# configure jump server to use SSL for MySQL server 5.7 version

203 Manu Chacko July 14, 2024 Tweaks & Configuration 55232

## How to configure Ezeelogin to use SSL for MySQL database connections on ubuntu 16.04?

---

Overview: This article gives step by step instructions to configure Ezeelogin to use SSL for MySQL database conneections on ubuntu 16.04.

---

### Mysql - SSL setup on Ubuntu Mysql server 5.7 version

1. Check the Current SSL/TLS Status

Log into MySQL session

Show the state of the SSL/TLS variables by typing:

The **have_openssl** and **have_ssl variables** are both marked as DISABLED. This means that SSL functionality has been compiled into the server, but that it is not yet enabled.

2. Generate SSL/TLS Certificates and Keys

**To enable SSL connections to MySQL, first we need to generate the appropriate certificate and key files**

We can use the following command to generate the necessary files.

The files will be created in MySQL's data directory, located at /var/lib/mysql

```
root@gateway:~#
```

Check the generated files by typing:

```
root@gateway:~#
```

```
```

Enable SSL Connections on the MySQL Server

Restart the MySQL service

```
root@gateway:~#
```

After restarting, open up a new MySQL session using the same command as before.

```
root@gateway:~#
```

Check the state of the SSL/TLS variables by typing:

```
Output
+---------------+----------------+
| Variable_name | Value  |
+---------------+----------------+
| have_openssl  | YES  |
| have_ssl  | YES  |
| ssl_ca  | Ca.pem  |
| ssl_capath  |  |
```

```
| ssl_cert  | server-cert.pem|
| ssl_cipher  |  |
| ssl_crl  |  |
| ssl_crlpath  |  |
| ssl_key  | server-key.pem |
+---------------+----------------+
9 rows in set (0.01 sec)
```

The **have_openssl** and **have_ssl** variables read "YES" instead of "DISABLED" this time.

Check the connection details by the following command:

```
root@gateway:~# mysql -u ezlogin_database_username -p -h
hostname or ip --ssl-ca=/var/lib/mysql/ca.pem --ssl-
cert=/var/lib/mysql/client-cert.pem --ssl-key=/var/lib/mysql/client-
key.pem

example :
```

```
root@gateway:~# mysql -u ezlogin_xxxx -p -h 10.11.1.11 --ssl-
ca=/var/lib/mysql/ca.pem --ssl-cert=/var/lib/mysql/client-cert.pem
--ssl-key=/var/lib/mysql/client-key.pem
```

In Case the certificate verification has been failed, refer SSL certificate failed with MYSQL SSL

```
. . .

SSL: Cipher in use is DHE-RSA-AES256-SHA

. . .

Connection: 127.0.0.1 via TCP/IP

. . .
```

SSL cipher is displayed, indicating that SSL is being used to secure our connection.

3. Configure ezeelogin jump server to use SSL for Mysql

Add mysql_ssl_key,mysql_ssl_cert,mysql_ssl_ca to **/usr/local/etc/ezlogin/ez.conf**

Edit the **/usr/local/etc/ezlogin/ez.conf** file add the following

```
#Add the following

mysql_encrypt yes
```

Make sure that you have changed **db_port** to ***3306*** & **db_host** to the ***IP Address of your host***

4. Change the bind-address & allow the Ezeelogin jump server user to access the database.

Edit the /etc/mysql/mysql.conf.d/mysqld.cnf & change bind-address

Restart the MySQL service

```
root@gateway:~# systemctl restart mysql
```

You can find out Ezeelogin jump server **dbname** and mysql **username** from the **ez.conf** file

Use this command for granting privileges for root " **GRANT USAGE ON ezlogin_databasename.* TO 'root'@'Hostname or ip' WITH GRANT OPTION;** "

Login to MySQL

```
root@gateway:~# mysql -u root -p

[Enter password]
```

Check if you can log in to MySQL using Ezeelogin jump server databases.

**If you have any difficulties please contact support**

Online URL:
https://www.ezeelogin.com/kb/article/configure-jump-server-to-use-ssl-for-mysql-server-5-7-version-203.html