

Ex No: 7

Export data from Hadoop using Sqoop

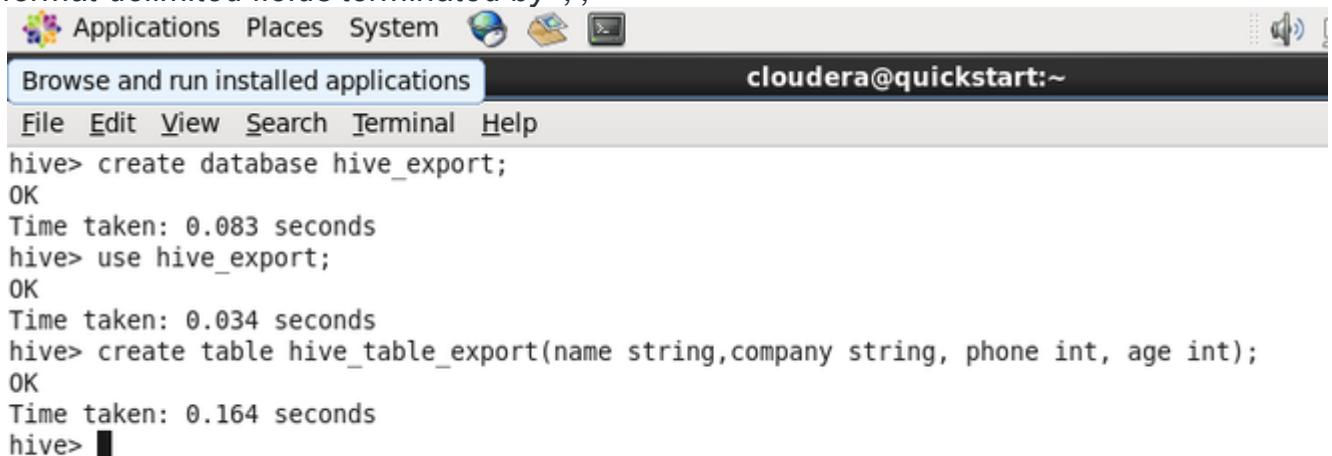
AIM:

To export data from Hadoop using Sqoop to import data to Hive.

To export data into MySQL from HDFS, perform the following steps:

Step 1: Create a database and table in the hive.

```
create table hive_table_export(name string,company string, phone int, age int) row  
format delimited fields terminated by ',';
```



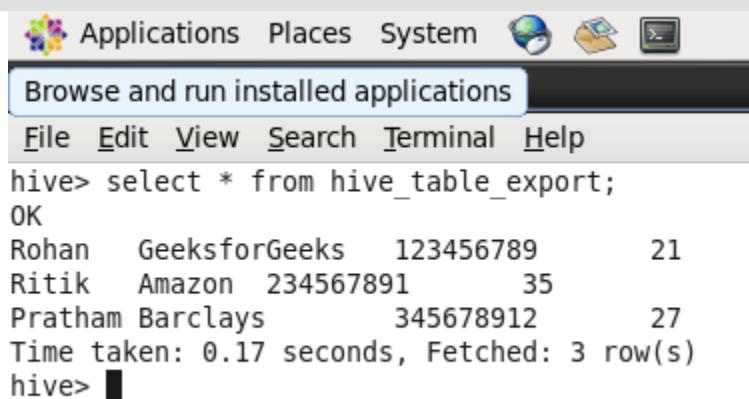
A screenshot of a terminal window titled "cloudera@quickstart:~". The window shows the following Hive commands being run:

```
hive> create database hive_export;  
OK  
Time taken: 0.083 seconds  
hive> use hive_export;  
OK  
Time taken: 0.034 seconds  
hive> create table hive_table_export(name string,company string, phone int, age int);  
OK  
Time taken: 0.164 seconds  
hive> █
```

Hive Database : hive_export and Hive Table : hive_table_export

Step 2: Insert data into the hive table.

```
insert into hive_table_export values("Ritik","Amazon",234567891,35);
```



A screenshot of a terminal window showing the data inserted into the hive table:

```
hive> select * from hive_table_export;  
OK  
Rohan  GeeksforGeeks  123456789      21  
Ritik   Amazon        234567891      35  
Pratham Barclays     345678912      27  
Time taken: 0.17 seconds, Fetched: 3 row(s)  
hive> █
```

Data in Hive table

Step 3: Create a database and table in MySQL in which data should be exported.



```
Browse and run installed applications cloudera@quickstart:~  
File Edit View Search Terminal Help  
mysql> create database mysql_export;  
Query OK, 1 row affected (0.00 sec)  
  
mysql> use mysql_export;  
Database changed  
mysql> create table mysql_table_export(name varchar(65),company varchar(65),phone int, age int);  
Query OK, 0 rows affected (0.02 sec)  
  
mysql> ■
```

