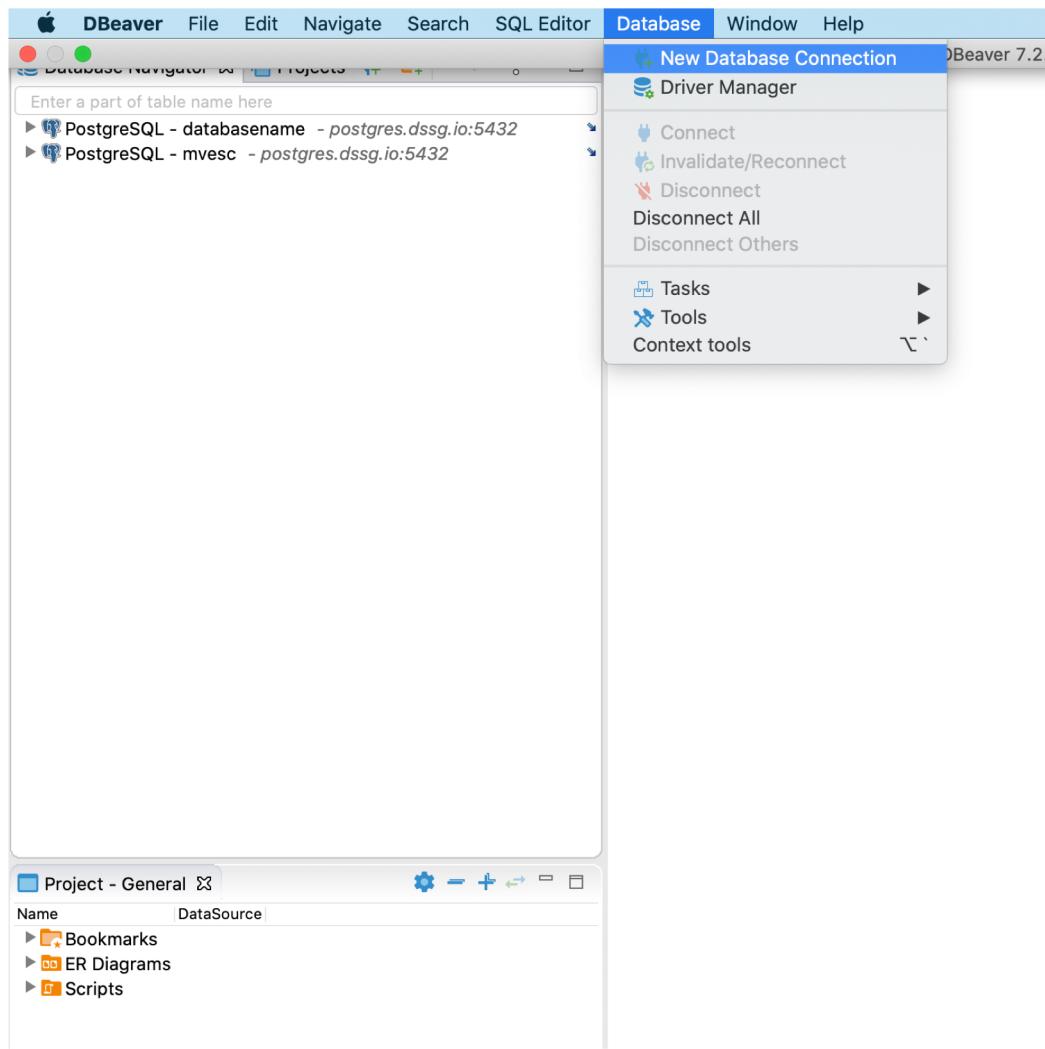


Installing DBeaver

- <https://dbeaver.com/edition/community/>
- Install the community edition (because it's free)
- Install any drivers it's asking you to install

Create new connection and select postgres



Connect to database

Connection Settings

PostgreSQL connection settings

Main PostgreSQL Driver properties SSH Proxy SSL

Server

Host: mlpolicylab.db.dssg.io Port: 5432

Database: group_students_database

Authentication

Authentication: Database Native

Username: your_andrew_id

Password: Save password locally

Advanced

Local Client:

(i) You can use variables in connection parameters.

