

Setting up MySQL on EMR Cluster

Now, you need to set up MySQL on your EMR cluster before you can begin with Apache Sqoop. The following steps will guide you through the setup process:

- Ensure that you have installed the MySQL connector. After that, run the following command to start setting up MySQL on EMR.

```
mysql_secure_installation
```

```
[hadoop@ip-172-31-45-198 mysql-connector-java-8.0.25]$ mysql_secure_installation
```

```
NOTE: RUNNING ALL PARTS OF THIS SCRIPT IS RECOMMENDED FOR ALL MariaDB  
SERVERS IN PRODUCTION USE! PLEASE READ EACH STEP CAREFULLY!
```

```
In order to log into MariaDB to secure it, we'll need the current  
password for the root user. If you've just installed MariaDB, and  
you haven't set the root password yet, the password will be blank,  
so you should just press enter here.
```

```
Enter current password for root (enter for none): |
```

- Now, the command will ask for the current password for root. You need to press **Enter** as no password is currently set for root.

```
Enter current password for root (enter for none):  
OK, successfully used password, moving on...
```

```
Setting the root password ensures that nobody can log into the MariaDB  
root user without the proper authorisation.
```

```
Set root password? [Y/n] |
```

- Then, you will be asked if you want to set the root password. You need to type **Y** and then press **Enter**.

```
Set root password? [Y/n] Y
New password: |
```

- After pressing **Y**, you need to type **123** as the password and then press **Enter**. After that, you will need to confirm the password by typing the password, that is, **123**, again.

```
Set root password? [Y/n] Y
New password:
Re-enter new password:
Password updated successfully!
Reloading privilege tables..
... Success!
```

By default, a MariaDB installation has an anonymous user, allowing anyone to log into MariaDB without having to have a user account created for them. This is intended only for testing, and to make the installation go a bit smoother. You should remove them before moving into a production environment.

```
Remove anonymous users? [Y/n]
```

- Now, you will be asked whether you want to remove anonymous users. Type **Y** and then press **Enter**.

```
Remove anonymous users? [Y/n] Y
... Success!
```

Normally, root should only be allowed to connect from 'localhost'. This ensures that someone cannot guess at the root password from the network.

```
Disallow root login remotely? [Y/n] |
```

- Next, you will be asked if you want to disallow root login remotely. Type **n** and then press **Enter**.

```
Disallow root login remotely? [Y/n] n
... skipping.
```

By default, MariaDB comes with a database named 'test' that anyone can access. This is also intended only for testing, and should be removed before moving into a production environment.

```
Remove test database and access to it? [Y/n] |
```

- Then after this, you will be asked whether you want to remove the test database along with its access. Type **Y** and then press **Enter**.

```
Remove test database and access to it? [Y/n] Y
- Dropping test database...
... Success!
- Removing privileges on test database...
... Success!
```

Reloading the privilege tables will ensure that all changes made so far will take effect immediately.

```
Reload privilege tables now? [Y/n] |
```

- Now, you will be asked if you want to reload privilege tables. Type **Y** and then press **Enter**.

```
Reload privilege tables now? [Y/n] Y
... Success!
```

Cleaning up...

All done! If you've completed all of the above steps, your MariaDB installation should now be secure.

Thanks for using MariaDB!

```
[hadoop@ip-172-31-45-198 mysql-connector-java-8.0.25]$ |
```

- With this, you have set up MySQL. You now need to access the MySQL shell. Enter the following command, type **123** when the password prompt comes up, and finally, press **Enter**.

```
mysql -u root -p
```

```
[hadoop@ip-172-31-45-198 mysql-connector-java-8.0.25]$ mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 118
Server version: 5.5.68-MariaDB MariaDB Server

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
MariaDB [(none)]> |
```

- Once you have accessed MySQL, you need to run the following queries to grant all privileges to the root user.

```
GRANT ALL PRIVILEGES ON *.* TO 'root'@'%' identified by '123' WITH GRANT
OPTION;

flush privileges;

exit;
```

```
MariaDB [(none)]> GRANT ALL PRIVILEGES ON *.* TO 'root'@'%' identified by '123' WITH GRANT OPTION;
Query OK, 0 rows affected (0.00 sec)

MariaDB [(none)]>
MariaDB [(none)]> flush privileges;
Query OK, 0 rows affected (0.00 sec)

MariaDB [(none)]>
MariaDB [(none)]> exit;
Bye
[hadoop@ip-172-31-45-198 mysql-connector-java-8.0.25]$ |
```

- Finally, you need to run the following command to restart the MySQL service to finish setting up MySQL.

```
sudo service mariadb restart
```

```
[hadoop@ip-172-31-45-198 mysql-connector-java-8.0.25]$ sudo service mariadb restart  
Redirecting to /bin/systemctl restart mariadb.service  
[hadoop@ip-172-31-45-198 mysql-connector-java-8.0.25]$ |
```