Importing an Excel File into PgAdmin

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Sometimes working with data in *Excel* has its limitations on query functions and timeliness. This guide shows how to easily import an *Excel* file into **PgAdmin**. **QGIS** is a necessary platform to enable this process, whereas using **PgAdmin** itself for this procedure is more complicated. For ease of explanation and for visual purposes, the default **PostgreSQL 10** server in **PgAdmin** and **QGIS** *version* **3.6.2** have been used for this guide.

**1**. Before beginning the process of importing an *Excel* file into **PgAdmin**, it is important to first edit the *Excel* file so **PgAdmin** will have an easier time reading it. Below are helpful tips:

* Use lower case
* No spaces, use underscores instead
* Save your excel file as a .csv
* Numbers should not be at the beginning of the filename
* All columns need a header

**2**. Open **PgAdmin** and either select or create a database and schema. For using an existing database and schema, please refer to Steps **9** and **10**.

Create a new database and schema by:

* Connect to the **PostgreSQL 10** server, right click on *Databases* and choose *Create* > *Database (Figure i)*; give it a name of your choice. This guide uses the name **xl**.
* Create a schema by right clicking on the newly created **xl** database and then *Create* > *Schema (Figure ii)*; give it a name of your choice. This guide uses the name **excel**.

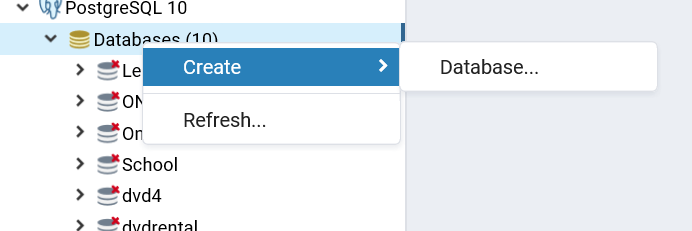
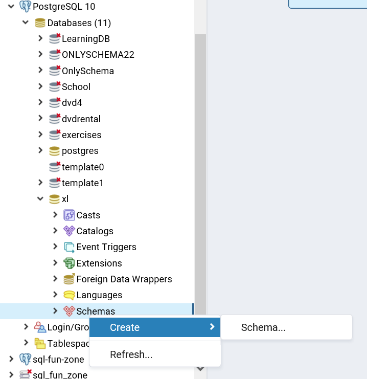
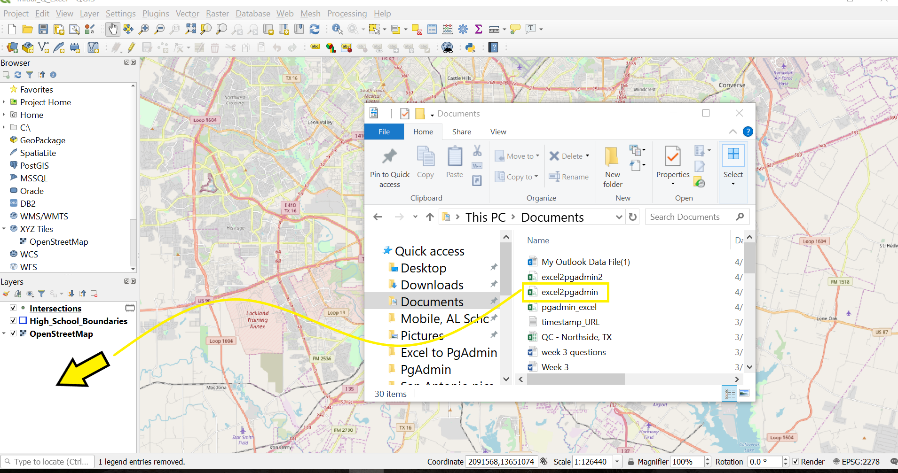


Figure ii

Figure i



**3.** Open the ***3.6.2*** *version of* ***QGIS*** (also referred to as ***Q***) and set up the screen to easily drag the Excel file into **Q**’s *Layers* window (*Figure iii*).

