

```
[ceph: root@node /]# ceph orch ls
```

NAME	RUNNING	REFRESHED	AGE	PLACEMENT
alertmanager	1/1	2s ago	2d	count:1
crash	4/4	3s ago	2d	*
grafana	1/1	2s ago	2d	count:1
mds.fs1	3/3	3s ago	114m	node1;node2;node3;count:3
mgr	4/4	3s ago	2d	node1;node2;node3;node4
mon	4/4	3s ago	2d	node1;node2;node3;node4
node-exporter	4/4	3s ago	2d	*
osd.default_drive_group	8/12	3s ago	2d	server*
prometheus	1/1	2s ago	2d	count:1
rgw.realm.zone	2/2	3s ago	2d	node3;node4

```
[ceph: root@node /]# ceph orch restart osd.default_drive_group
```

Scheduled to restart osd.0 on host 'node1'

Scheduled to restart osd.1 on host 'node1'

Scheduled to restart osd.2 on host 'node1'

Scheduled to restart osd.3 on host 'node2'

Scheduled to restart osd.5 on host 'node2'

Scheduled to restart osd.7 on host 'node2'

Scheduled to restart osd.4 on host 'node3'

Scheduled to restart osd.6 on host 'node3'

Scheduled to restart osd.8 on host 'node3'

You can manage an individual cluster daemon by using the `ceph orch daemon` command.

```
[ceph: root@node /]# ceph orch daemon restart osd.1
```

Powering Down or Restarting the Cluster

Ceph supports cluster flags to control the behavior of the cluster. You must set some flags when restarting the cluster or performing cluster maintenance. You can use cluster flags to limit the impact of a failed cluster component or to prevent cluster performance issues.

Use the `ceph osd set` and `ceph osd unset` commands to manage these flags:

noup

Do not automatically mark a starting OSD as up. If the cluster network is experiencing latency issues, OSDs can mark each other down on the MON, then mark themselves up. This scenario is called *flapping*. Set the `noup` and `nodown` flags to prevent flapping.

nodown

The `nodown` flag tells the Ceph MON to mark a stopping OSD with the down state. Use the `nodown` flag when performing maintenance or a cluster shutdown. Set the `nodown` flag to prevent flapping.

noout

The `noout` flag tells the Ceph MON not to remove any OSDs from the CRUSH map, which prevents CRUSH from automatically rebalancing the cluster when OSDs are stopped. Use the `noout` flag when performing maintenance on a subset of the cluster. Clear the flag after the OSDs are restarted.

noin

The `noin` flag prevent booting OSDs from being marked with the `in` state. The flag prevents data from being automatically allocated to that specific OSD.