MySQL Database : mysql_export and MySQL Table : mysql_table_export

Step 4: Run the following command on Hadoop.

```
sqoop export --connect \  
jdbc:mysql://127.0.0.1:3306/database_name_in_mysql \  
--table table_name_in_mysql \  
--username root --password cloudera \  
--export-dir /user/hive/warehouse/hive_database_name.db/table_name_in_hive \  
--m 1 \  
-- driver com.mysql.jdbc.Driver \  
--input-fields-terminated-by ','
```

```
[cloudera@quickstart ~]$ sqoop export --connect jdbc:mysql://127.0.0.1:3306/mysql_export --table mysql_table_export --username root --password cloudera --export-dir /user/hive/warehouse/hive_export.db/hive_table_export --m 1 --driver com.mysql.jdbc.Driver --input-fields-separated-by ','
Warning: /usr/lib/sqoop/.../accumulo does not exist! Accumulo imports will fail.
Please set $ACCUMULO_HOME to the root of your Accumulo installation.
20/09/08 02:10:05 INFO sqoop.Sqoop: Running Sqoop version: 1.4.5-cdh5.4.2
20/09/08 02:10:05 WARN tool.BaseSqoopTool: Setting your password on the command-line is insecure. Consider using -P instead.
20/09/08 02:10:05 WARN sqoop.ConnFactory: Parameter --driver is set to an explicit driver however appropriate connection manager is not being set (via --connection-manager). Sqoop is going to fall back to org.apache.sqoop.manager.GenericJdbcManager. Please specify explicitly which connection manager should be used next time.
20/09/08 02:10:06 INFO manager.SqlManager: Using default fetchSize of 1000
20/09/08 02:10:06 INFO tool.CodeGenTool: Beginning code generation
20/09/08 02:10:08 INFO manager.SqlManager: Executing SQL statement: SELECT t.* FROM mysql_table_export AS t WHERE 1=0
20/09/08 02:10:08 INFO manager.SqlManager: Executing SQL statement: SELECT t.* FROM mysql_table_export AS t WHERE 1=0
20/09/08 02:10:08 INFO orm.CompilationManager: HADOOP_MAPRED_HOME is /usr/lib/hadoop-mapreduce
Note: /tmp/sqoop-cloudera/compile/3337bf5a79cf6ef945aa0f7d87de28a4/mysql_table_export.java uses or overrides a deprecated API
.
Note: Recompile with -Xlint:deprecation for details.
20/09/08 02:10:17 INFO orm.CompilationManager: Writing jar file: /tmp/sqoop-cloudera/compile/3337bf5a79cf6ef945aa0f7d87de28a4/mysql_table_export.jar
20/09/08 02:10:17 INFO mapreduce.ExportJobBase: Beginning export of mysql_table_export
20/09/08 02:10:17 INFO Configuration.deprecation: mapred.job.tracker is deprecated. Instead, use mapreduce.jobtracker.address
20/09/08 02:10:18 INFO Configuration.deprecation: mapred.jar is deprecated. Instead, use mapreduce.job.jar
20/09/08 02:10:23 INFO manager.SqlManager: Executing SQL statement: SELECT t.* FROM mysql_table_export AS t WHERE 1=0
20/09/08 02:10:23 INFO Configuration.deprecation: mapred.reduce.tasks.speculative.execution is deprecated. Instead, use mapreduce.reduce.speculative
20/09/08 02:10:23 INFO Configuration.deprecation: mapred.map.tasks.speculative.execution is deprecated. Instead, use mapreduce.map.speculative
20/09/08 02:10:23 INFO Configuration.deprecation: mapred.map.tasks is deprecated. Instead, use mapreduce.job.maps
20/09/08 02:10:23 INFO client.RMProxy: Connecting to ResourceManager at /0.0.0.0:8032
20/09/08 02:10:28 INFO input.FileInputFormat: Total input paths to process : 3
20/09/08 02:10:28 INFO input.FileInputFormat: Total input paths to process : 3
20/09/08 02:10:28 INFO mapreduce.JobSubmitter: number of splits:1
20/09/08 02:10:28 INFO Configuration.deprecation: mapred.map.tasks.speculative.execution is deprecated. Instead, use mapreduce.map.speculative
20/09/08 02:10:29 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_1599551473625_0010
20/09/08 02:10:31 INFO impl.YarnClientImpl: Submitted application application_1599551473625_0010
```

SQOOP command to export data

In the above code following things should be noted.

- **127.0.0.1** is the localhost IP address.
- **3306** is the port number for MySQL.
- In the case of exporting data, the entire path to the table should be specified
- **m** is the number of mappers

Step 5: Check-in MySQL if data is exported successfully or not.

```
mysql> select * from mysql_table_export;
+-----+-----+-----+
| name | company | phone | age |
+-----+-----+-----+
| Rohan | GeeksforGeeks | 123456789 | 21 |
| Ritik | Amazon | 234567891 | 35 |
| Pratham | Barclays | 345678912 | 27 |
+-----+-----+-----+
3 rows in set (0.00 sec)
```

```
mysql> ■
```