SQOOP INSTALLATION

Sqoop is a tool designed to transfer data between Hadoop and relational databases or mainframes. You can use Sqoop to import data from a relational database management system (RDBMS) such as MySQL or Oracle or a mainframe into the Hadoop Distributed File System (HDFS), transform the data in Hadoop MapReduce, and then export the data back into an RDBMS.

Sqoop automates most of this process, relying on the database to describe the schema for the data to be imported. Sqoop uses MapReduce to import and export the data, which provides parallel operation as well as fault tolerance.

Steps for Sqoop Installation are as follows :

1. Download the Sqoop tar file from the official site of apache.

    https://www-us.apache.org/dist/sqoop/1.4.7

2. Extract the tar file to **/usr/local**

    ```
    $tar -xvf sqoop-1.4.7.bin__hadoop-2.6.0.tar.gz
    $ su –
    Password :
    # mv sqoop-1.4.7.bin__hadoop-2.6.0 /usr/local/sqoop
    #exit
    ```

3. Now, set up the Sqoop environment by appending the following lines to ~/**.bashrc** file

    ```
    $sudo vim ~/.bashrc

    # Sqoop variables start
    export PATH=/usr/local/sqoop/bin:$PATH
    export SQOOP_HOME=/usr/local/sqoop
    # Sqoop variables end
    ```

4. To execute **~/.bashrc** file

    ```
    $source ~/.bashrc
    ```

5. To configure Sqoop with Hadoop, you need to edit the **sqoop-env.sh** file, which is placed in the **$SQOOP_HOME/conf** i.e. **/usr/local/sqoop/conf** directory.

    ```
    $cd $SQOOP_HOME/conf
    $ll
    $cp sqoop-env-template.sh sqoop-env.sh
    ```

6. Do the following entries in sqoop-env.sh file by the following commands.

```
$sudo vim sqoop-env.sh

export HADOOP_COMMON_HOME=/usr/local/hadoop
export HADOOP_MAPRED_HOME=/usr/local/hadoop
```

7. Now , download the **mysql-connector-java-5.1.30.tar.gz** file from the link :
http://ftp.ntu.edu.tw/MySQL/Downloads/Connector-J/

The following commands are used to extract mysql-connector-java tarball and
move **mysql-connector-java-5.1.30-bin.jar** to **/usr/local/sqoop/lib** directory.

```
$ tar -zxf mysql-connector-java-5.1.30.tar.gz
$ su
password:
# cd mysql-connector-java-5.1.30
# mv mysql-connector-java-5.1.30-bin.jar /usr/local/sqoop/lib
```

8. Sqoop is installed. Check the version by :

```
$ cd $SQOOP_HOME/bin
$ sqoop-version
```

Sqoop installation is now complete.