use Red Hat Ceph Storage version 5 or later.

The CephFS mirroring feature is snapshot-based. The first snapshot synchronization requires bulk transfer of the data from the source cluster to the remote cluster. Then, for the following synchronizations, the mirror daemon identifies the modified files between local snapshots and synchronizes those files in the remote cluster. This synchronization method is faster than other methods that require bulk transfer of the data to the remote cluster, because it does not need to