> **Note**
> You can mark an OSD as out even though it is still running (up). The in or out
> status does not correlate to an OSD's running state.

▶ **10.** Analyze the current utilization and number of PGs on the OSD 2 daemon.

```
[ceph: root@clienta /]# ceph osd df tree
ID  CLASS  WEIGHT   REWEIGHT  SIZE     RAW USE  DATA     OMAP    META     AVAIL
 %USE  VAR   PGS  STATUS  TYPE NAME
-1          0.08817         -  90 GiB   256 MiB   36 MiB  56 KiB  220 MiB  90 GiB
 0.28  1.00     -          root default
-3          0.02939         -  30 GiB    71 MiB   12 MiB  20 KiB   59 MiB  30 GiB
 0.23  0.83     -              host serverc
 0    hdd  0.00980  1.00000  10 GiB    26 MiB  4.0 MiB  11 KiB   22 MiB  10 GiB
 0.25  0.91    68      up            osd.0
 1    hdd  0.00980  1.00000  10 GiB    29 MiB  4.0 MiB   6 KiB   25 MiB  10 GiB
 0.28  1.01    74      up            osd.1
 2    hdd  0.00980  1.00000  10 GiB    16 MiB  3.9 MiB   3 KiB   12 MiB  10 GiB
 0.16  0.57    59      up           osd.2
...output omitted...
                            TOTAL  90 GiB  256 MiB   36 MiB  61 KiB  220 MiB  90 GiB
 0.28
MIN/MAX VAR: 0.57/1.48  STDDEV: 0.06
```

▶ **11.** View the placement group status for the cluster. Create a test pool and a test object. Find
the placement group to which the test object belongs and analyze that placement group's
status.

11.1. View the placement group status for the cluster. Examine the PG states. Your output
may be different in your lab environment.

```
[ceph: root@clienta /]# ceph pg stat
201 pgs: 201 active+clean; 8.6 KiB data, 261 MiB used, 90 GiB / 90 GiB avail; 511
 B/s rd, 0 op/s
```

11.2. Create a pool called testpool and an object called testobject containing the /
etc/ceph/ceph.conf file.

```
[ceph: root@clienta /]# ceph osd pool create testpool 32 32
pool 'testpool' created
[ceph: root@clienta /]# rados -p testpool put testobject /etc/ceph/ceph.conf
```

11.3. Find the placement group of the testobject object in the testpool pool and
analyze its status. Use the placement group information from your lab environment in
the query.

```
[ceph: root@clienta /]# ceph osd map testpool testobject
osdmap e332 pool 'testpool' (9) object 'testobject' -> pg 9.98824931 (9.11) -> up
 ([8,2,5], p8) acting ([8,2,5], p8)
[ceph: root@clienta /]# ceph pg 9.11 query
```