

CASSANDRA - SHELL COMMANDS

http://www.tutorialspoint.com/cassandra/cassandra_shell_commands.htm

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Cassandra provides documented shell commands in addition to CQL commands. Given below are the Cassandra documented shell commands.

Help

The HELP command displays a synopsis and a brief description of all cqlsh commands. Given below is the usage of help command.

```
cqlsh> help

Documented shell commands:
=====
CAPTURE COPY DESCRIBE EXPAND PAGING SOURCE
CONSISTENCY DESC EXIT HELP SHOW TRACING.

CQL help topics:
=====
ALTER          CREATE_TABLE_OPTIONS    SELECT
ALTER_ADD      CREATE_TABLE_TYPES      SELECT_COLUMNFAMILY
ALTER_ALTER    CREATE_USER             SELECT_EXPR
ALTER_DROP     DELETE                  SELECT_LIMIT
ALTER_RENAME   DELETE_COLUMNS          SELECT_TABLE
```

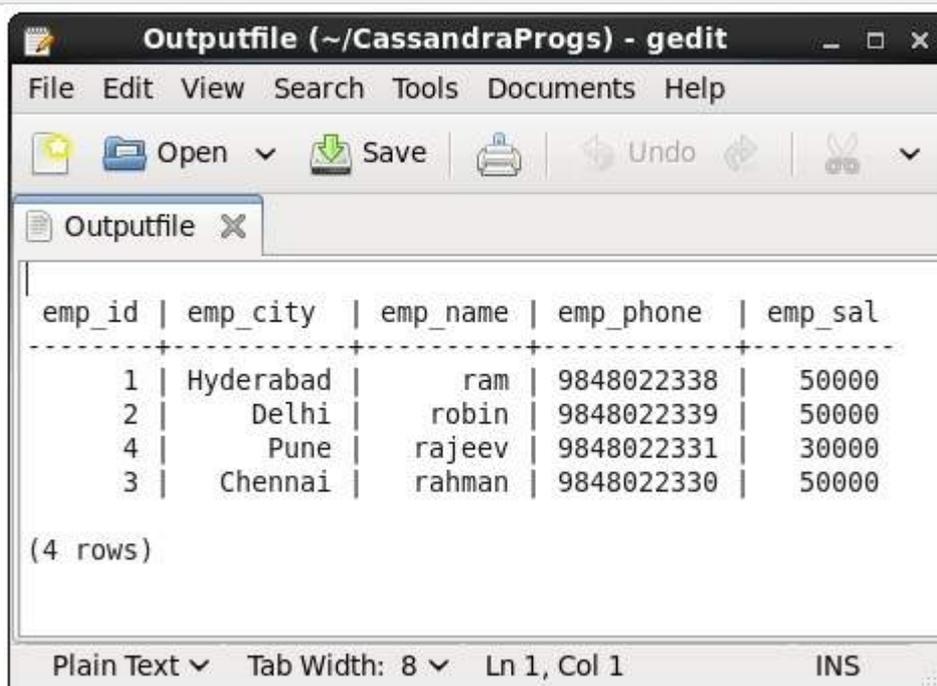
Capture

This command captures the output of a command and adds it to a file. For example, take a look at the following code that captures the output to a file named **Outputfile**.

```
cqlsh> CAPTURE '/home/hadoop/CassandraProgs/Outputfile'
```

When we type any command in the terminal, the output will be captured by the file given. Given below is the command used and the snapshot of the output file.

```
cqlsh:tutorialspoint> select * from emp;
```



```
emp_id | emp_city | emp_name | emp_phone | emp_sal
-----+-----+-----+-----+-----
      1 | Hyderabad |      ram | 9848022338 | 50000
      2 |      Delhi |     robin | 9848022339 | 50000
      4 |      Pune |    rajeev | 9848022331 | 30000
      3 |      Chennai |    rahman | 9848022330 | 50000

(4 rows)
```

You can turn capturing off using the following command.

```
cqlsh:tutorialspoint> capture off;
```

Consistency

This command shows the current consistency level, or sets a new consistency level.

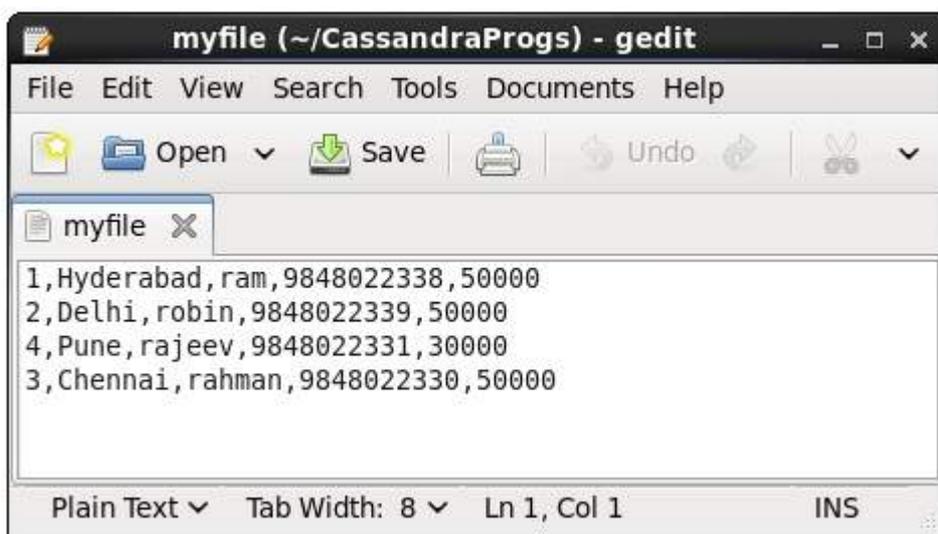
```
cqlsh:tutorialspoint> CONSISTENCY  
Current consistency level is 1.
```

Copy

This command copies data to and from Cassandra to a file. Given below is an example to copy the table named **emp** to the file **myfile**.

```
cqlsh:tutorialspoint> COPY emp (emp_id, emp_city, emp_name, emp_phone,emp_sal) TO  
'myfile';  
4 rows exported in 0.034 seconds.
```

If you open and verify the file given, you can find the copied data as shown below.



