

configure jump server to use SSL for MySQL

206 Manu Chacko August 1, 2023 [Tweaks & Configuration](#) 9491

How to configure Ezeelogin jump server to use SSL for MySQL database connections on centos?

Mysql-SSL setup on Centos 7, Mysql server 5.5 version

1. Check the Current SSL/TLS Status

Log into a MySQL session

```
root@gateway:~# mysql -u root -p -h 127.0.0.1
```

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

```
mysql> SHOW VARIABLES LIKE '%ssl%';
```

Output

```
+-----+-----+
| Variable_name | Value |
+-----+-----+
| have_openssl  | DISABLED |
| have_ssl      | DISABLED |
| ssl_ca        |          |
| ssl_capath    |          |
| ssl_cert      |          |
| ssl_cipher    |          |
| ssl_crl       |          |
| ssl_crlpath   |          |
| ssl_key       |          |
+-----+-----+
```

9 rows in set (0.01 sec)

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

Create a clean environment



Create the CA certificate



Create the server certificate, remove passphrase, and sign it



Create the client certificate, remove passphrase, and sign it

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

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

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

After generating the certificates, verify them:

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

Enable SSL for MySQL

We have to edit the MySQL configuration file '/etc/my.cnf'

In the '[mysqld]' section, paste the configuration below.



Restart the MySQL service

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

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

```
root@gateway:~# mysql -u root -p -h 127.0.0.1
```

Check state of the SSL/TLS variables by typing:

```
mysql> SHOW VARIABLES LIKE '%ssl%';
```

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@localhost ~]# mysql -u ezlogin_database_username -p -h hostname  
or ip --ssl-ca=/etc/certs/ca.pem --ssl-cert=/etc/certs/client-  
cert.pem --ssl-key=/etc/certs/client-key.pem
```

example :

```
[root@localhost ~]# mysql -u ezlogin_xxxx -p -h 10.11.1.11 --ssl-  
ca=/etc/certs/ca.pem --ssl-cert=/etc/certs/client-cert.pem --ssl-  
key=/etc/certs/client-key.pem
```

In Case the certificate verification has been failed, refer [SSL certificate failed with MYSQL SSL](#)

```
mysql> s
```

```
-----
```

```
...
```

```
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 5.5

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

```
root@gateway:~# vi /usr/local/etc/ezlogin/ez.conf

#Add the following

system_folder /var/www/ezlogin/
force_https no
uri_path /ezlogin/
db_host 10.10.1.11
db_port 3306
db_name ezlogin_qzms
db_user ezlogin_edcjwz
db_pass dsH)$s5xAE[QgFms
db_prefix aqvo_
cookie_encryption_key ASvs8^pnu^^X9
cookie_name lcrdfs
cookie_path /ezlogin/
www_folder /var/www/html/ezlogin/
admin_user admin
mysql_encrypt yes
mysql_ssl_key /etc/certs/client-key.pem
mysql_ssl_cert /etc/certs/client-cert.pem
mysql_ssl_ca /etc/certs/ca.pem
mysql_ssl_cpath /etc/certs/
mysql_ssl_verify no
```

Make sure that you have changed **db_port** to **3306** & **db_host** to *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

```
root@gateway:~# vi /etc/mysql/mysql.conf.d/mysqld.cnf

Change bind-address to host ip(server ip)

bind-address x.x.x.x (Host ip)
```

Restart the MySQL service

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

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

```
root@gateway:~# cat /usr/local/etc/ezlogin/ez.conf

system_folder /var/www/ezlogin/
```

```
force_https no
uri_path /ezlogin/
db_host 10.10.1.11
db_port 3306
db_name ezlogin_qzms
db_user ezlogin_edcjwz
db_pass dsH)$s5xAE[QgFms
db_prefix aqvo_
cookie_encryption_key ASvs8^pnu^^X9
cookie_name lcrfs
cookie_path /ezlogin/
www_folder /var/www/html/ezlogin/
admin_user admin
mysql_encrypt yes
mysql_ssl_key /etc/certs/client-key.pem
mysql_ssl_cert /etc/certs/client-cert.pem
mysql_ssl_ca /etc/certs/ca.pem
mysql_ssl_capath /etc/certs/
mysql_ssl_verify no
```

Login to mysql

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

[Enter password]

mysql> grant all on ezlogin_databasename.* to 'mysql_username'@'%'
identified by 'password';

example : mysql > grant all on ezlogin_xxx.* to 'ezlogin_xxxx'@'%'
identified by 'dsH)$s5xAE[QgFmfsfgg';

mysql > flush privileges;

mysql > exit
```

Check if you can log in to MySQL using Ezeelogin databases

```
root@gateway:~# mysql -u ezeelogin_databasename_username -h  
10.11.1.11 -p  
  
Enter Password:  
  
mysql >  
  
mysql > exit
```

If you have any difficulties please contact support

Online URL: <https://www.ezeelogin.com/kb/article/configure-jump-server-to-use-ssl-for-mysql-206.html>