

Data Ingestion from the RDS to HDFS using Sqoop

Sqoop Import command used for importing table from RDS to HDFS:

```
sqoop import --connect jdbc:mysql://upgradtest.cyaieic9bmnf.us-east-1.rds.amazonaws.com/testdatabase --username student --password STUDENT123 --table SRC_ATM_TRANS --split-by day --direct --warehouse-dir /user/root/testdatabase --compress --delete-target-dir
```

```
22/09/01 05:05:44 INFO mapreduce.Job: Job job_1662008401963_0001 running in uber mode : false
22/09/01 05:05:44 INFO mapreduce.Job: map 0% reduce 0%
22/09/01 05:06:06 INFO mapreduce.Job: map 100% reduce 0%
22/09/01 05:06:32 INFO mapreduce.Job: Job job_1662008401963_0001 completed successfully
22/09/01 05:06:33 INFO mapreduce.Job: Counters: 30
  File System Counters
    FILE: Number of bytes read=0
    FILE: Number of bytes written=760696
    FILE: Number of read operations=0
    FILE: Number of large read operations=0
    FILE: Number of write operations=0
    HDFS: Number of bytes read=406
    HDFS: Number of bytes written=39077529
    HDFS: Number of read operations=16
    HDFS: Number of large read operations=0
    HDFS: Number of write operations=8
  Job Counters
    Launched map tasks=4
    Other local map tasks=4
    Total time spent by all maps in occupied slots (ms)=8529360
    Total time spent by all reduces in occupied slots (ms)=0
    Total time spent by all map tasks (ms)=177695
    Total vcore-milliseconds taken by all map tasks=177695
    Total megabyte-milliseconds taken by all map tasks=272939520
  Map-Reduce Framework
    Map input records=4
    Map output records=2468572
    Input split bytes=406
    Spilled Records=0
    Failed Shuffles=0
    Merged Map outputs=0
    GC time elapsed (ms)=1917
    CPU time spent (ms)=86130
    Physical memory (bytes) snapshot=2341957632
    Virtual memory (bytes) snapshot=13183541248
    Total committed heap usage (bytes)=2087714816
  File Input Format Counters
    Bytes Read=0
  File Output Format Counters
    Bytes Written=39077529
22/09/01 05:06:33 INFO mapreduce.ImportJobBase: Transferred 37.2672 MB in 77.3766 seconds (493.1934 KB/sec)
22/09/01 05:06:33 INFO mapreduce.ImportJobBase: Retrieved 2468572 records.
```

Command used to see the list of imported data in HDFS:

```
hadoop fs -ls /user/root/testdatabase/SRC_ATM_TRANS/
```

Screenshot of the imported data:

```
[hadoop@ip-172-31-94-68 mysql-connector-java-8.0.25]$ hadoop fs -ls /user/root/testdatabase/SRC_ATM_TRANS/
Found 5 items
-rw-r--r-- 1 hadoop hadoop 0 2022-09-01 05:06 /user/root/testdatabase/SRC_ATM_TRANS/_SUCCESS
-rw-r--r-- 1 hadoop hadoop 11167588 2022-09-01 05:06 /user/root/testdatabase/SRC_ATM_TRANS/part-m-00000.gz
-rw-r--r-- 1 hadoop hadoop 9760577 2022-09-01 05:06 /user/root/testdatabase/SRC_ATM_TRANS/part-m-00001.gz
-rw-r--r-- 1 hadoop hadoop 8385138 2022-09-01 05:06 /user/root/testdatabase/SRC_ATM_TRANS/part-m-00002.gz
-rw-r--r-- 1 hadoop hadoop 9764226 2022-09-01 05:06 /user/root/testdatabase/SRC_ATM_TRANS/part-m-00003.gz
```