

## 7.2.1

## Create a Database

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**You've** created an entire map of a database! That's no small feat—a lot of thought goes into creating an ERD. We've already put in quite a bit of effort to create a really solid database foundation. Now that it's finished, we can help Bobby create a database in Postgres. Remember, Postgres is where our data will actually live once we import it.

Also, remember how we've been calling the ERD a map? This is where we'll really be able to implement its uses as such. Using the ERD, we will be able to create each table for each CSV. These tables will be tailored specifically for the data in each file, and their creation has already been planned out in our ERD. All we need to do is plug in the information!

We'll start by opening pgAdmin and familiarizing ourselves with the GUI (graphical user interface). A GUI is an interface that often uses visual indicators to help users, such as us, navigate through a program. We'll use the GUI to create our database, then connect to it.

## Launch pgAdmin

When writing queries in SQL, data is organized into tables, as shown in the ERD. Return to the pgAdmin window we opened earlier.

### NOTE

If you have closed your pgAdmin window, or shut down the program completely, you can open a new one by locating the pgAdmin icon and clicking it to start the software again. Then, follow the steps for your operating system.

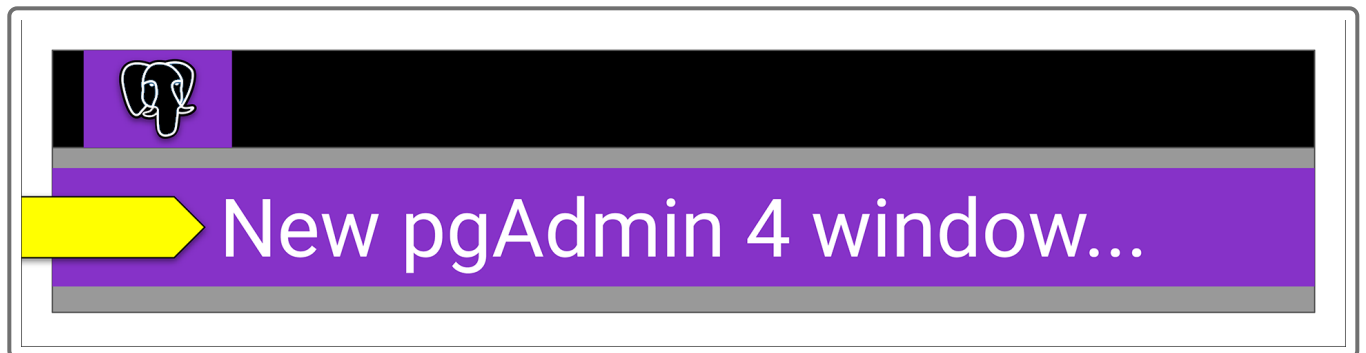
#### macOS

1. Open your launchpad and find the pgAdmin 4 icon.



2. Click it to start the program.

If a new window does not automatically open, then click the icon from the toolbar and select "New pgAdmin 4 window."



