

Installing PostgreSQL on local machine

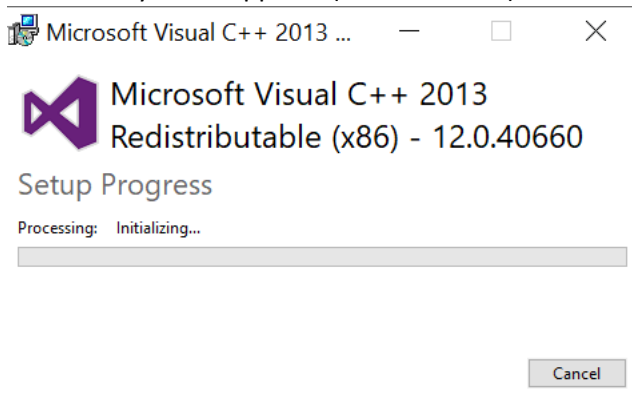
1. Go to <https://www.enterprisedb.com/downloads/postgres-postgresql-downloads> and download the latest version that fits your OS.



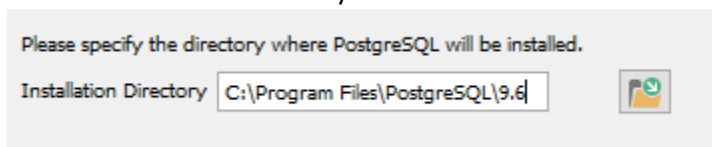
The screenshot shows the 'PostgreSQL Download' page from the EnterpriseDB website. The page features a navigation bar with links like 'Downloads', 'Blog', 'Portals', and 'Language'. Below the navigation bar is a large dark blue banner with the text 'PostgreSQL Download'. Underneath the banner is a table listing PostgreSQL versions and their download links for different operating systems.

PostgreSQL Version	Linux x86-64	Linux x86-32	Mac OS X	Windows x86-64	Windows x86-32
11.1	N/A	N/A	Download	Download	N/A
10.6	Download	Download	Download	Download	Download
9.6.11	Download	Download	Download	Download	Download
9.5.15	Download	Download	Download	Download	Download

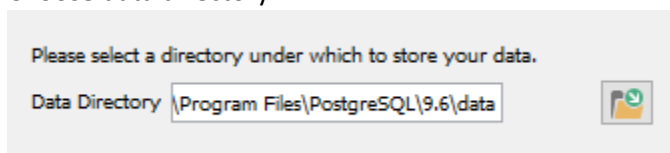
2. Download and run installer
3. Don't worry if this appears (or if it doesn't)



4. Choose installation directory



5. Choose data directory



6. Provide a password for superuser postgres

Please provide a password for the database superuser (postgres).

Password

Retype password

7. Select the port the server listens on (default is 5432)

Please select the port number the server should listen on.

Port

8. Select the locale for DB cluster as “default locale”

Select the locale to be used by the new database cluster.

Locale

9. Install the software

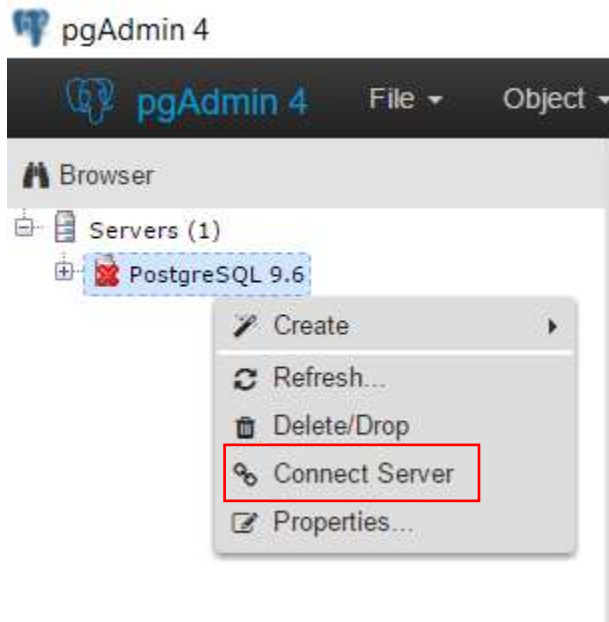
Setup is now ready to begin installing PostgreSQL on your computer.

10. No need to Run Stack Builder, finish installation



First sign in (as superuser)

1. Run pgAdmin (located under {installation directory}\pgAdmin 4\bin)
2. Connect to your server (right click on "PostgreSQL 9.6" and click "Connect Server"). Enter password for postgres user if prompted.



