**Install CockroachDB on Linux**

Download CockroachDB binary

wget <https://binaries.cockroachdb.com/cockroach-v23.1.12.linux-amd64.tgz>

tar xvf cockroach-v23.1.12.linux-amd64.tgz

cd cockroach-v23.1.12.linux-amd64

CockroachDB uses custom-built versions of the [GEOS](https://www.cockroachlabs.com/docs/v23.1/architecture/glossary#geos) libraries. Copy these libraries to one of the locations where CockroachDB expects to find them.

mkdir -p /usr/local/lib/cockroach

cp libgeos.so /usr/local/lib/cockroach/

cp cockroach /usr/local/bin/cockroach

export PATH="/usr/local/bin/:$PATH" if you want permanent put it this line in .bashrc

now we can test it in demo

cockroach demo

In the demo cluster's interactive SQL shell, run the following command to test that the spatial libraries have loaded properly:

SELECT ST\_IsValid(ST\_MakePoint(1,2));

If your cockroach binary is not properly accessing the dynamically linked C libraries in /usr/local/lib/cockroach, it will output an error message like the one below.

Install on docker

docker pull cockroachdb/cockroach:v23.1.12

sample work with this db

create databases;

CREATE DATABASE bank;

CREATE DATABASE IF NOT EXISTS bank;

Show databases;

demo@127.0.0.1:26257/movr> SHOW DATABASES;

database\_name | owner | primary\_region | secondary\_region | regions | survival\_goal

----------------+-------+----------------+------------------+---------+----------------

bank | demo | NULL | NULL | {} | NULL

defaultdb | root | NULL | NULL | {} | NULL

movr | demo | NULL | NULL | {} | NULL

postgres | root | NULL | NULL | {} | NULL

system | node | NULL | NULL | {} | NULL

(5 rows)

## Set the default database

SET DATABASE = bank;

### **Start single node CockroachDB cluster**

cockroach start-single-node \

--insecure \

--store=commerce\_database \

--listen-addr=0.0.0.0:26257 \

--http-addr=localhost:8080 \

--background

* Next start CockroachDB shell using the command below.

cockroach sql --insecure --host=localhost:26257

### Install CockroachDB cluster:(production)

*cockroach cert create-node localhost $(hostname) 192.168.10.10 --certs-dir=certs --ca-key=certs/ca.key*

*cockroach --certs-dir=certs cert list*

## Start CockroachDB Cluster

*cockroach start --background --certs-dir=certs --advertise-host=192.168.10.10 --join=192.168.10.10,192.168.10.11,192.168.10.12 --background*

## Add Remaining Nodes to the Cluster

This command in node 2 and 3 exec

*cockroach start --background --certs-dir=certs --advertise-host=192.168.10.11 --listen-addr=192.168.10.11 --join=192.168.10.10:26257*

*cockroach start --background --certs-dir=certs --advertise-host=192.168.10.12 --listen-addr=192.168.10.12 --join=192.168.10.10:26257*