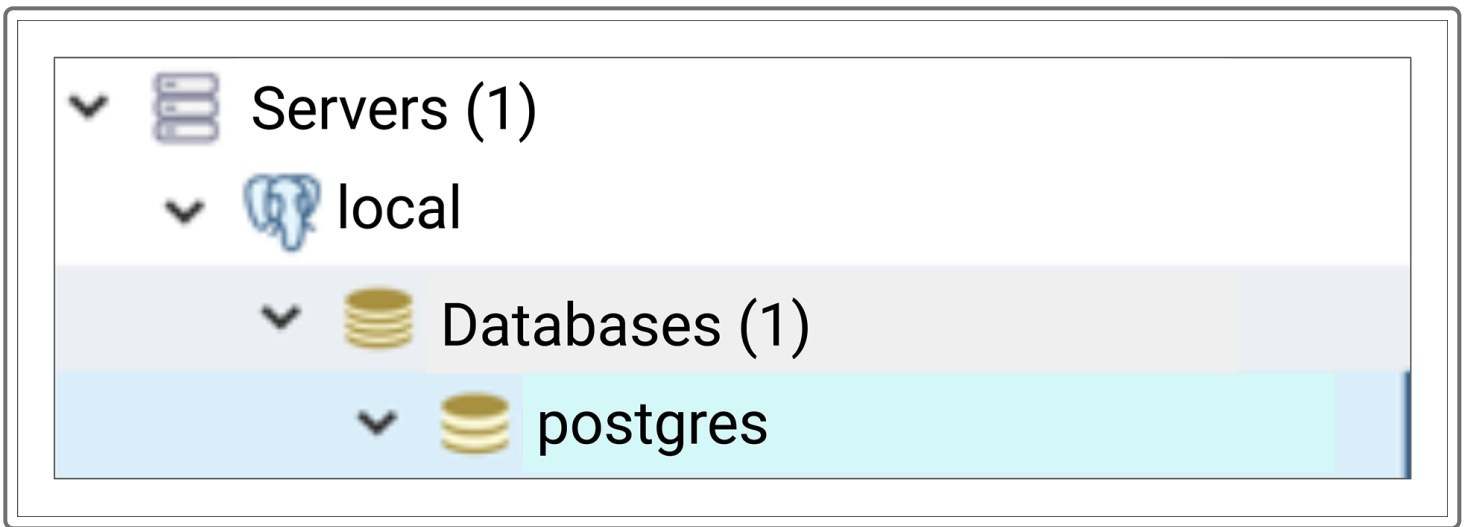
## Windows

Search for pgAdmin or double-click the shortcut on your desktop to start the program.

## Connect to the Server

If you've been disconnected from your server, locate it in the menu to the left, then single-click the PostgreSQL 11 server to initiate a connection. At this point, you will be prompted to enter the password you created during installation.

After connecting to the server, you should see that there is already a database named "postgres."

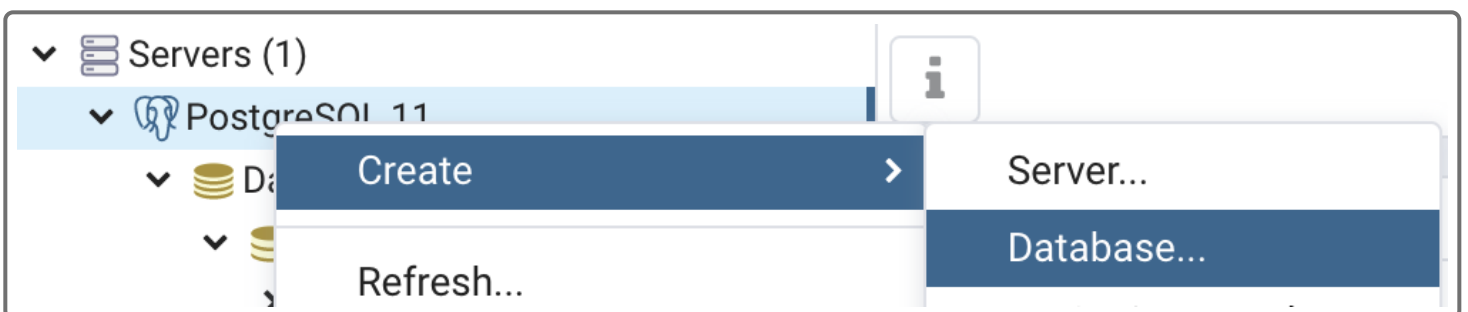


This is the default database that is created when the pgAdmin and Postgres package was installed. Instead of using this database, though, we'll be creating one specifically for Bobby's work with Pewlett Hackard.

## Create a New Database

To create a new database to hold the employee information, follow these steps:

1. Right-click on "PostgreSQL 11."
2. Hover your pointer over "Create."
3. From the menu that pops up on the right, click "Database."



