

I. Installation

MongoDB install:

1. Download the binaries of MongoDB and setup the environment. We can create a new user account/group as the owner of the mongodb related files.
2. `cd /usr/local`
3. Download MongoDB- `sudo curl -O https://fastdl.mongodb.org/linux/mongodb-linux-x86_64-ubuntu1604- 3.2.10.tgz`
4. Untar the downloaded package -`sudo tar zxvf mongodb-linux-x86_64-ubuntu1604-3.2.10.tgz`
5. Change the owner of the files(in our case the user is hduser and group is project)-`sudo chown -R hduser:project mongodb-linux-x86_64-ubuntu1604-3.2.10`
6. Create a symbolic link- `sudo ln -s mongodb-linux-x86_64-ubuntu1604-3.2.10 mongodb`
7. Make a directory for mongodbddata- `sudo mkdir ../mongodbddata`
8. Change the owner for the above created directry- `sudo chown -R hduser:project ../mongodbddata`
9. `cd /`
10. Create a symbolic lync- `sudo ln -s /usr/mongodbddata data`
11. `cd data`
12. Make a directory names db under data- `mkdir -p db`
13. For setting the environment variables edit the .bashrc file
 1. `cd ~`
 2. `vi .bashrc`
 3. Add 'export PATH=\$PATH:/usr/local/mongodb/bin' in the file and save.
14. Source the .bashrc file- `. .bashrc`
14. Start the mongod process and allow the session to run the process –
`mongod --bind_ip 127.0.0.1`

Install Cassandra:

1. Cassandra requires oracle JRE, so add the personal package archive- `sudo add-apt-repository ppa:webupd8team/java`
2. Update the package database- `sudo apt-get update`
3. Install the Oracle JRE, accept the license agreement- `sudo apt-get install oracle-java8-set-default`
4. Verify that it is a default JRE- `java -version`
5. Add the repository of the cassandra package to make it available for the system - `echo "deb http://www.apache.org/dist/cassandra/debian 311x main" | sudo tee -a /etc/apt/sources.list.d/cassandra.sources.list.`

6. Add the repository's source- `echo "deb-src
http://www.apache.org/dist/cassandra/debian 311x main" | sudo tee -a
/etc/apt/sources.list.d/cassandra.sources.list`
7. We need to add 3 public keys from Apache to avoid the package signature warning during update of package.

First key-

```
gpg --keyserver pgp.mit.edu --recv-keys F758CE318D77295D  
gpg --export --armor F758CE318D77295D | sudo apt-key add -
```

Second key-

```
gpg --keyserver pgp.mit.edu --recv-keys 2B5C1B00  
gpg --export --armor 2B5C1B00 | sudo apt-key add -
```

Third key-

```
gpg --keyserver pgp.mit.edu --recv-keys 0353B12C  
gpg --export --armor 0353B12C | sudo apt-key add -
```

8. Update the package database once again
`sudo apt-get update`
9. Install Cassandra-
`sudo apt-get install cassandra`
10. To confirm that cassandra is running or not, run the below command.
`sudo service cassandra status.`

The output should be 'Active(running)'