

CASSANDRA - UPDATE DATA

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

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Updating Data using Cqlsh

UPDATE is the command used to update data in a table. The following keywords are used while updating data in a table:

- **Where** - This clause is used to select the row to be updated.
- **Set** - Set the value using this keyword.
- **Must** - Includes all the columns composing the primary key.

While updating rows, if a given row is unavailable, then UPDATE creates a fresh row. Given below is the syntax of UPDATE command:

```
UPDATE <tablename>
SET <column name> = <new value>
<column name> = <value>....
WHERE <condition>
```

Example

Assume there is a table named **emp**. This table stores the details of employees of a certain company, and it has the following details:

emp_id	emp_name	emp_city	emp_phone	emp_sal
1	ram	Hyderabad	9848022338	50000
2	robin	Hyderabad	9848022339	40000
3	rahman	Chennai	9848022330	45000

Let us now update emp_city of robin to Delhi, and his salary to 50000. Given below is the query to perform the required updates.

```
cqlsh:tutorialspoint> UPDATE emp SET emp_city='Delhi',emp_sal=50000
WHERE emp_id=2;
```

Verification

Use SELECT statement to verify whether the data has been updated or not. If you verify the emp table using SELECT statement, it will produce the following output.

```
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
      3 |      Chennai |    rahman | 9848022330 | 45000

(3 rows)
```

Here you can observe the table data has got updated.

Updating Data using Java API

You can update data in a table using the execute method of Session class. Follow the steps given below to update data in a table using Java API.

Step 1: Create a Cluster Object

Create an instance of **Cluster.builder** class of **com.datastax.driver.core** package as shown below.

```
//Creating Cluster.Builder object
Cluster.Builder builder1 = Cluster.builder();
```

Add a contact point *IPaddressofthenode* using the **addContactPoint** method of **Cluster.Builder** object. This method returns **Cluster.Builder**.

```
//Adding contact point to the Cluster.Builder object
Cluster.Builder builder2 = build.addContactPoint("127.0.0.1");
```

Using the new builder object, create a cluster object. To do so, you have a method called **build** in the **Cluster.Builder** class. Use the following code to create the cluster object.

```
//Building a cluster
Cluster cluster = builder.build();
```

You can build the cluster object using a single line of code as shown below.

```
Cluster cluster = Cluster.builder().addContactPoint("127.0.0.1").build();
```

Step 2: Create a Session Object

Create an instance of Session object using the connect method of Cluster class as shown below.

```
Session session = cluster.connect( );
```

This method creates a new session and initializes it. If you already have a keyspace, then you can set it to the existing one by passing the KeySpace name in string format to this method as shown below.

```
Session session = cluster.connect(" Your keyspace name");
```

Here we are using the KeySpace named **tp**. Therefore, create the session object as shown below.

```
Session session = cluster.connect("tp");
```

Step 3: Execute Query

You can execute CQL queries using the execute method of Session class. Pass the query either in string format or as a Statement class object to the execute method. Whatever you pass to this method in string format will be executed on the **cqlsh**.

In the following example, we are updating the emp table. You have to store the query in a string variable and pass it to the execute method as shown below:

```
String query = " UPDATE emp SET emp_city='Delhi',emp_sal=50000
WHERE emp_id = 2;" ;
```

Given below is the complete program to update data in a table using Java API.

```
import com.datastax.driver.core.Cluster;
import com.datastax.driver.core.Session;

public class Update_Data {
```

```
public static void main(String args[]){  
    //query  
    String query = " UPDATE emp SET emp_city='Delhi',emp_sal=50000"  
  
    //Creating Cluster object  
    Cluster cluster = Cluster.builder().addContactPoint("127.0.0.1").build();  
  
    //Creating Session object  
    Session session = cluster.connect("tp");  
  
    //Executing the query  
    session.execute(query);  
  
    System.out.println("Data updated");  
}  
}
```

Save the above program with the class name followed by .java, browse to the location where it is saved. Compile and execute the program as shown below.

```
$javac Update_Data.java  
$java Update_Data
```

Under normal conditions, it should produce the following output:

```
Data updated  
Loading [MathJax]/jax/output/HTML-CSS/jax.js
```