Figure iii

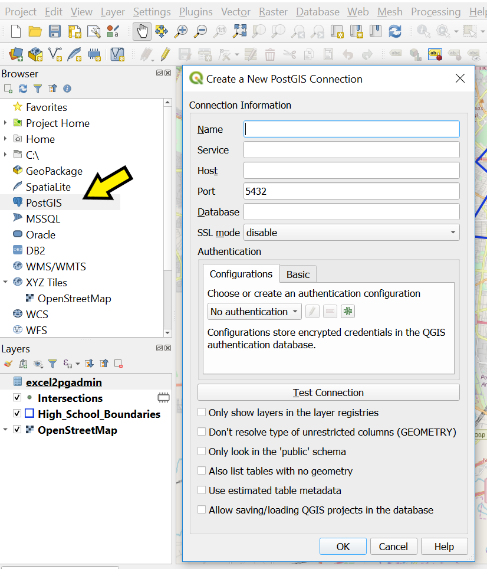
**4**. In the browser window (*Figure iv)*, right click *PostGIS* > *New Connection*. Another window called *Connection Information* will open needing information found in **PgAdmin**.

Figure iv

**5**. Go back to **PgAdmin** and right click the **PostgreSQL 10** server containing the **xl** database and click on *Properties* where the information is found for a simple copy/paste into **Q**’s *Connection Information* window*:*

* Copy/paste the server *name* found in the *General* tab(**PostgreSQL 10**)
* Click the *Connection* tab (fields might be gray) and copy/paste the *Host name/address*
* For *Database,* type in **xl**.
* Check the box *Also list tables with no geometry* > *OK.*

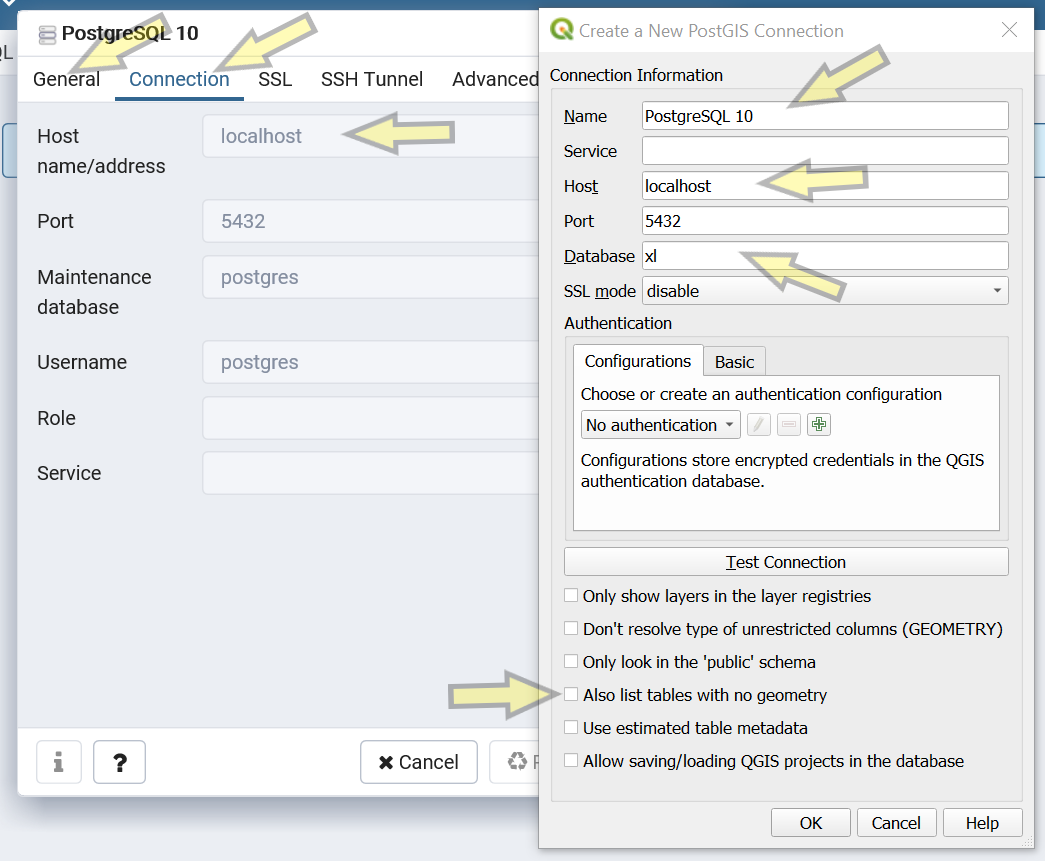
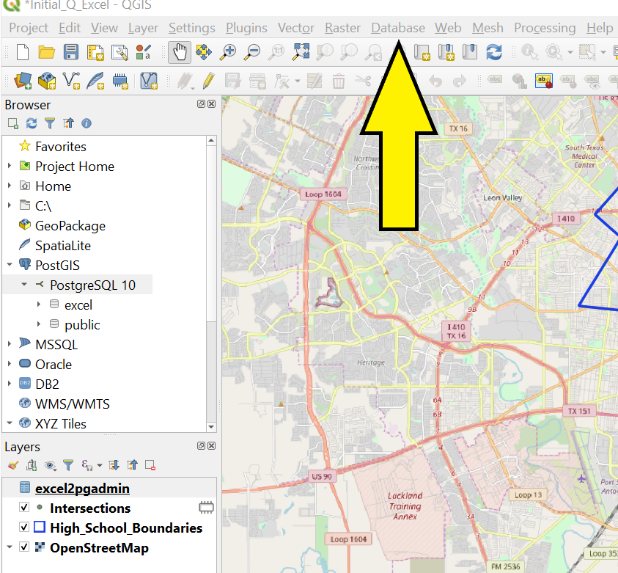


