



Get Started with Apache Cassandra

Interested in getting started with Cassandra? Follow these instructions.

STEP 1: GET CASSANDRA USING DOCKER

You'll need to have Docker Desktop for Mac, Docker Desktop for Windows, or similar software installed on your computer.

Apache Cassandra is also available as a tarball or package [download](#).

```
docker pull cassandra:latest
```

STEP 2: START CASSANDRA

A Docker network allows us to access the container's ports without exposing them on the host.

```
docker network create cassandra
```

```
docker run --rm -d --name cassandra --hostname cassandra --network  
cassandra cassandra
```

STEP 3: CREATE FILES

The Cassandra Query Language (CQL) is very similar to SQL but suited for the JOINless structure of Cassandra.

Create a file named data.cql and paste the following CQL script in it. This script will create a keyspace, the layer at which Cassandra replicates its data, a table to hold the data, and insert some data into that table:

```
-- Create a keyspace  
CREATE KEYSPACE IF NOT EXISTS store WITH REPLICATION = { 'class' :  
  'SimpleStrategy', 'replication_factor' : '1' };  
  
-- Create a table  
CREATE TABLE IF NOT EXISTS store.shopping_cart (  
  userid text PRIMARY KEY,  
  item_count int,  
  last_update_timestamp timestamp  
);  
  
-- Insert some data  
INSERT INTO store.shopping_cart  
  (userid, item_count, last_update_timestamp)  
VALUES ('9876', 2, toTimeStamp(now()));  
INSERT INTO store.shopping_cart  
  (userid, item_count, last_update_timestamp)  
VALUES ('1234', 5, toTimeStamp(now()));
```

STEP 4: LOAD DATA WITH CQLSH

The CQL shell, or `cqlsh`, is one tool to use in interacting with the database. We'll use it to load some data into the database using the script you just saved.

```
docker run --rm --network cassandra -v "$(pwd)/data.cql:/scripts/data.cql" -e CQLSH_HOST=cassandra -e CQLSH_PORT=9042 -e CQLVERSION=3.4.5 nuvo/docker-cqlsh
```

Note: The cassandra server itself (the first docker run command you ran) takes a few seconds to start up. The above command will throw an error if the server hasn't finished its init sequence yet, so give it a few seconds to spin up.

STEP 5: INTERACTIVE CQLSH

Much like an SQL shell, you can also of course use CQLSH to run CQL commands interactively.

```
docker run --rm -it --network cassandra nuvo/docker-cqlsh cqlsh cassandra 9042 --cqlversion='3.4.5'
```

This should get you a prompt like so:

```
Connected to Test Cluster at cassandra:9042.  
[cqlsh 5.0.1 | Cassandra 4.0.4 | CQL spec 3.4.5 | Native protocol v  
5]  
Use HELP for help.  
cqlsh>
```

STEP 6: READ SOME DATA

```
SELECT * FROM store.shopping_cart;
```

STEP 7: WRITE SOME MORE DATA

```
INSERT INTO store.shopping_cart (userid, item_count) VALUES ('4567', 20);
```

STEP 8: CLEAN UP

```
docker kill cassandra  
docker network rm cassandra
```

CONGRATULATIONS!

Hey, that wasn't so hard, was it?

To learn more, we suggest the following next steps:

- Read through the [Cassandra Basics](#) to learn main concepts and how Cassandra works at a high level.
- To understand Cassandra in more detail, head over to the [Docs](#).
- Browse through the [Case Studies](#) to learn how other users in our worldwide community are getting value out of Cassandra.

Get started with Cassandra, fast.

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Apache Cassandra powers mission-critical deployments with improved performance and unparalleled levels of scale in the cloud.



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