



# APACHE CASSANDRA™ COMMAND LINE INTERFACE (CLI) REFERENCE

## ***What is Cassandra?***

Apache Cassandra is a high performance, extremely scalable, fault tolerant (i.e. no single point of failure), distributed post-relational database solution. Cassandra combines all the benefits of Google Bigtable and Amazon Dynamo to handle the types of database management needs that traditional RDBMS vendors cannot support. DataStax is the leading worldwide commercial provider of Cassandra products, services, support, and training.

## ***How do I install Cassandra?***

Downloading and installing Cassandra is very easy. Downloads of Cassandra are available via the DataStax web site at: [www.datastax.com/download](http://www.datastax.com/download).

For installation guidance, please see our online documentation at: [www.datastax.com/docs/1.0/getting\\_started/index](http://www.datastax.com/docs/1.0/getting_started/index) and [www.datastax.com/docs/1.0/install/index](http://www.datastax.com/docs/1.0/install/index). You can also view a guided video tutorial for installing a simple Cassandra and DataStax OpsCenter setup at: [www.datastax.com/resources/tutorials](http://www.datastax.com/resources/tutorials).

## ***What client libraries/drivers can I use with Cassandra?***

There are a number of CQL (Cassandra Query Language) drivers and native client libraries available for most all popular development languages (e.g. Java, Ruby, etc.) All drivers and client libraries can be downloaded from: [www.datastax.com/download/clientdrivers](http://www.datastax.com/download/clientdrivers).

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## **ASSUME** Sets client side validation

```
assume [comparator | sub_comparator | validator | keys ] as [ascii | bytes | counterColumn | int | integer | lexicalUUID | long | utf8];
```

## **CONNECT** Connects to a Cassandra node/cluster

```
connect [hostname or ip address] / [port];
```

## **CONSISTENCYLEVEL** Sets the data consistency level for the client

```
consistencylevel as [one | two | three | quorum | local_quorum | each_quorum | any | all];
```

## **COUNT** Counts the number of columns with specified key

```
count <column family>['<key>']['<super>'];
```

## **CREATE COLUMN FAMILY** Creates a new column family

```
create column family <name> with <att1>=<value1> and <att2>=<value2>...;
```

## **CREATE KEYSPACE** Creates a new keyspace

```
create keyspace <keyspace> with <att1>=<value1> and <att2>=<value2> ...;
```

## **DEL** Deletes a column, row, or subcolumn

```
del <cf>['<key>']['<super>']['<col>'];
```

## **DECR** Decrements the specified column by the value

```
decr <column family>['<key>']['<super>']['<col>'] [by <value>];
```

## **DESCRIBE CLUSTER** Provides metadata about a cluster

```
describe cluster;
```

## **DESCRIBE** Provides metadata on a keyspace or column family

```
describe <keyspace> <column_family>;
```

## **DROP COLUMN FAMILY** Drops/removes a column family from a keyspace

```
drop column family <column family>;
```

## **DROP KEYSPACE** Drops/removes a keyspace

```
drop keyspace <keyspace>;
```

## **DROP INDEX** Drops/removes an index from a column family

```
drop index on <column family>.<column>;
```

## **GET** Retrieves data based on criteria

```
get <column family>['<key>'];
get <column family> where <col> <operator> <value> [and <col> <operator> <value> and ...] [limit <limit>;]
```

## **INC** Increments a counter column by a value

```
incr <column family>['<key>']['<col>'] [by <value>;]
```

## **LIST** Lists a range of rows in a column family

```
list <cf>[<startKey>:<endKey>] limit <limit>;
```

## **SET** Inserts or updates data in a column family

```
set <column family>[<function>(<key>)] [<function>(<col>) || <col>] =<value> || <function> with ttl = <secs>;
```

## **SHOW API VERSION** Displays the API version number

```
show api version;
```

## **SHOW CLUSTER NAME** Displays the cluster name

```
show cluster name;
```

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**SHOW KEYSPACES** Displays all keyspaces with column families on a cluster  
`show keyspaces;`

**SHOW SCHEMA** Creates a script to recreate the current keyspace and column families  
`show schema;`

**TRUNCATE** Removes all data for a column family  
`Truncate <column family>;`

**UPDATE COLUMN FAMILY** Modifies a column family's properties  
`update column family <name> with  
<att1>=<value1> and <att2>=<value2>...;`

**UPDATE KEYSPACES** Modifies a keyspace's properties  
`update keyspace <keyspace> with  
<att1>=<value1> and <att2>=<value2> ...;`

**USE** Switch to a keyspace to perform work  
`use <keyspace name>;`

## ABOUT DATASTAX

DataStax is the primary developer of and worldwide leader in Apache Cassandra. DataStax provides free and commercial software products including DataStax Enterprise, a distributed, scalable, and highly available database platform, based on Apache Cassandra, that is designed for the management of both real-time and analytic workloads. The company has over 100 customers, including leaders such as Netflix, Cisco, Rackspace and Constant Contact, and spanning verticals including web, financial services, telecommunications, logistics and government.

DataStax is backed by industry leading investors, including Lightspeed Venture Partners and Crosslink Capital and is based in Burlingame, CA with offices in Austin, TX and Stamford, CT.

For more information and software downloads, visit [www.datastax.com](http://www.datastax.com).