OPERATING A CLUSTER

The ceph service provides functionality to **start**, **restart**, and **stop** your Ceph cluster. Each time you execute ceph processes, you must specify at least one option and one command. You may also specify a daemon type or a daemon instance. For most newer Debian/Ubuntu distributions, you may use the following syntax:

```
sudo service ceph [options] [commands] [daemons]
```

For older distributions, you may wish to use the /etc/init.d/ceph path:

```
sudo /etc/init.d/ceph [options] [commands] [daemons]
```

The ceph service options include:

Option	Shortcut	Description
verbose	- V	Use verbose logging.
valgrind	N/A	(Dev and QA only) Use Valgrind debugging.
allhosts	-a	Execute on all hosts in ceph.conf. Otherwise, it only executes on localhost.
restart	N/A	Automatically restart daemon if it core dumps.
norestart	N/A	Don't restart a daemon if it core dumps.
conf	- C	Use an alternate configuration file.

The ceph service commands include:

Command	and Description	
start	rt Start the daemon(s).	
stop	Stop the daemon(s).	
forcestop	Force the daemon(s) to stop. Same as kill -9	
killall	Kill all daemons of a particular type.	
cleanlogs	Cleans out the log directory.	
cleanalllogs Cleans out everything in the log directory.		

For subsystem operations, the ceph service can target specific daemon types by adding a particular daemon type for the [daemons] option. Daemon types include:

- mon
- osd
- mds

The ceph service's [daemons] setting may also target a specific instance:

```
sudo /etc/init.d/ceph -a start osd.0
```

Where osd.0 is the first OSD in the cluster.

STARTING A CLUSTER

To start your Ceph cluster, execute ceph with the start command. The usage may differ based upon your Linux distribution. For example, for most newer Debian/Ubuntu distributions, you may use the following syntax:

```
sudo service ceph start [options] [start|restart] [daemonType|daemonID]
```

For older distributions, you may wish to use the /etc/init.d/ceph path:

```
sudo /etc/init.d/ceph [options] [start|restart] [daemonType|daemonID]
```

The following examples illustrates a typical use case:

```
sudo service ceph -a start
sudo /etc/init.d/ceph -a start
```

Once you execute with -a, Ceph should begin operating. You may also specify a particular daemon instance to constrain the command to a single instance. For example:

sudo /etc/init.d/ceph start osd.0

STOPPING A CLUSTER

To stop your Ceph cluster, execute ceph with the stop command. The usage may differ based upon your Linux distribution. For example, for most newer Debian/Ubuntu distributions, you may use the following syntax:

sudo service ceph [options] stop [daemonType|daemonID]

For example:

sudo service ceph -a stop

For older distributions, you may wish to use the /etc/init.d/ceph path:

sudo /etc/init.d/ceph -a stop

Ceph should shut down the operating processes.