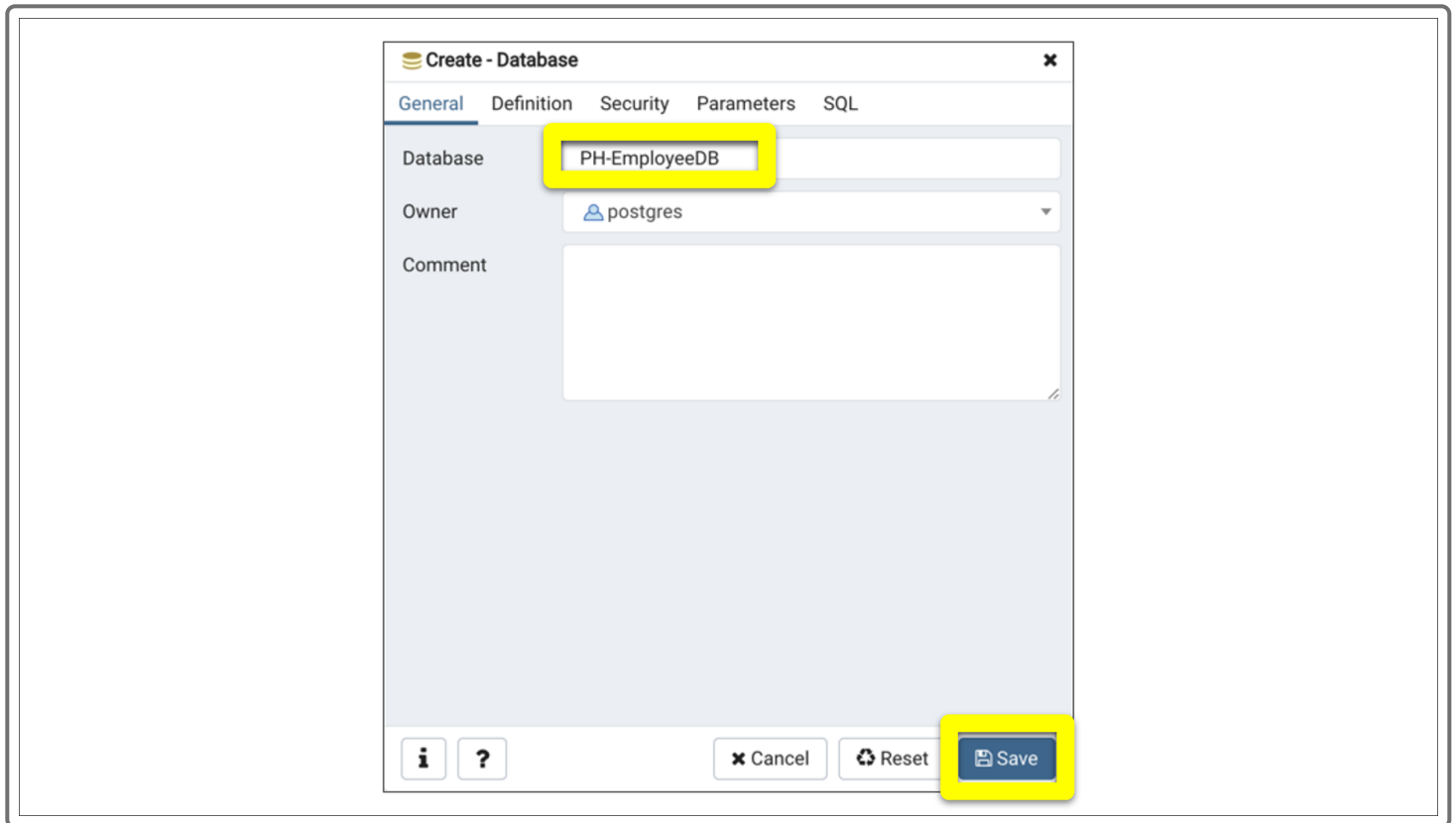
After following these steps, a form will pop up prompting for information. We'll want to name the database something relevant to the data it will house, such as "PH-EmployeeDB." The owner is set to Postgres by default, which is fine for our purposes.

### NOTE

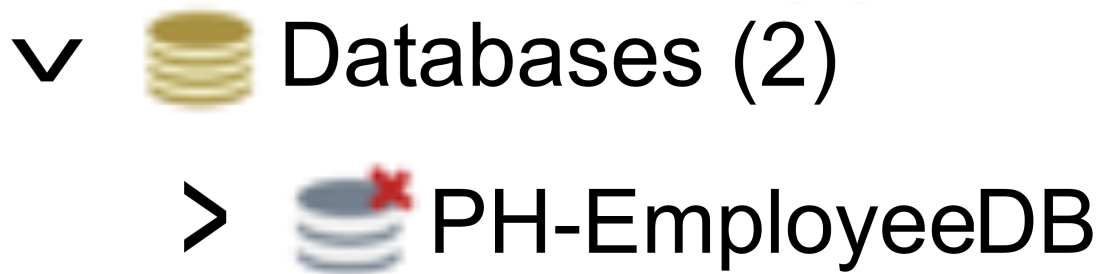
It's okay to assign your own name as the owner also---this is your work.

Later, as you expand your SQL skills and work with more complex databases, the owner is often named after the role of the SQL developer(s) working in it. This is to easily designate who has been working in the database.

Click "Save" to create a new database.



After the new database has been created, the database count in pgAdmin will have increased to two, and the new database will be listed.



A red X beside the new database's name indicates we aren't yet connected to it, but it is there and ready for use. Click on the new database to connect. Once connected, we'll be able to create tables and import data.

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