

```
[ceph: root@node /]# ceph tell osd.0 config set debug_ms 5
```

View the configuration settings at runtime as follows:

```
[ceph: root@node /]# ceph tell osd.0 config show
```

Configure Logging in the Configuration Database

Configure the subsystem debug levels so that they log to the default log file at boot time. Add the debugging settings to the Ceph configuration database by using the `ceph config set` command.

For example, add debug levels for specific Ceph daemons by setting these parameters in your Ceph configuration database:

```
[ceph: root@node /]# ceph config set global debug_ms 1/5
[ceph: root@node /]# ceph config set osd debug_ms 1
[ceph: root@node /]# ceph config set osd debug_osd 1/5
[ceph: root@node /]# ceph config set mon debug_mon 20
```

Setting Log File Rotation

Debug logging for Ceph components is resource-intensive and can generate a huge amount of data. If you have almost full disks, then accelerate log rotation by modifying the log rotation configuration at `/etc/logrotate.d/ceph`. The Cron job scheduler uses this file to schedule log rotation.

You can add a size setting after the rotation frequency, so that the log file is rotated when it reaches the specified size:

```
rotate 7
weekly
size size
compress
sharedscripts
```

Use the `crontab` command to add an entry to inspect the `/etc/logrotate.d/ceph` file.

```
[ceph: root@node /]# crontab -e
```

For example, you can instruct Cron to check `/etc/logrotate.d/ceph` every 30 minutes.

```
30 * * * * /usr/sbin/logrotate /etc/logrotate.d/ceph >/dev/null 2>&1
```

Troubleshooting Network Issues

Ceph nodes use the network for communicating with each other. Network issues can be the cause when OSDs are reported as down. Monitors with clock skew errors are a common cause of networking issues. A clock skew, or timing skew, is a phenomenon in synchronous digital circuit systems in which the same sourced clock signal arrives at different components at different times. If the difference between the readings is too far apart from what is configured in the cluster, then