**APACHE CASSANDRA INSTALLATIONS**

These are the guidelines for setting up the supported Apache Cassandra releases on Linux systems.

Cassandra runs on a wide array of Linux distributions including (but not limited to):

* Ubuntu, most notably LTS releases 16.04 to 18.04
* CentOS & RedHat Enterprise Linux (RHEL) including 6.6 to 7.7
* Amazon Linux AMIs including 2016.09 through to Linux 2
* Debian versions 8 & 9
* SUSE Enterprise Linux 12

This is neither a prescriptive nor a complete list of operating system platforms. Nonetheless, users would be wise to carry out thorough tests on their own, especially for less well-known Linux versions. It is not advised to deploy on older versions unless you have prior production-level expertise with the older distribution.

Installing a Docker image is easy if you already use Docker. You must either have Docker installed on Linux or install Docker Desktop for Mac or Windows. After removing the relevant image, use the run command to launch Cassandra.

Installing the binary tarball is likewise a straightforward decision for most users. All of the contents of the tarball are unpacked into a single place, with configuration files and binaries stored in separate subdirectories. The tarball installation's most evident feature is that it can be installed on any Linux distribution and doesn't require root capabilities.

Packaged installations are best suited for production setups and need root permissions. To install Cassandra using YUM, install the RPM build for CentOS and RHEL-based editions. If you want to install Cassandra via APT, install the Debian build on Ubuntu and other Debian-based distributions. It should be noted that installing the binaries and configuration files as the cassandra OS user needed root rights for both the YUM and APT approaches.

Prerequisites

* Install the latest version of Java 8 or Java 11, either the [Oracle Java Standard Edition 8](http://www.oracle.com/technetwork/java/javase/downloads/index.html) / [Oracle Java Standard Edition 11 (Long Term Support)](http://www.oracle.com/technetwork/java/javase/downloads/index.html) or [OpenJDK 8](http://openjdk.java.net/) / [OpenJDK 11](http://openjdk.java.net/). To verify that you have the correct version of java installed, type java -version.
* **NOTE**: Experimental support for Java 11 was added in Cassandra 4.0 ([CASSANDRA-9608](https://issues.apache.org/jira/browse/CASSANDRA-9608)). Full support is effective Cassandra 4.0.2 version ([CASSANDRA-16894](https://issues.apache.org/jira/browse/CASSANDRA-16894)) For more information, see [NEWS.txt](https://github.com/apache/cassandra/blob/trunk/NEWS.txt).
* For using cqlsh, the latest version of Python 3.6+ or Python 2.7 (support deprecated). To verify that you have the correct version of Python installed, type python –version.
* There are three methods of installing Cassandra that are common:
	+ Docker image
	+ Tarball binary file
	+ Package installation (RPM, YUM)

**USING DOCKER IMAGE**

Step-1--🡪Installing Docker Desktop on your pc

* First try to install Docker Desktop on your windows.
* <https://docs.docker.com/desktop/install/windows-install/>

Go to the above link for downloading Docker Desktop official website



* Next you will be getting like an above figure
* Then after successful downloading
* Try to install the file
* Then launch the application
* You may continue by signing up or without signing up

STEP-2🡪Pulling image using cmd

* Then open cmd
* Pull Image

type the command **docker pull cassandra** in it to launch the application.



* Check if the image is pulled or not

Type the command **docker images**



STEP-3🡪Running the container using image

* Then run the container using image



* Then type **docker ps** command. To check the container is running or not



* Get inside the container

Type the command **docker exec -it 5fdf3ce7225a bash**



STEP -4🡪Starting the Cassandra Shell)

* Start cqlsh (Cassandra Shell)

Type the command **cqlsh**



STEP-5🡪Creating and describing the Keyspace

Create and describe key space

* Create Keyspace:

Type the command **CREATE KEYSPACE techframer WITH replication ={‘class’:’SimpleStrategy’, ‘replication\_factor’:1};**



* Describe Keyspace:

Type the command **DESC KEYSPACES**



STEP-6🡪Creating a table

* Create Table

Type the command **CREATE TABLE student(student\_id int PRIMARY KEY, student\_name text, student\_city text, student\_fees varint, student\_phone varint);**



STEP-7🡪Adding and Checking the Data

Add & Check Data

* Select Data

Type the command **SELECT\* FROM student;**

* Insert Data

Type the command **INSERT INTO student(student\_id, student \_fees, student\_name) VALUES(1,2000,’Sandeep’);**



**Watch Demo here 🡪** <https://youtu.be/A8Ual34Y-Wg?si=4wH5mM3PCVlwSjnz>

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