

norecover

The **norecover** flag prevents recovery operations from running. Use the **norecover** flag when performing maintenance or a cluster shutdown.

nobackfill

The **nobackfill** flag prevents backfill operations from running. Use the **nobackfill** flag when performing maintenance or a cluster shutdown. Backfilling is discussed later in this section.

norebalance

The **norebalance** flag prevents rebalancing operations from running. Use the **norebalance** flag when performing maintenance or a cluster shutdown.

noscrub

The **noscrub** flag prevents scrubbing operations from running. Scrubbing will be discussed later in this section.

nodeep-scrub

The **nodeep-scrub** flag prevents any deep-scrubbing operation from running. Deep-scrubbing is discussed later in this section.

Cluster Power Down

Perform the following steps to shut down the entire cluster:

- Prevent clients from accessing the cluster.
- Ensure that the cluster is in a healthy state (HEALTH_OK) and that all PGs are in an active+clean state before proceeding.
- Bring down CephFS.
- Set the **noout**, **norecover**, **norebalance**, **nobackfill**, **nodown**, and **pause** flags.
- Shut down all Ceph Object Gateways (RGW) and iSCSI Gateways.
- Shut down OSD nodes one by one.
- Shut down MON and MGR nodes one by one.
- Shut down the admin node.

Cluster Power Up

Perform the following steps to power on the cluster:

- Power up cluster nodes in the following order: admin node, MON and MGR nodes, OSD nodes, MDS nodes.
- Clear the **noout**, **norecover**, **norebalance**, **nobackfill**, **nodown** and **pause** flags.
- Bring up Ceph Object Gateways and iSCSI Gateways.
- Bring up CephFS.

Monitoring the Cluster

View the MON quorum status with the **ceph mon stat** or the **ceph quorum_status -f json-pretty** commands.

```
[ceph: root@node /]# ceph mon stat
```

```
[ceph: root@node /]# ceph quorum_status -f json-pretty
```

You can also view the status of MONs in the Dashboard.