

## INSTALLING OPROFILE

The easiest way to profile Ceph's CPU consumption is to use the [oprofile](#) system-wide profiler.

### INSTALLATION

If you are using a Debian/Ubuntu distribution, you can install oprofile by executing the following:

```
sudo apt-get install oprofile oprofile-gui
```

### COMPILING CEPH FOR PROFILING

To compile Ceph for profiling, first clean everything.

```
make distclean
```

Then, export the following settings so that you can see callgraph output.

```
export CFLAGS="-fno=omit-frame-pointer -O2 -g"
```

Finally, compile Ceph.

```
./autogen.sh  
./configure  
make
```

You can use `make -j` to execute multiple jobs depending upon your system. For example:

```
make -j4
```

### CEPH CONFIGURATION

Ensure that you disable lockdep. Consider setting logging to levels appropriate for a production cluster. See [Ceph Logging and Debugging](#) for details.

See the [CPU Profiling](#) section of the RADOS Troubleshooting documentation for details on using Oprofile.