Create Database

1. Right click on “databases” and choose “create”->“database”
2. Call the database “cs236363”

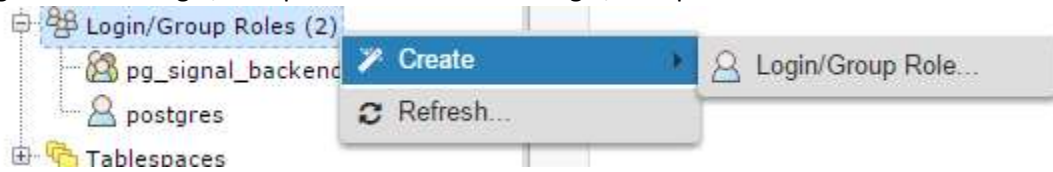


The screenshot shows a 'Create - Database' dialog box with the following fields and controls:

- Database:** Text input field containing 'cs236363'.
- Owner:** Dropdown menu showing 'postgres'.
- Comment:** Large text area for additional notes.
- Buttons:** 'Save' (blue), 'Cancel' (red), and 'Reset' (orange) buttons at the bottom right.
- Help/Info:** 'i' and '?' icons at the bottom left.

Create user (for HW2)

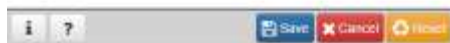
1. Right click on "Login/Group Roles" -> "create" -> "Login/Group Role".



2. In the "general" tab, give your user a name (I used the name "java", for example)



3. In the "definition" tab, give your user a password



4. In “privileges” tab mark “can login” and unmark “inherit rights from the parent roles?” and click save

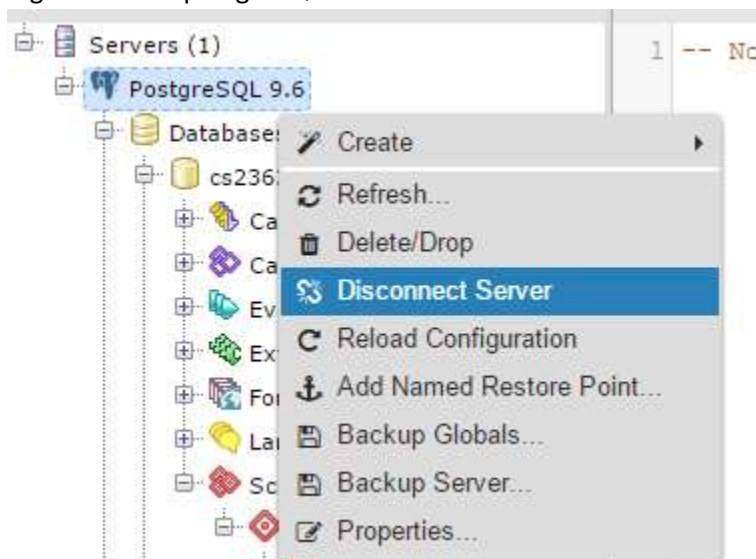


- 5.

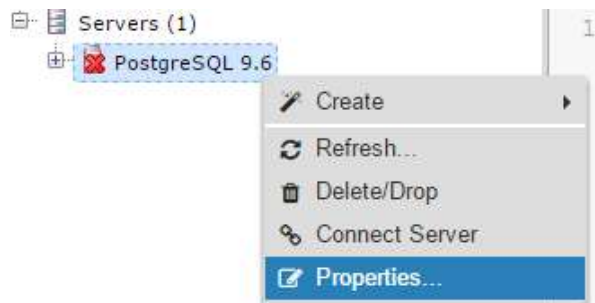
Sign in as your user

Please sign in as your user to prevent any unnecessary mistakes, caused by superuser privileges.

1. Right click on “postgreSQL 9.6” server and choose “disconnect server”.



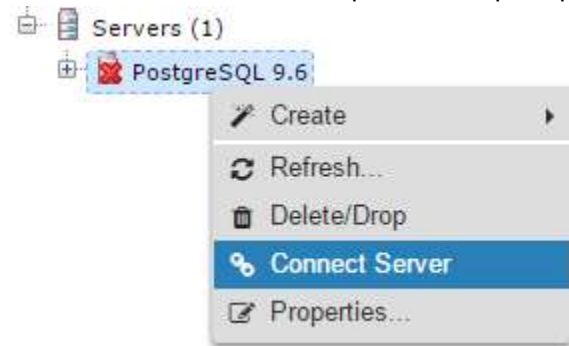
2. Right click on “PostgreSQL 9.6” server and choose “properties”



