Connecting to PostgreSQL on Linux for the first time

Note

This section uses the command line utility `psql` and optionally the graphical utility `pgAdmin`. These tools may not automatically present, depending on the type of installation of OpenGeo Suite. Please see the *Installation* section for information on how to install these tools for your platform.

On Windows and OS X, PostgreSQL is configured to be accessed immediately. No further configuration is required. Th user name is `postgres` and password is `postgres`.

However, on Linux, both on Ubuntu and Red Hat-based systems, additional work needs to be undertaken. This is beca the default PostgreSQL configuration on both Ubuntu and Red Hat-based systems has connections turned off for the `postgres` user by default.

So after install of OpenGeo Suite, if you try to connect to PostgreSQL via the **psql**command-line utility or through pgAc you will get the following connection error:

```
psql: FATAL:  peer authentication failed for user "postgres"
```

There are two steps to allow connections to PostgreSQL:

- Set a password for the `postgres` user
- Allow local connections to PostgreSQL

For more information, please see the Ubuntu documentation on PostgreSQL.

Setting a password for the `postgres` user

On Windows and OS X, the default password is `postgres`. But on Linux systems, there is no default password set.

To set the default password:

1. Run the **psql** command from the `postgres` user account:

   ```
   sudo -u postgres psql postgres
   ```

2. Set the password:

```
\password postgres
```

3. Enter a password.
4. Close **psql**.

   ```
   \q
   ```

Allowing local connections

The file `pg_hba.conf` governs the basic constraints underlying connection to PostgreSQL. By default, these settings very conservative. Specifically, local connections are not allowed for the `postgres` user.

To allow this:

1. As a super user, open `/etc/postgresql/9.3/main/pg_hba.conf` (Ubuntu) or `/var/lib/pgsql/9.3/data/pg_hba.conf` (Red Hat) in a text editor.
2. Scroll down to the line that describes local socket connections. It may look like this:

   ```
   local   all             all                                      peer
   ```

3. Change the `peer` method to `md5`.

   > **Note**
   >
   > For more information on the various options, please see the PostgreSQL documentation on pg_hba.conf.

4. To allow connections using pgAdmin, find the line that describes local loopback connections over IPv6:

   ```
   host    all             all             ::1/128                 ident
   ```

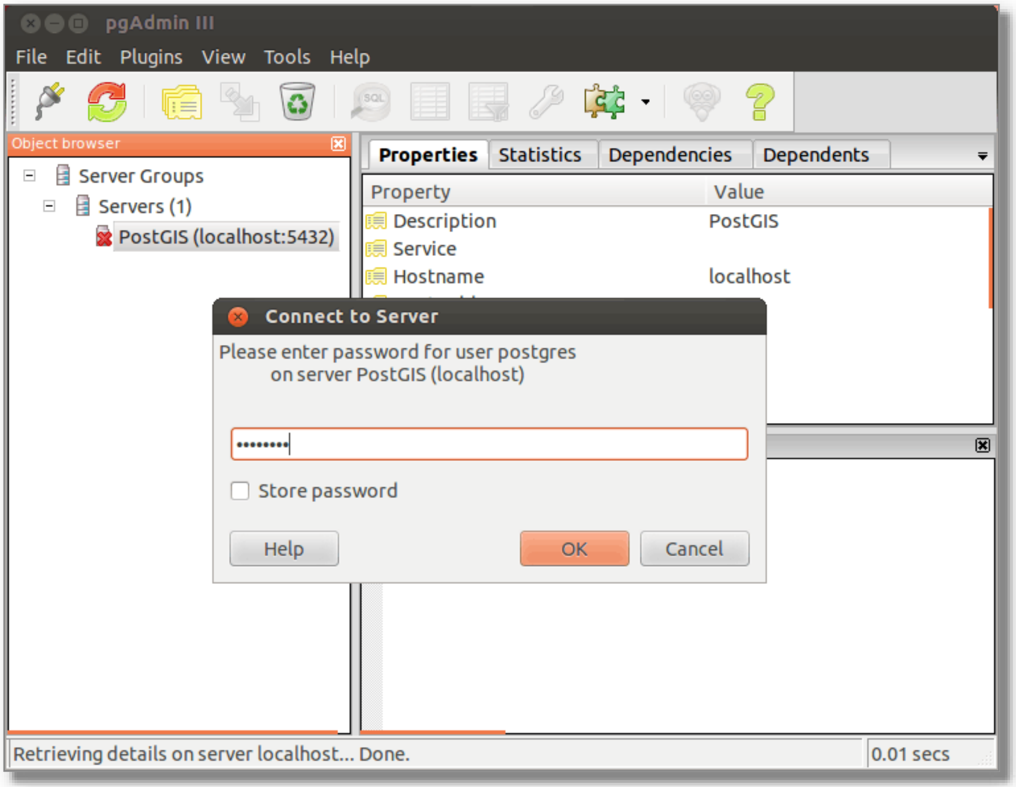
5. Change the `ident` method to `md5`.
6. Save and close the file.
7. Restart PostgreSQL:

   ```
   sudo service postgresql restart
   ```

8. To test your connection using **psql**, run the following command:

and enter your password when prompted. You should be able to access the **psql** console.

9. To test your connection using **pgAdmin**, connect to the database at localhost:5432 using the user name `postgres` and the password supplied.



Property	Value
Description	PostGIS
Service	
Hostname	localhost

Please enter password for user postgres
on server PostGIS (localhost)

••••••••

Retrieving details on server localhost... Done.

0.01 secs

Testing the connection in pgAdmin

If you encounter errors, make sure that the `postgres` password is set correctly, and that the correct line was edited in `pg_hba.conf`, as many look alike.

Allowing remote connections

Often the system running `psql` will be different from the system running the database. This is especially true if you w to run **pgAdmin** from your system.

In order to allow connections from remote systems, some slightly different configuration will be necessary.

The details are similar to that of allowing local connections, with some slight differences.

1. As a super user, open `/etc/postgresql/9.3/main/pg_hba.conf` (Ubuntu) or `/var/lib/pgsql/9.3/data/pg_hba.conf` (Red Hat) in a text editor.
2. Scroll down to the line that describes local socket connections. It may look like this:

```
local   all             all                                     peer
```

```
host    all             all             0.0.0.0/0               trust
```

Warning

This is a potential security risk, and you may wish to customize this further. For more information on the various options, please see the PostgreSQL documentation on pg_hba.conf.

4. Save and close the file.
5. In the same directory, open `postgresql.conf`.
6. Under the section on ***Connection Settings***, add or replace the line that starts with `listen_addresses` to respo to all requests:

```
listen_addresses = '*'
```

Note

Make sure the line is uncommented.

7. Save and close the file.
8. Restart PostgreSQL:

```
sudo service postgresql restart
```

9. To test your connection using **pgAdmin**, connect to the database at the IP address or host name of the system tha hosts the database. Enter the user name `postgres` and the password supplied.

Note

Make sure that port 5432 is open on this system.