

# DebianPackaging

## Official Package To Install On Debian(tm) (not a product of Debian(tm))

Add the following lines to `/etc/apt/sources.list`:

```
deb http://www.apache.org/dist/cassandra/debian 30x main
deb-src http://www.apache.org/dist/cassandra/debian 30x main
```

You will want to replace `30x` by the series you want to use: `22x` for the 2.2.x series, `21x` for the 2.1.x series, etc... You will not automatically get major version updates unless you change the series, but that is *a feature*.

## Adding Repository Keys

If you run `apt-get update` and see an error similar to this:

```
GPG error: http://www.apache.org unstable Release: The following signatures couldn't be verified because the
public key is not available: NO_PUBKEY F758CE318D77295D
```

This simply means you need to add a `PUBLIC_KEY` for Apache Cassandra deb releases. The Apache Cassandra committer's public keys are available at <https://www.apache.org/dist/cassandra/KEYS>

To add the `KEYS` file to apt in one command (may be repeated on existing installs, if you see an error similar to above, and the new Release Manager keys will be fetched):

```
curl https://www.apache.org/dist/cassandra/KEYS | sudo apt-key add -
```

`sudo apt-key list` should show the following keys added, along with the base OS keys:

```
pub   1024D/F2833C93 2004-01-18
uid           Eric Evans <eevans@sym-link.com>
uid           Eric Evans <eevans@debian.org>
uid           Eric Evans <eevans@opennms.org>
sub   2048g/98CB5BA4 2004-01-18

pub   4096R/8D77295D 2009-07-12
uid           Eric Evans <eevans@sym-link.com>
uid           Eric Evans <eevans@apache.org>
uid           Eric Evans <eevans@debian.org>
uid           Eric Evans <eevans@opennms.com>
uid           Eric Evans <eevans@opennms.org>
sub   4096R/C47D63C0 2009-07-12

pub   2048R/2B5C1B00 2011-04-13
uid           Sylvain Lebresne (pcmanus) <sylvain@datastax.com>
sub   2048R/9CB2AA80 2011-04-13

pub   4096R/0353B12C 2014-09-05
uid           T Jake Luciani <jake@apache.org>
sub   4096R/D35F8215 2014-09-05

pub   4096R/FE4B2BDA 2009-07-15
uid           Michael Shuler <michael@pbandjelly.org>
uid           Michael Shuler <mshuler@gmail.com>
sub   4096R/25A883ED 2009-07-15
```

## Alternative Key Fetching

If you wish to manually add an individual committer's key, `apt-key` can fetch from a keyserver, as follows, using the long key ID: (Michael Shuler's key was added to `KEYS` on 2016-09-23, so releases after this date may be signed with FE4B2BDA)

Eric Evans:

```
sudo apt-key adv --keyserver pool.sks-keyservers.net --recv-key 0xF8358FA2F2833C93
sudo apt-key adv --keyserver pool.sks-keyservers.net --recv-key 0xF758CE318D77295D
```

Sylvain Lebresne:

```
sudo apt-key adv --keyserver pool.sks-keyservers.net --recv-key 0x4BD736A82B5C1B00
```

Jake Luciani:

```
sudo apt-key adv --keyserver pool.sks-keyservers.net --recv-key 0x749D6EEC0353B12C
```

Michael Shuler:

```
sudo apt-key adv --keyserver pool.sks-keyservers.net --recv-key 0xA278B781FE4B2BDA
```

## Install Apache Cassandra

```
sudo apt-get update
sudo apt-get install cassandra
sudo apt-get install cassandra-tools # optional utilities
```

Some things to be aware of:

- The configuration files are located in `/etc/cassandra`
- Start-up options (heap size, etc) can be configured in `/etc/default/cassandra`

## Building Packages on Debian

Once all the build dependencies are set up, all you need to do is run

```
dpkg-buildpackage -uc -us
```

Troubleshooting:

Make sure you are building with the Oracle JDK, not OpenJDK, and not gcj. You want to see something like this:

```
$ java -version
java version "1.8.0_102"
Java(TM) SE Runtime Environment (build 1.8.0_102-b14)
Java HotSpot(TM) 64-Bit Server VM (build 25.102-b14, mixed mode)
```

By default, installing the Cassandra Debian package or its build dependencies will pull in OpenJDK. For runtime purposes this will work fine, but you may wish to install Oracle JRE, which is outside the scope of this document.

<https://c.statcounter.com/9397521/0/fe557aad/1/> | stats