

sqoop import

If you are implementing in emr pls remember these points

sqoop installed in /usr/lib/sqoop/ folder.

So if you want to import data from oracle place all jars at /usr/lib/sqoop/lib

mysql url: jdbc:mysql://mysqladb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:3306/mysqladb

oracle url: jdbc:oracle:thin://@oracledb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:1521/orcl

mssql url: jdbc:sqlserver://mssql.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:1433

//import from mysql

sqoop import --connect jdbc:mysql://mysqladb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:3306/mysqladb
--username musername --password mpassword --table emp --target-dir=/user/venu/empdata -m 1

//if you are not mention target-dir by default its store in /user/hadoop/ path

sqoop import --connect jdbc:mysql://mysqladb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:3306/mysqladb
--username musername --password mpassword --table emp -m 1

//hide password

sqoop import --connect jdbc:mysql://mysqladb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:3306/mysqladb
--username musername --password-file s3://apachesparktraining/Training/jars/mpassword.txt --target-dir /testing
--table emp -m 1

//import from oracle

sqoop import --connect jdbc:oracle:thin://@oracledb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:1521/orcl
--username ousername --password opassword --table CUSTOMER --target-dir=/user/venu/CUSTOMERdata -m
1

//download jdbc drive and place in sqoop lib folder and warehouse path /usr/lib/sqoop/lib

so download oracle jar ojdbc7.jar from website, with winscp place in emr, than run this command

sudo cp /*.jar /usr/lib/sqoop/lib

//test these files exists or not

ls /usr/lib/sqoop/lib

//import data based on query ... \$CONDITIONS is mandatory its reference as its condition

sqoop import --connect jdbc:oracle:thin://@oracledb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:1521/orcl
--username ousername --password opassword --query 'SELECT * FROM OUSERNAME.EMP where sal >2999
and \$CONDITIONS' --target-dir=/user/venu/emptarget -m 1

//when u r importing data if already data exists, overwrite it using --delete-target-dir

sqoop import --connect jdbc:oracle:thin://@oracledb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:1521/orcl
--username ousername --password opassword --table EMP --delete-target-dir -m 1

// you can join two tables and import the data

```
sqoop import --connect jdbc:oracle:thin://@oracledb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:1521/orcl
--username ouername --password opassword --query 'SELECT b.dname, b.loc, a.ename FROM emp a JOIN
dept b on (a.deptno = b.deptno) WHERE $CONDITIONS' --target-dir=/user/venu/querybased -m 1
```

//check this data is stored in hdfs or not

```
hdfs dfs -cat /user/venu/emptarget/part*
```

//if already in hdfs store / append data in hdfs using --append

```
sqoop import --connect jdbc:oracle:thin://@oracledb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:1521/orcl
--username ouername --password opassword --query 'SELECT * FROM OUSERNAME.EMP where sal <2999
and $CONDITIONS' --append --target-dir=/user/venu/emptarget -m 1
```

//import all tables

```
sqoop import-all-tables --connect
jdbc:mysql://mysqldb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:3306/mysqldb --username musername
--password mpassword -m 1
```

//import all except these tables

```
sqoop import-all-tables --connect
'jdbc:oracle:thin://@oracledb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:1521/ORCL' --username
ouername --password opassword --warehouse-dir /user/hive/warehouse --exclude-tables
'AIRLINE_PARQUET,AIRLINE,AIRLEMPINE_PARQUET,CUSTOMERTAB,EMP,MILLIONDATA,ORAT
AB' -m 1
hdfs dfs -ls /user/hadoop/
```

//overwrite change warehouse path

```
sqoop import-all-tables --connect
jdbc:mysql://mysqldb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:3306/mysqldb --username musername
--password mpassword --warehouse-dir /user/oracle -m 1
```

//warehouse

```
sqoop import --connect
'jdbc:oracle:thin://@oracledb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:1521/ORCL' --username
ouername --password opassword --table EMP --warehouse-dir /user/hive/warehouse -m 1
```

//import data from mssql

//////////

```
CREATE TABLE tempdb.dbo.Products
(ProductID int PRIMARY KEY NOT NULL,
 ProductName varchar(25) NOT NULL,
 Price money NULL,
```

ProductDescription text NULL)

```
INSERT tempdb.dbo.Products (ProductID, ProductName, Price, ProductDescription)
VALUES (1, 'Clamp', 12.48, 'Workbench clamp')
```

```
INSERT tempdb.dbo.Products (ProductName, ProductID, Price, ProductDescription)
VALUES ('Screwdriver', 50, 3.17, 'Flat head')
```

```
INSERT tempdb.dbo.Products
VALUES (75, 'Tire Bar', NULL, 'Tool for changing tires.')
```

```
INSERT Products (ProductID, ProductName, Price)
VALUES (3000, '3mm Bracket', .52)
```

```
UPDATE tempdb.dbo.Products
SET ProductName = 'Flat Head Screwdriver'
WHERE ProductID = 50
```

<https://docs.microsoft.com/en-us/sql/t-sql/lesson-1-creating-database-objects>

```
sqoop import --connect
'jdbc:sqlserver://mssql.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:1433;database=tempdb' --username
msusername --password mspassword --driver com.microsoft.sqlserver.jdbc.SQLServerDriver --table
"dbo.Products" --target-dir=/user/venu/mssqlimport -m 1
```

