

Package Specifics

- [ceph](#)
- [Horizon](#)

ceph

Ceph uses sbuild to build the package

Dependencies

```
# sbuild dependencies
sudo apt install -yq sbuild debhelper ubuntu-dev-tools piuparts

# Ceph dependencies
sudo apt install -yq \
    default-jdk javahelper junit4 libatomic-ops-dev \
    libboost-dev libboost-program-options-dev libboost-system-dev \
    libboost-thread-dev libedit-dev libfcgi-dev libfuse-dev \
    libgoogle-perftools-dev libjerasure-dev libkeyutils-dev \
    libleveldb-dev libs3-dev libsnappy-dev libxml2-dev python-nose yasm
```

Setup sbuild

```
mkdir -p /home/ubuntu/ubuntu/logs
```

create /etc/schroot/sbuild/fstab

```
# fstab: static file system information for chroots.
# Note that the mount point will be prefixed by the chroot path
# (CHROOT_PATH)
#
# <file system> <mount point> <type> <options> <dump> <pass>
/proc           /proc          none          rw,bind       0            0
/sys            /sys           none          rw,bind       0            0
/dev/pts        /dev/pts       none          rw,bind       0            0
tmpfs           /dev/shm       tmpfs         defaults      0            0
# Mount a large scratch space for the build, so we don't use up
# space on an LVM snapshot of the chroot itself.
/var/lib/sbuild/build /build none          rw,bind       0            0
```

Create \$HOME/.sbuidrc:

```
# *** VERIFY AND UPDATE $mailto and $maintainer_name BELOW ***

# Mail address where logs are sent to (mandatory, no default!)
$mailto = 'chris.macnaughton@canonical.com';

# Name to use as override in .changes files for the Maintainer: field
$maintainer_name='Chris MacNaughton <chris.macnaughton@canonical.com>';

# Directory for chroot symlinks and sbuild logs. Defaults to the
# current directory if unspecified.
$sbuild_dir='/home/ubuntu/ubuntu/build';

# Directory for writing build logs to
$log_dir="/home/ubuntu/ubuntu/logs";
# don't remove this, Perl needs it:
1;
```

Setup some chroots!

```
for distro in focal bionic; do
  mk-sbuild $distro
done
```

Build Ceph

```
sbuild ceph -c chroot:focal-amd64 --arch=amd64 --dist=focal --nolog -A
```

Horizon

Horizon vendors xstatic so needs weird things

```
# This example is using Train as an example, during a release of the 16.2.0
# stable point release. Note that the previous version of the package is
# 16.1.0, so we're pulling the xstatic tgz from there.
wget https://launchpad.net/~ubuntu-cloud-archive/+archive/ubuntu/train-staging/+sourcefiles/horizon/3:16.1.0-0ubuntu1~cloud0/horizon_16.1.0.orig-xstatic.tar.gz
mv horizon_16.1.0.orig-xstatic.tar.gz horizon_16.2.0.orig-xstatic.tar.gz
```

Alternately, to pull in the xstatic bits for a new release, you can run `debian/rules refresh-xstatic` as documented in `debian/README` in the package.

Build the source package

```
cd horizon
# debuild can handle multiple sources when building packages, so that's
# what we're using to build the package, rather than `gbp`
debuild -S -sa -us -uc
```

Now we want to confirm that the package built correctly

The following could specify the version more explicitly but I like the generic wildcard version over `horizon_16.2.0-0ubuntu1.dsc`

```
pbuilder-dist eoan build ../horizon*.dsc
```