3. On the “connection” tab, change the user from “postgres” to your user name and save



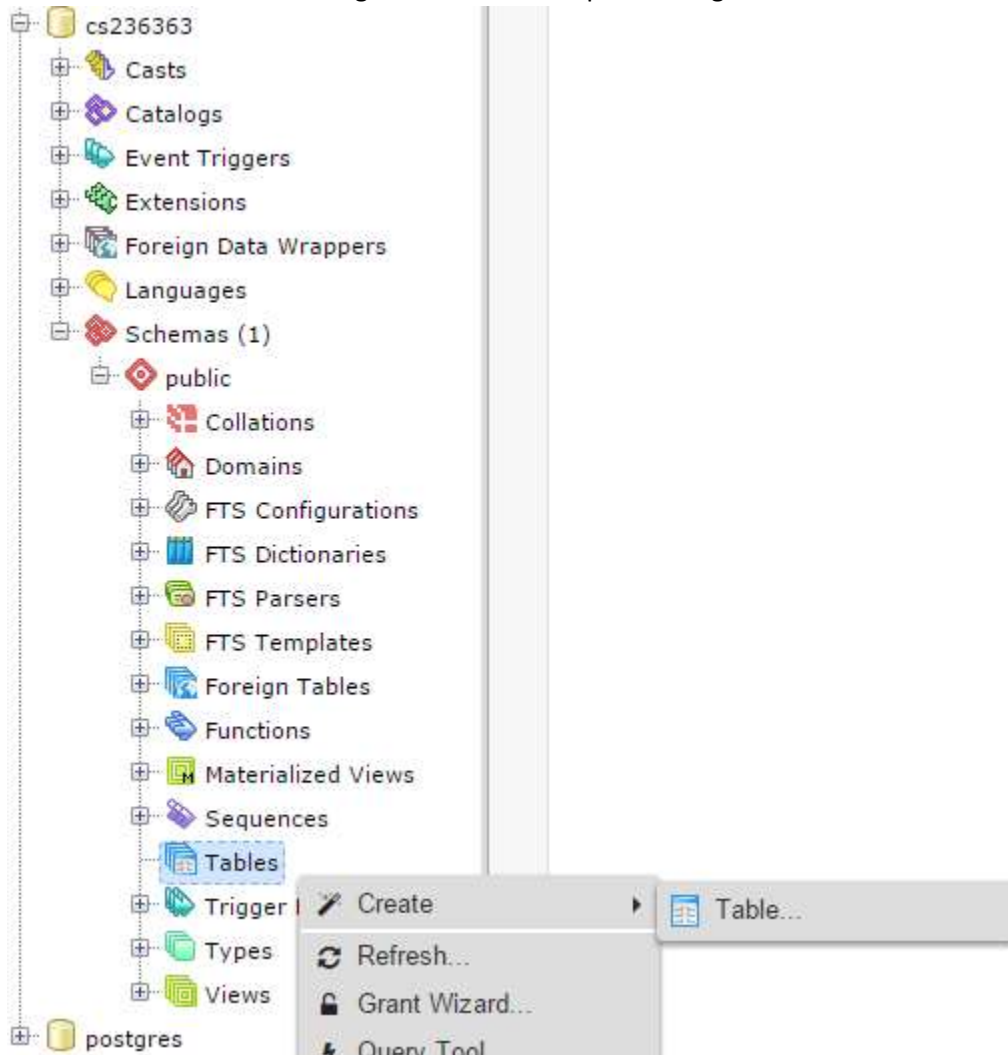
4. Connect to server and enter password if prompted



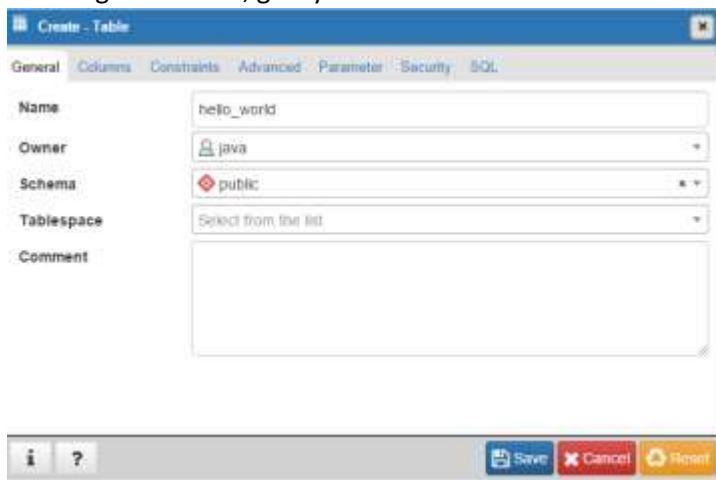
Notice: before you run any DB’s command in Java you must configure the project with your account in postgresQL as explained in the HW PDF file in section 5.2 (Connecting to the Database using JDBC) – Do it before you try to run the Example.java you got in the zip file.

