

Large Scale Data Ingestion Using Sqoop

Exporting Data To MySQL From Hive Using Sqoop

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Exporting Data To MySQL From Hive Using Sqoop

In this demo, we will learn how to transfer the data from a Hive table to MySQL using Sqoop.

Following are the steps involved:

1. Create a MySQL table as per the schema of the hive table to be exported (Hint: use Sqoop eval command).
2. Login to MySQL and verify if the table is created or not.
3. Write Sqoop command to export the data from Hive table to MySQL table created in Step1.
4. Verify if the data is exported to MySQL table or not.

Now let's implement these steps:

1. Create a MySQL table as per the schema of the hive table to be exported (Hint: use Sqoop eval command).

Command: `sqoop eval --connect jdbc:mysql://dbserver.edu.cloudlab.com/labuser_database \`
`--query "CREATE TABLE customer_details(\`
`id int(7), \`
`firstName varchar(50), \`
`lastName varchar(50), \`
`age int(2), \`
`profession varchar(50))" \`
`--username edu_labuser \`
`--password edureka`

```
[edureka_396201@ip-20-0-41-190 ~]$ sqoop eval --connect jdbc:mysql://dbserver.edu.cloudlab.com/labuser_database \
> --query "CREATE TABLE customer_details( \
> id int(7), \
> firstName varchar(50), \
> lastName varchar(50), \
> age int(2), \
> profession varchar(50))" \
> --username edu_labuser \
> --password edureka
Warning: /opt/cloudera/parcels/CDH-5.11.1-1.cdh5.11.1.p0.4/bin/../lib/sqoop/./accumulo does not exist! Accumulo imports will fail.
Please set $ACCUMULO_HOME to the root of your Accumulo installation.
20/01/28 05:25:09 INFO sqoop.Sqoop: Running Sqoop version: 1.4.6-cdh5.11.1
20/01/28 05:25:09 WARN tool.BaseSqoopTool: Setting your password on the command-line is insecure. Consider using -P instead.
20/01/28 05:25:09 INFO manager.MySQLManager: Preparing to use a MySQL streaming resultset.
20/01/28 05:25:09 INFO tool.EvalSqlTool: 0 row(s) updated.
```

2. Login to MySQL and verify if the table is created or not.

Command: `desc labuser_database.customer_details;`

```
[edureka_396201@ip-20-0-41-190 ~]$ mysql -u edu_labuser -pedureka -h dbserver.edu.cloudlab.com
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MySQL connection id is 28107248
Server version: 5.6.38-log MySQL Community Server (GPL)

Copyright (c) 2000, 2017, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MySQL [(none)]> desc labuser_database.customer_details;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id         | int(7)        | YES  |     | NULL    |       |
| firstName  | varchar(50)    | YES  |     | NULL    |       |
| lastName   | varchar(50)    | YES  |     | NULL    |       |
| age        | int(2)        | YES  |     | NULL    |       |
| profession | varchar(50)    | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

3. Write Sqoop command to export the data from Hive table to MySQL table created in Step1.

Command: `sqoop export --connect jdbc:mysql://dbserver.edu.cloudlab.com/labuser_database \`
`--username edu_labuser \`
`--password edureka \`
`--table customer_details \`
`--input-fields-terminated-by '\t' \`
`--export-dir /user/hive/warehouse/custs_details \`
`-m 1`

```
[edureka_396201@ip-20-0-41-190 ~]$ sqoop export --connect jdbc:mysql://dbserver.edu.cloudlab.com/labuser_database \
> --username edu_labuser \
> --password edureka \
> --table customer_details \
> --input-fields-terminated-by '\t' \
> --export-dir /user/hive/warehouse/custs_details \
> -m 1
Warning: /opt/cloudera/parcels/CDH-5.11.1-1.cdh5.11.1.p0.4/bin/../lib/sqoop/./accumulo does not exist! Accumulo import
s will fail.
Please set $ACCUMULO_HOME to the root of your Accumulo installation.
20/01/28 05:56:12 INFO sqoop.Sqoop: Running Sqoop version: 1.4.6-cdh5.11.1
20/01/28 05:56:12 WARN tool.BaseSqoopTool: Setting your password on the command-line is insecure. Consider using -P ins
tead.
```

```
File Input Format Counters
  Bytes Read=0
File Output Format Counters
  Bytes Written=0
20/01/28 05:57:13 INFO mapreduce.ExportJobBase: Transferred 357 bytes in 57.6794 seconds (6.1894 bytes/sec)
20/01/28 05:57:13 INFO mapreduce.ExportJobBase: Exported 6 records.
```

4. Verify if the data is exported to MySQL table or not.

Command: `select * from labuser_database.customer_details;`

```
MySQL [(none)]> select * from labuser_database.customer_details;
```

id	firstName	lastName	age	profession
4000001	Kristina	Chung	55	Pilot
4000002	Paige	Chen	74	Teacher
4000003	Sherri	Melton	34	Firefighter
4000004	Gretchen	Hill	66	Hardware Engineer
4000005	Karen	Puckett	74	Lawyer
4000006	Patrick	Song	42	Teacher

```
6 rows in set (0.00 sec)
```

We have successfully exported the data to MySQL from Hive using Sqoop 😊

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