

CASSANDRA - CQLSH

This chapter introduces the Cassandra query language shell and explains how to use its commands.

By default, Cassandra provides a prompt Cassandra query language shell *cqlsh* that allows users to communicate with it. Using this shell, you can execute **Cassandra Query Language CQL**.

Using *cqlsh*, you can

- define a schema,
- insert data, and
- execute a query.

Starting cqlsh

Start *cqlsh* using the command **cqlsh** as shown below. It gives the Cassandra *cqlsh* prompt as output.

```
[hadoop@linux bin]$ cqlsh
Connected to Test Cluster at 127.0.0.1:9042.
[cqlsh 5.0.1 | Cassandra 2.1.2 | CQL spec 3.2.0 | Native protocol v3]
Use HELP for help.
cqlsh>
```

Cqlsh - As discussed above, this command is used to start the *cqlsh* prompt. In addition, it supports a few more options as well. The following table explains all the options of **cqlsh** and their usage.

Options	Usage
<code>cqlsh --help</code>	Shows help topics about the options of cqlsh commands.
<code>cqlsh --version</code>	Provides the version of the <i>cqlsh</i> you are using.
<code>cqlsh --color</code>	Directs the shell to use colored output.
<code>cqlsh --debug</code>	Shows additional debugging information.
<code>cqlsh --execute</code> <code>cql_statement</code>	Directs the shell to accept and execute a CQL command.
<code>cqlsh --file= "file name"</code>	If you use this option, Cassandra executes the command in the given file and exits.
<code>cqlsh --no-color</code>	Directs Cassandra not to use colored output.
<code>cqlsh -u "user name"</code>	Using this option, you can authenticate a user. The default user name is: <code>cassandra</code> .
<code>cqlsh-p "pass word"</code>	Using this option, you can authenticate a user with a password. The default password is: <code>cassandra</code> .

Cqlsh Commands

Cqlsh has a few commands that allow users to interact with it. The commands are listed below.

Documented Shell Commands

Given below are the Cqlsh documented shell commands. These are the commands used to perform tasks such as displaying help topics, exit from cqlsh, describe, etc.

- **HELP** - Displays help topics for all cqlsh commands.
- **CAPTURE** - Captures the output of a command and adds it to a file.
- **CONSISTENCY** - Shows the current consistency level, or sets a new consistency level.
- **COPY** - Copies data to and from Cassandra.
- **DESCRIBE** - Describes the current cluster of Cassandra and its objects.
- **EXPAND** - Expands the output of a query vertically.
- **EXIT** - Using this command, you can terminate cqlsh.
- **PAGING** - Enables or disables query paging.
- **SHOW** - Displays the details of current cqlsh session such as Cassandra version, host, or data type assumptions.
- **SOURCE** - Executes a file that contains CQL statements.
- **TRACING** - Enables or disables request tracing.

CQL Data Definition Commands

- **CREATE KEYSPACE** - Creates a KeySpace in Cassandra.
- **USE** - Connects to a created KeySpace.
- **ALTER KEYSPACE** - Changes the properties of a KeySpace.
- **DROP KEYSPACE** - Removes a KeySpace
- **CREATE TABLE** - Creates a table in a KeySpace.
- **ALTER TABLE** - Modifies the column properties of a table.
- **DROP TABLE** - Removes a table.
- **TRUNCATE** - Removes all the data from a table.
- **CREATE INDEX** - Defines a new index on a single column of a table.
- **DROP INDEX** - Deletes a named index.

CQL Data Manipulation Commands

- **INSERT** - Adds columns for a row in a table.
- **UPDATE** - Updates a column of a row.
- **DELETE** - Deletes data from a table.
- **BATCH** - Executes multiple DML statements at once.

CQL Clauses

- **SELECT** - This clause reads data from a table
- **WHERE** - The where clause is used along with select to read a specific data.
- **ORDERBY** - The orderby clause is used along with select to read a specific data in a specific order

