

CPU PROFILING

If you built Ceph from source and compiled Ceph for use with **oprofile** you can profile Ceph's CPU usage. See **Installing Oprofile** for details.

INITIALIZING OPROFILE

The first time you use oprofile you need to initialize it. Locate the vmlinux image corresponding to the kernel you are now running.

```
ls /boot
sudo opcontrol --init
sudo opcontrol --setup --vmlinux={path-to-image} --separate=library --callgraph=6
```

STARTING OPROFILE

To start oprofile execute the following command:

```
opcontrol --start
```

Once you start oprofile, you may run some tests with Ceph.

STOPPING OPROFILE

To stop oprofile execute the following command:

```
opcontrol --stop
```

RETRIEVING OPROFILE RESULTS

To retrieve the top cmon results, execute the following command:

```
opreport -gal ./cmon | less
```

To retrieve the top cmon results with call graphs attached, execute the following command:

```
opreport -cal ./cmon | less
```

Important: After reviewing results, you should reset oprofile before running it again. Resetting oprofile removes data from the session directory.

RESETTING OPROFILE

To reset oprofile, execute the following command:

```
sudo opcontrol --reset
```

Important: You should reset oprofile after analyzing data so that you do not commingle results from different tests.