Connection details (name, type, ...)

Edit Driver Settings

Driver name: PostgreSQL

Test Connection ... < Back Next > Cancel Finish

This is the *database server* we are using all semester

This is the test database name for now. Your project will have a different database name so you'll need to replace this later.

Enter your andrew id here

This is your database password. We have stored it in a file called .pgpass and placed it in your directory on the server - it will be a long string with lots of words combined. When you log on to the server through ssh, type cat .pgpass to see it (it will start after your andrew id in .pgpass)

Connect to database

Connection Settings

PostgreSQL connection settings

Main PostgreSQL Driver properties **SSH** Proxy SSL

Use SSH Tunnel

Profile:

Host/IP: `mlpolicylab.dssg.io`

User Name: `your_andrew_id`

Authentication Method: `Public Key`

Private Key: `select your private key file here`

Passphrase: Save Password

Advanced

Implementation: `JSch`

Local host: Remote host:

Local port: `0` Remote port: `0`

Keep-Alive interval (ms): `0` Tunnel connect timeout (ms): `10000`

(i) You can use variables in SSH parameters.

Test Connection ... < Back Next > Cancel **Finish**

You need to “tunnel” through the class server to get to the database so this tab needs your server information

This is the *class server* we are using. – same as the one you ssh’ed to earlier

Enter your andrew id here

You can directly enter the path to your private key file or navigate to it using the folder icon. This will typically be `~/.ssh/id_rsa` for mac/linux or `C:\Users\username\.ssh\id_rsa` for windows

When you generated your ssh key, you may have entered a passphrase to protect it. If you did, you will need to enter it here. If you left it blank, you can leave it blank here.

Click here to test if everything is working

The screenshot shows the PostgreSQL Connection Settings dialog with the SSH tab selected. Several fields are highlighted with red boxes and arrows pointing to explanatory text on the right side of the screen:

- Use SSH Tunnel**: Points to the "Use SSH Tunnel" checkbox.
- SSH Tab**: Points to the "SSH" tab in the top navigation bar.
- Host/IP**: Points to the "Host/IP" field containing "mlpolicylab.dssg.io".
- User Name**: Points to the "User Name" field containing "your_andrew_id".
- Authentication Method**: Points to the "Authentication Method" dropdown set to "Public Key".
- Private Key**: Points to the "Private Key" field with the placeholder "select your private key file here".
- Passphrase**: Points to the "Passphrase" input field.
- Implementation**: Points to the "Implementation" dropdown set to "JSch".
- Local host**: Points to the "Local host" input field.
- Remote host**: Points to the "Remote host" input field.
- Local port**: Points to the "Local port" input field set to "0".
- Remote port**: Points to the "Remote port" input field set to "0".
- Keep-Alive interval (ms)**: Points to the "Keep-Alive interval (ms)" input field set to "0".
- Tunnel connect timeout (ms)**: Points to the "Tunnel connect timeout (ms)" input field set to "10000".
- Test Connection ...**: Points to the "Test Connection ..." button at the bottom left.

Debugging

- If you get an error, take a screenshot and **paste it in tech-help on slack**
- Common errors:
 - You may not be on the CMU full VPN
 - You get an error **invalid privatekey: [B@7696c31f**
 - You may need to install a different SSH package called "SSHJ" -- under the Help menu, choose "Install new Software" then search for SSHJ and install the package (you'll need to restartdbeaver). After restarting, choose "SSHJ" in the drop-down under advanced (should be labeled either "Implementation" or "Method")
 - If that doesn't work, you can try changing the format of your private key: go to the directory where your private key is and type **ssh-keygen -p -m PEM -f id_rsa** and trydbeaver again