Figure v

**6**. Return to **Q**, click on *PostGIS* > **PostgreSQL 10** (clicking the bullet points by the name works); a window should automatically open to enter username and password, which will be either the credentials given to you for access to a particular database, or what you used when you downloaded **PostgreSQL 10**. Note, if the window does not automatically open, then try right clicking on **PostgreSQL 10** and select *Refresh.*

**7**. At the top of the page in **Q**, click on the *Database* tab (*Figure vi*):



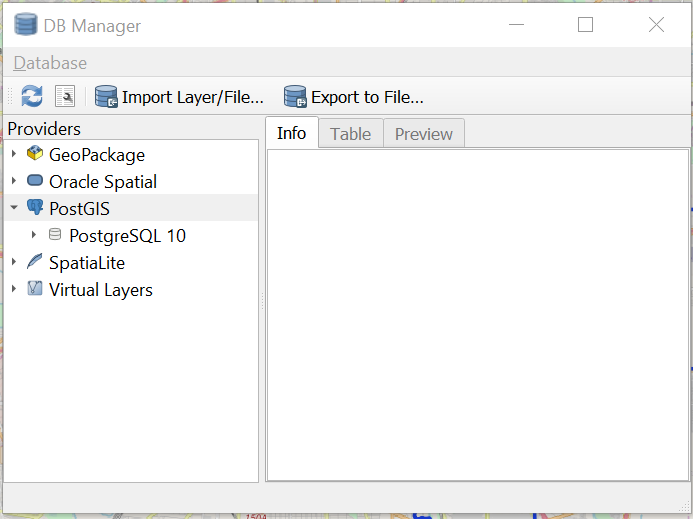


Figure vii

Figure vi

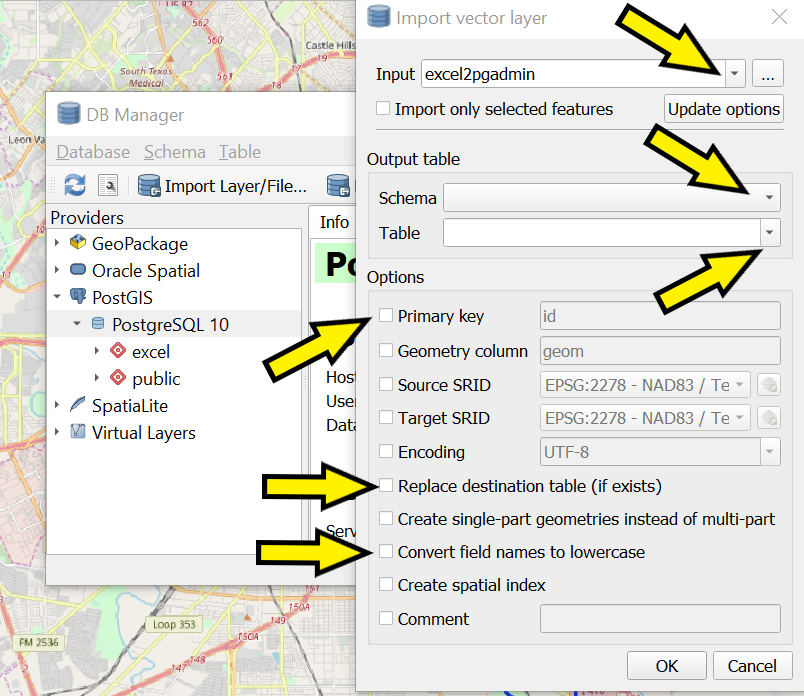
* Click on *Database Manager* > *PostGIS* (*Figure vii*);