Hello world

1. On the database “cs236363” go to “schemas”->“public”->right click on “tables”->“create table”



2. In the “general” tab, give your table a name



3. Create the columns you like with the “+” button

Create - Table

General Columns Constraints Advanced Parameter Security SQL

Inherited from table(s)

Columns						
	Name	Data type	Length	Precision	Not NULL?	Primary key?
<input checked="" type="checkbox"/>	id	integer			<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes
<input checked="" type="checkbox"/>	short_text	text			<input type="checkbox"/> No	<input type="checkbox"/> No

i ? **Save** **Cancel** **Reset**

4. Notice that in the “Constraints” tab you can set everything we talked about in tutorial 1 (foreign keys, unique, check etc..)

Table: hello_world

General Columns Constraints Advanced Parameter Security SQL

Primary Key Foreign Key Check Unique Exclude

Check constraint	
Name	Check
<input checked="" type="checkbox"/> pos_id	id > 0

General **Definition**

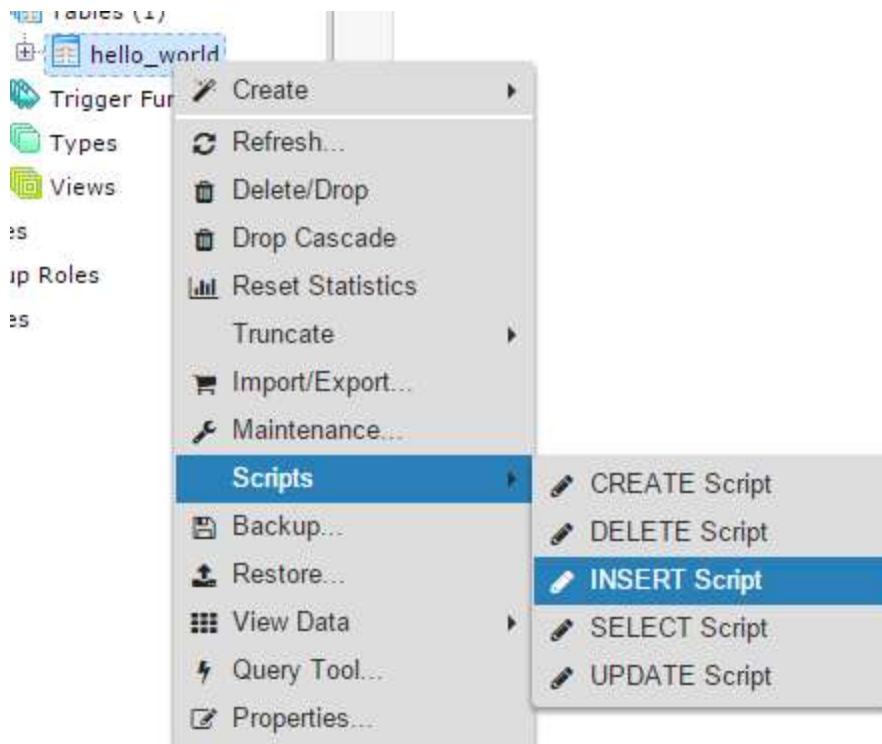
Check:

No inherit? ☐ **No**

Don't validate? ☐ **No**

i ? **Save** **Cancel** **Reset**

5. When done, click save
6. Hint: right click on the table, and choosing scripts, will auto generate a script for you, for example, and insert script



Result:

```
cs236363 on java@PostgreSQL 9.6
1  INSERT INTO public.hello_world(
2      id, short_text)
3      VALUES (?, ?);|
```

You just need to replace the “?” placeholders with valid values, and click the flash button



to execute.

```
cs236363 on java@PostgreSQL 9.6
1  INSERT INTO public.hello_world(
2      id, short_text)
3      VALUES (1, 'Hello World!');|
```