Viewing Daemon Logs

To view daemon logs, use the `journalctl -u` *`$daemon@$id`* command. To show only recent journal entries, use the `-f` option. For example, this example views logs for that host's OSD `10` daemon.

```
[root@node ~]$ journalctl -u \
ceph-ff97a876-1fd2-11ec-8258-52540000fa0c@osd.10.service
```

Ceph containers write to individual log files for each daemon. Enable logging for each specific Ceph daemon by configuring the daemon's `log_to_file` setting to `true`. This example enables logging for MON nodes.

```
[ceph: root@node /]# ceph config set mon log_to_file true
```

Monitoring OSDs

If the cluster is not healthy, Ceph displays a detailed status report containing the following information:

- Current status of the OSDs (`up/down/out/in`)
- OSD near capacity limit information (`nearfull/full`)
- Current status of the placement groups (PGs)

The `ceph status` and `ceph health` commands report space-related warning or error conditions. The various `ceph osd` subcommands report OSD usage details, status, and location information.

Analyzing OSD Usage

The `ceph osd df` command displays OSD usage statistics. Use the `ceph osd df tree` command to display the CRUSH tree in the command output.

```
[ceph: root@node /]# ceph osd df
ID CLASS WEIGHT  REWEIGHT SIZE   RAW USE DATA    OMAP    META     AVAIL   %USE
 VAR  PGS STATUS
0   hdd 0.00980  1.00000 10 GiB 1.0 GiB  28 MiB  20 KiB 1024 MiB 9.0 GiB 10.28
 1.00  41     up
1   hdd 0.00980  1.00000 10 GiB 1.0 GiB  29 MiB  40 KiB 1024 MiB 9.0 GiB 10.29
 1.00  58     up
2   hdd 0.00980  1.00000 10 GiB 1.0 GiB  28 MiB  20 KiB 1024 MiB 9.0 GiB 10.28
 1.00  30     up
3   hdd 0.00980  1.00000 10 GiB 1.0 GiB  28 MiB  20 KiB 1024 MiB 9.0 GiB 10.28
 1.00  43     up
4   hdd 0.00980  1.00000 10 GiB 1.0 GiB  28 MiB  20 KiB 1024 MiB 9.0 GiB 10.28
 1.00  46     up
5   hdd 0.00980  1.00000 10 GiB 1.0 GiB  28 MiB  20 KiB 1024 MiB 9.0 GiB 10.28
 1.00  40     up
6   hdd 0.00980  1.00000 10 GiB 1.0 GiB  29 MiB  44 KiB 1024 MiB 9.0 GiB 10.28
 1.00  44     up
```