Figure viii

* Enter your credentials, again.
* Click on the *Import Layer/File*. The *Input* dropdown will contain the files in **Q**’s *Layers* window which should include the *Excel* file (*Figure viii*).
* Under the *Output table* (*Figures viii & ix*):
* Select the *Schema* **excel** from the dropdown menu.
* Choose an appropriate name for the table: **xl\_test**.
* Check the *Primary key* and enter the column name. Note, **Q** will automatically make a unique primary key, but for good habit’s sake, change the name to match the header of the primary key in the table (for example, ‘objectid’ and not the default ‘id’).
* Check the box for *Replace destination table (if exists)* as well as *Convert field names to lowercase*.
* *OK.*

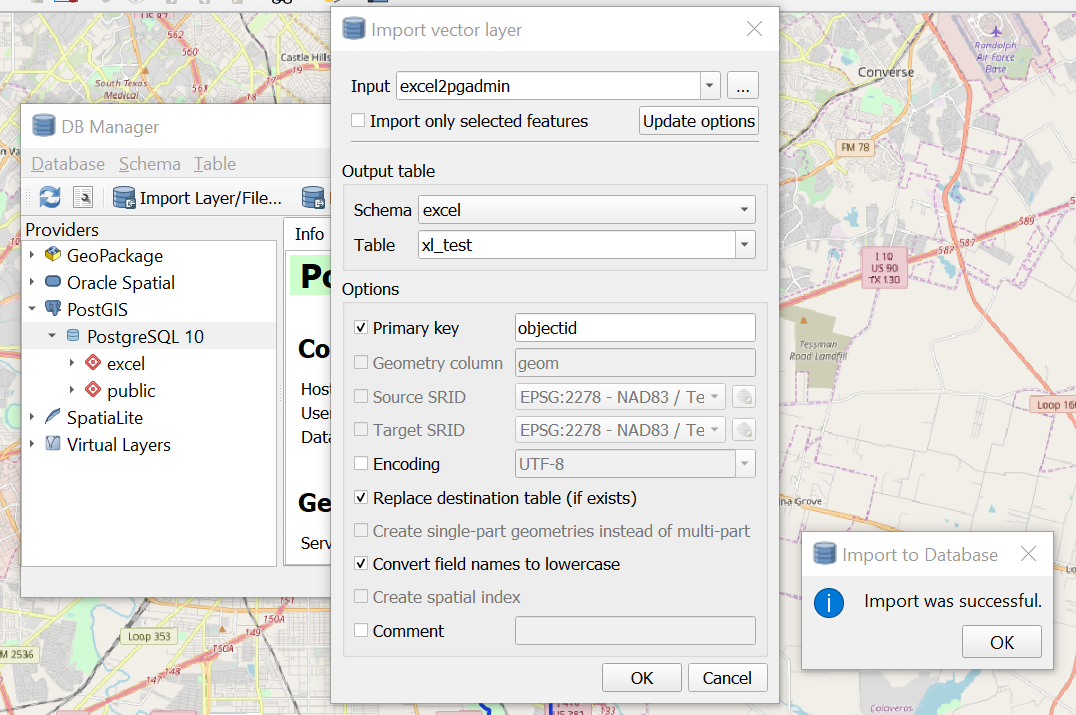
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Figure ix

**8**. Go back to **PgAdmin** and verify the newly imported table!

**9**. You can easily add more tables to this newly created database and schema since **Q** has all of the credentials stored, just repeat steps **3** and **7**.

**10**. For adding a table to an existing schema not already established in **Q**, follow steps **4** through **7** using the associated names of the server, database, and schema to correctly add the table.