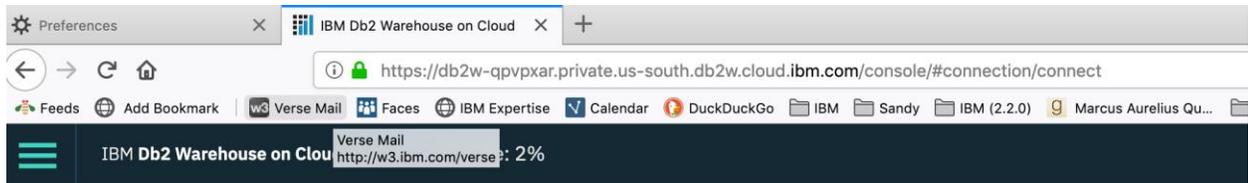


How to setup Toad for secure access to DB2 on the IBM cloud

References:

1. DB2 CLI connection testing:
https://www.ibm.com/support/knowledgecenter/en/SS6NHC/com.ibm.swg.im.dashdb.doc/connecting/connect_connecting_cli_and_odbc_applications.html
 2. GSKit
https://www.ibm.com/support/knowledgecenter/en/SS6NHC/com.ibm.swg.im.dashdb.doc/connecting/connect_connecting_ibm_datastage.html
 3. Setting up SSL for DB2 access
<https://www.ibm.com/developerworks/data/library/techarticle/dm-1306seuresocketlayers/>
or
<https://medium.com/datadriveninvestor/configuring-secure-sockets-layer-ssl-for-db2-server-and-client-3b317a033d71>
1. Collect connect information, including database details such as:
 - i. hostname: < Ip or Hostname>
 - ii. Port number 50000
 - iii. Database name: BLUDB
 - iv. username: "bluadmin",
 - v. password: "<Password>",
 2. Download the Db2cli (driver)
 - a. You can download the driver package for your operating system from the Db2 Warehouse on Cloud web console. From your IBM Cloud dashboard, open your Db2 Warehouse on Cloud service. Log in to your Db2 Warehouse on Cloud web console.
 - i. Login to the Db2 Warehouse console
<https://<hostname>/console>

[or](#)
<https://<IP>/console>
 - ii. Once you have logged into your Db2 Warehouse click on the Hamburger icon (upper left) > Connection Info > Connect > Use the pull down to find the connection type, eg: CLI, Embedded SQL, JDBC, NodeJS or OLEDB > Select CLI (you should see the following):



CONNECT

Connect to Db2 Warehouse on Cloud

CLI

The **CLI** driver is included as part of the IBM Data Server driver package. Download the driver specific to your operating system on the [connection info](#) page. After you install the driver, check the connection configuration resources on the [connection info](#) page for details about your instance. See the [Db2 driver package](#) documentation in IBM Knowledge Center for more information.

- b. Click on “Connection Information” in the text.
- c. Select the tile representing your operating system to download the:
 - i. Appropriate driver (Db2cli)
 - ii. SSL certificate (DigiCertGlobalRootCA.crt file)
3. Be sure to select your operating system, eg: Windows.
4. Install Db2cli on your Windows machine.
5. Now Download and install the GSKit for Windows
 - a. The required / latest GSKit V8 can be downloaded from IBM Fix Central:
 - i. https://www-945.ibm.com/support/fixcentral/swg/selectFixes?parent=Security+Systems&product=ibm/Tivoli/IBM+Global+Security+Kit&release=All&platform=All&function=fixId&fixids=8.0.*&source=fc
 - ii. As a backup try this link:
 1. <https://www-01.ibm.com/support/docview.wss?uid=swg21631462>
 2. Then click on ‘ IBM Fix Central’ in the sentence “ The required / latest GSKit V8 can be downloaded from “IBM Fix Central.””
6. Assuming you on Windows, we need to add the GSKit directories to your Windows PATH environment variable:

```
<installation_directory>\gsk8\bin
<installation_directory>\gsk8\lib
```
7. Open a command line or terminal and make a new directory to store the SSL certificate and key files.

```
# /home/db2inst2> mkdir SSL
# /home/db2inst2> cd SSL
```
8. Copy the DigiCertGlobalRootCA.crt certificate into the SSL directory you made above.
9. Create a client keystore database in the DataStage system by using the gsk8capicmd utility. This utility is included in the DB2® server installation.

```
# /home/db2inst2/SSL> gsk8capicmd -keydb -create -db <keystore_db.kdb> -pw  
<ks_db_password> -stash
```

where <keystore_db.kdb> represents the client keystore database and
<ks_db_password> represents the password for the client keystore database.

10. Add the certificate to the client keystore database.

```
a. # /home/db2inst2/SSL> gsk8capicmd -cert -add -db <keystore_db.kdb> -pw  
<ks_db_password> -label BLUDB_SSL -file DigiCertGlobalRootCA.crt
```

where <keystore_db.kdb> represents the client keystore database and
<ks_db_password> represents the password for the client keystore database.

11. Now validate your connection:

```
db2cli validate -dsn alias -connect -user userid -passwd password
```

where:

alias is the alias you created with the db2cli writecfg command

userid is from the connect credentials you collected beforehand

password is from the connect credentials you collected beforehand

2. Once your windows client has been setup to support SSL DB2 .Net connections, you can use Toad DB2 and Toad Data Point and connect via SSL. For example, in Toad you could create a 'connection string' DB2 connection and specify all the necessary syntax such as:

Connection Properties [X]

Group: DB2

Connection method
 Catalog Direct Connection string

```
Database=SAMPLE;  
Server=localhost:50000;  
CurrentSchema=TOAD;  
UID=TOAD;  
Pooling=False;  
Connect Timeout=15;  
Security=ssl;  
SSLClientKeystoredb=C:\db2\ibm\gsk8\clientstore.kdb;  
SSLClientKeystash=C:\db2\ibm\gsk8\clientstore.sth;
```

Restore default

Name: SAMPLE-CS-SSL(JPODLASEK)

Category: None

Save password Connect on startup

Make it the active connection on startup

Connect Save Cancel