

```
[WRN] PG_DEGRADED: Degraded data redundancy: 82/663 objects degraded (12.368%), 14
pgs degraded
  pg 2.f is active+undersized+degraded, acting [8,0]
  pg 2.19 is active+undersized+degraded, acting [0,8]
  pg 3.0 is active+undersized+degraded, acting [8,1]
...output omitted...
```

► 4. Identify the failed OSD device for replacement.

4.1. Identify which OSD is down.

```
[ceph: root@clienta /]# ceph osd tree | grep -i down
3  hdd 0.00980      osd.3      down 1.00000 1.00000
```

4.2. Identify which host the OSD is on.

```
[ceph: root@clienta /]# ceph osd find osd.3
{
  "osd": 3,
  ...output omitted...
  "host": "serverd.lab.example.com",
  "crush_location": {
    "host": "serverd",
    "root": "default"
  }
}
```

4.3. Log in to the serverd node and use `sudo` to run the `cephadm` shell. Identify the device name for the failed OSD.

```
[ceph: root@clienta /]# ssh admin@serverd
admin@serverd's password: redhat
[admin@serverd ~]$ sudo cephadm shell
[ceph: root@serverd /]# ceph-volume lvm list

===== osd.3 =====
...output omitted...
      devices              /dev/vdb
...output omitted...
```



Note

You can also identify the device name of an OSD by using the `ceph osd metadata OSD_ID` command from the admin node.

► 5. Exit the `cephadm` shell. Identify the service name of the `osd.3` daemon running on the `serverd` node. The service name will be different in your lab environment.

```
[ceph: root@serverd /]# exit
exit
[admin@serverd ~]$ sudo systemctl list-units --all "ceph*"
```