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# *Cassandra :: Single-Node Cluster*

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Cassandra requires that the Oracle Java SE Runtime Environment (JRE) be installed. So, in this step, you'll install and verify that it's the default JRE.

***# sudo add-apt-repository ppa:webupd8team/java***

***# sudo apt-get update***

Then install the Oracle JRE. Installing this particular package not only installs it but also makes it the default JRE. When prompted, accept the license agreement:

***# sudo apt-get install oracle-java8-set-default***
***# java -version***

You should see output similar to the following:

***Output***

***java version "1.8.0_60"***
***Java(TM) SE Runtime Environment (build 1.8.0_60-b27)***
***Java HotSpot(TM) 64-Bit Server VM (build 25.60-b23, mixed mode)***

We'll install Cassandra using packages from the official Apache Software Foundation repositories, so start by adding the repo so that the packages are available to your system. Note that Cassandra 2.2.2 is the latest version at the time of this publication. Change the 22x to match the latest version. For example, use 39x if Cassandra 3.9 is the latest version:

***# echo "deb http://www.apache.org/dist/cassandra/debian 39x main" | sudo tee -a /etc/apt/sources.list.d/cassandra.sources.list***

***# echo "deb-src http://www.apache.org/dist/cassandra/debian 39x main" | sudo tee -a /etc/apt/sources.list.d/cassandra.sources.list***

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***links ::***

***latest version ::***
http://cassandra.apache.org/download/
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***# sudo apt-get update***

Finally, install Cassandra:

***# sudo apt-get install cassandra***

Ordinarily, Cassandra should have been started automatically at this point. However, because of a bug, it does not. To confirm that it's not running, type:

***# sudo service cassandra status***
***# sudo service cassandra restart***

wait for few minutes and check,

***# sudo tailf /var/log/cassandra/system.log***

***# sudo service cassandra status***

If it is not running, the following output will be displayed:

Output

**** could not access pidfile for Cassandra***

and check the log file also which mentioned above.

Then, resolve this issue by,

***# sudo nano +60 /etc/init.d/cassandra***

That line should read:

***# sudo nano /etc/init.d/cassandra***

***CMD_PATT="cassandra.+CassandraDaemon"***

Change it to:

***CMD_PATT="cassandra"***

Close and save the file, then reboot the server:

***# sudo reboot***

After logging back in, Cassandra should now be running. Verify:

***# sudo service cassandra status***

If you are successful, you will see:

Output

**** Cassandra is running***

If you were able to successfully start Cassandra, check the status of the cluster:

***# sudo nodetool status***

In the output, **UN** means it's **U**p and **N**ormal:

Output

***Datacenter: datacenter1***
***=======================***
***Status=Up/Down***
***|/ State=Normal/Leaving/Joining/Moving***
***--  Address    Load       Tokens       Owns    Host ID                               Rack***
***UN  127.0.0.1  142.02 KB  256          ?       2053956d-7461-41e6-8dd2-0af59436f736  rack1***

***Note: Non-system keyspaces don't have the same replication settings, effective ownership information is meaningless***

Then connect to it using its interactive command line interface cqlsh.

***# cqlsh***

You will see it connect:
Output

***Connected to Test Cluster at 127.0.0.1:9042.***
***[cqlsh 5.0.1 | Cassandra 2.2.2 | CQL spec 3.3.1 | Native protocol v4]***
***Use HELP for help.***
***cqlsh>***

Type exit to quit:

***> exit***

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***links ::***

https://www.digitalocean.com/community/tutorials/how-to-install-cassandra-and-run-a-single-node-cluster-on-ubuntu-14-04
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