Describe

This command describes the current cluster of Cassandra and its objects. The variants of this command are explained below.

Describe cluster - This command provides information about the cluster.

```
cqlsh:tutorialspoint> describe cluster;  
  
Cluster: Test Cluster  
Partitioner: Murmur3Partitioner  
  
Range ownership:  
-658380912249644557 [127.0.0.1]  
-2833890865268921414 [127.0.0.1]  
-6792159006375935836 [127.0.0.1]
```

Describe Keyspaces - This command lists all the keyspaces in a cluster. Given below is the usage of this command.

```
cqlsh:tutorialspoint> describe keyspaces;  
  
system_traces system tp tutorialspoint
```

Describe tables - This command lists all the tables in a keyspace. Given below is the usage of this command.

```
cqlsh:tutorialspoint> describe tables;
emp
```

Describe table - This command provides the description of a table. Given below is the usage of this command.

```
cqlsh:tutorialspoint> describe table emp;

CREATE TABLE tutorialspoint.emp (
  emp_id int PRIMARY KEY,
  emp_city text,
  emp_name text,
  emp_phone varint,
  emp_sal varint
) WITH bloom_filter_fp_chance = 0.01
   AND caching = '{"keys":"ALL", "rows_per_partition":"NONE"}'
   AND comment = ''
   AND compaction = {'min_threshold': '4', 'class':
'org.apache.cassandra.db.compaction.SizeTieredCompactionStrategy',
'max_threshold': '32'}

   AND compression = {'sstable_compression':
'org.apache.cassandra.io.compress.LZ4Compressor'}

   AND dclocal_read_repair_chance = 0.1
   AND default_time_to_live = 0
   AND gc_grace_seconds = 864000
   AND max_index_interval = 2048
   AND memtable_flush_period_in_ms = 0
   AND min_index_interval = 128
   AND read_repair_chance = 0.0
   AND speculative_retry = '99.0PERCENTILE';
CREATE INDEX emp_emp_sal_idx ON tutorialspoint.emp (emp_sal);
```

Describe Type

This command is used to describe a user-defined data type. Given below is the usage of this command.

```
cqlsh:tutorialspoint> describe type card_details;

CREATE TYPE tutorialspoint.card_details (
  num int,
  pin int,
  name text,
  cvv int,
  phone set<int>,
  mail text
);
```

Describe Types

This command lists all the user-defined data types. Given below is the usage of this command. Assume there are two user-defined data types: **card** and **card_details**.

```
cqlsh:tutorialspoint> DESCRIBE TYPES;

card_details card
```

Expand

This command is used to expand the output. Before using this command, you have to turn the expand command on. Given below is the usage of this command.

```
cqlsh:tutorialspoint> expand on;
```

```
cqlsh:tutorialspoint> select * from emp;
```

```
@ Row 1
```

```
-----+-----  
emp_id | 1  
emp_city | Hyderabad  
emp_name | ram  
emp_phone | 9848022338  
emp_sal | 50000
```

```
@ Row 2
```

```
-----+-----  
emp_id | 2  
emp_city | Delhi  
emp_name | robin  
emp_phone | 9848022339  
emp_sal | 50000
```

```
@ Row 3
```

```
-----+-----  
emp_id | 4  
emp_city | Pune  
emp_name | rajeev  
emp_phone | 9848022331  
emp_sal | 30000
```

```
@ Row 4
```

```
-----+-----  
emp_id | 3  
emp_city | Chennai  
emp_name | rahman  
emp_phone | 9848022330  
emp_sal | 50000  
(4 rows)
```

Note: You can turn the expand option off using the following command.

```
cqlsh:tutorialspoint> expand off;  
Disabled Expanded output.
```

Exit

This command is used to terminate the cql shell.

Show

This command displays the details of current cqlsh session such as Cassandra version, host, or data type assumptions. Given below is the usage of this command.

```
cqlsh:tutorialspoint> show host;  
Connected to Test Cluster at 127.0.0.1:9042.
```

```
cqlsh:tutorialspoint> show version;  
[cqlsh 5.0.1 | Cassandra 2.1.2 | CQL spec 3.2.0 | Native protocol v3]
```

Source

Using this command, you can execute the commands in a file. Suppose our input file is as follows:



```
use tutorialspoint;
select * from emp;
```

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Then you can execute the file containing the commands as shown below.

```
cqlsh:tutorialspoint> source '/home/hadoop/CassandraProgs/inputfile';
```

emp_id	emp_city	emp_name	emp_phone	emp_sal
1	Hyderabad	ram	9848022338	50000
2	Delhi	robin	9848022339	50000
3	Pune	rajeev	9848022331	30000
4	Chennai	rahman	9848022330	50000

(4 rows)