//like oracle, place jdbc driver in sqoop folder

//if you want to import data from mssql or teradata or redshift table, ist mandatory use --driver

//import data to hive

```
sqoop import --connect jdbc:oracle:thin:@oracledb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:1521/orcl
--username ouername --password opassword --table EMP --hive-import -m 1
//now when u r importing data from oracle table name emp, so in hive also tablename is emp if you want to
overwrite tablename use --hive-table
```

```
sqoop import --connect jdbc:oracle:thin:@oracledb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:1521/orcl
--username ouername --password opassword --table EMP --hive-import --hive-table newemp -m 1
```

//if you have already table overwrite its

```
sqoop import --connect
jdbc:oracle:thin:@oracledb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:1521/ORCL --username ouername
--password opassword --table EMP --hive-overwrite -m 1
```

if you want to import hive data in particular target folder target-dir doesn't support alternatively use warehouse-dir

```
sqoop import --connect jdbc:oracle:thin:@oracledb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:1521/orcl
```

```
--username ouername --password opassword --table EMP --hive-import --target-dir=/user/hive/hiveimp -m 1
```

```
sqoop import --connect jdbc:oracle:thin://@oracledb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:1521/orcl  
--username ouername --password opassword --table EMP --hive-import --warehouse-dir=/user/hive/ -m 1
```

//import data in avro format

```
sqoop import --connect jdbc:oracle:thin://@oracledb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:1521/ORCL  
--username ouername --password opassword --table EMP --as-avrodatafile -m 1
```

```
hdfs dfs -cat /user/hadoop/EMP/part*
```

//import to in avro format

```
sqoop import --connect jdbc:oracle:thin://@oracledb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:1521/ORCL  
--username ouername --password opassword --table EMP --as-avrodatafile -m 1
```

//import in parquet format

```
sqoop import --connect jdbc:oracle:thin://@oracledb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:1521/ORCL  
--username ouername --password opassword --table EMP --as-parquetfile -m 1
```

//Sequencefile

```
sqoop import --connect jdbc:oracle:thin://@oracledb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:1521/ORCL  
--username ouername --password opassword --table EMP --as-sequencefile -m 1
```

//when you are importing data by default row separated by , but if you want to separated by tab \t use
--fields-terminated-by '\t'

```
sqoop import --connect  
'jdbc:oracle:thin://@oracledb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:1521/ORCL' --username  
ouername --password opassword --table ASL --target-dir=/tabdatatarget/ --fields-terminated-by '\t' -m 1
```

--incremental import

//////////

its useful in streaming data.

```
sqoop import --connect  
'jdbc:oracle:thin://@oracledb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:1521/ORCL' --username  
ouername --password opassword --table EMP --check-column empno --incremental append --last-value 7934  
--warehouse-dir /user/hive/warehouse -m 1
```

```
sqoop job --create myjob import --connect  
'jdbc:oracle:thin://@oracledb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:1521/ORCL' --username  
ouername --password opassword --table EMP --check-column empno --incremental append --last-value 7934  
--warehouse-dir /user/hive/warehouse -m 1  
sqoop job --list
```

`sqoop job --exec myjob`

`//export////////very head ache`

first create a table in oracle

put data in hdfs folder only

`hdfs dfs -mkdir /asldata/`

than export the database

`sqoop export --connect`

`'jdbc:oracle:thin:@oracledb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:1521/ORCL' --username`
`ouusername --password opassword --table ASL --export-dir=/asldata/ -m 1`

`sqoop export --connect`

`'jdbc:oracle:thin:@oracledb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:1521/ORCL' --username`
`ouusername --password opassword --table ASL --export-dir=/samp/ -m 1`

`//its append`

`//now if you want to update data in oracle follow this command.`

`sqoop export --connect`

`'jdbc:oracle:thin:@oracledb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:1521/ORCL' --username`
`ouusername --password opassword --table ASL --update-key NAME --update-mode allowinsert`
`--export-dir=/tabdata --input-fields-terminated-by ',' -m 2`

<https://stackoverflow.com/questions/25887086/sqoop-export-using-update-key>

`//limits if you want skip header in sqoop not possible`

`similarly when u r importing its not possible to import schema.`

`especially mal records, very headache in sqoop`

`sqoop export --connect`

`'jdbc:oracle:thin:@oracledb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:1521/ORCL' --username`
`ouusername --password opassword --table USADATAONLY --export-dir=/USDATA/ -m 1`

`//WHEN YOU are export data, bydefault fields terminated by ',' so instead of , if you want tab \t separated use`

`--input-fields-terminated-by '\t';`

`means if you have each data separated by tab use it`

`let eg:`

`cat >tabdata.txt`

`venkat 88 hyd`

`priya 44 blr`

`munna 74 ogl`

`susila 99 blr`

`ctrl+d`

`hdfs dfs -mkdir /tabdata`

```
hdfs dfs -put tabdata.txt /tabdata
```

```
sqoop export --connect
```

```
'jdbc:oracle:thin://@oracledb.ck8xvu8hemdj.ap-south-1.rds.amazonaws.com:1521/ORCL' --username
```

```
ouername --password opassword --table ASL --export-dir=/tabdata/ --input-fields-terminated-by '\t' -m 1
```