PostgreSQL Installation Guide

Version 1

Updated March 2018

Contents

Introduction

PostgreSQL Overview

The follow is an excerpt from the https://www.postgresql.org/ site at the time this document was created.

"PostgreSQL is a powerful, open source object-relational database system. It has more than 15 years of active development and a proven architecture that has earned it a strong reputation for reliability, data integrity, and correctness. It runs on all major operating systems, including Linux, UNIX (AIX, BSD, HP-UX, macOS, Solaris), and Windows. It is fully ACID compliant, has full support for foreign keys, joins, views, triggers, and stored procedures (in multiple languages). It includes most SQL:2008 data types, including INTEGER, NUMERIC, BOOLEAN, CHAR, VARCHAR, DATE, INTERVAL, and TIMESTAMP. It also supports storage of binary large objects, including pictures, sounds, or video."

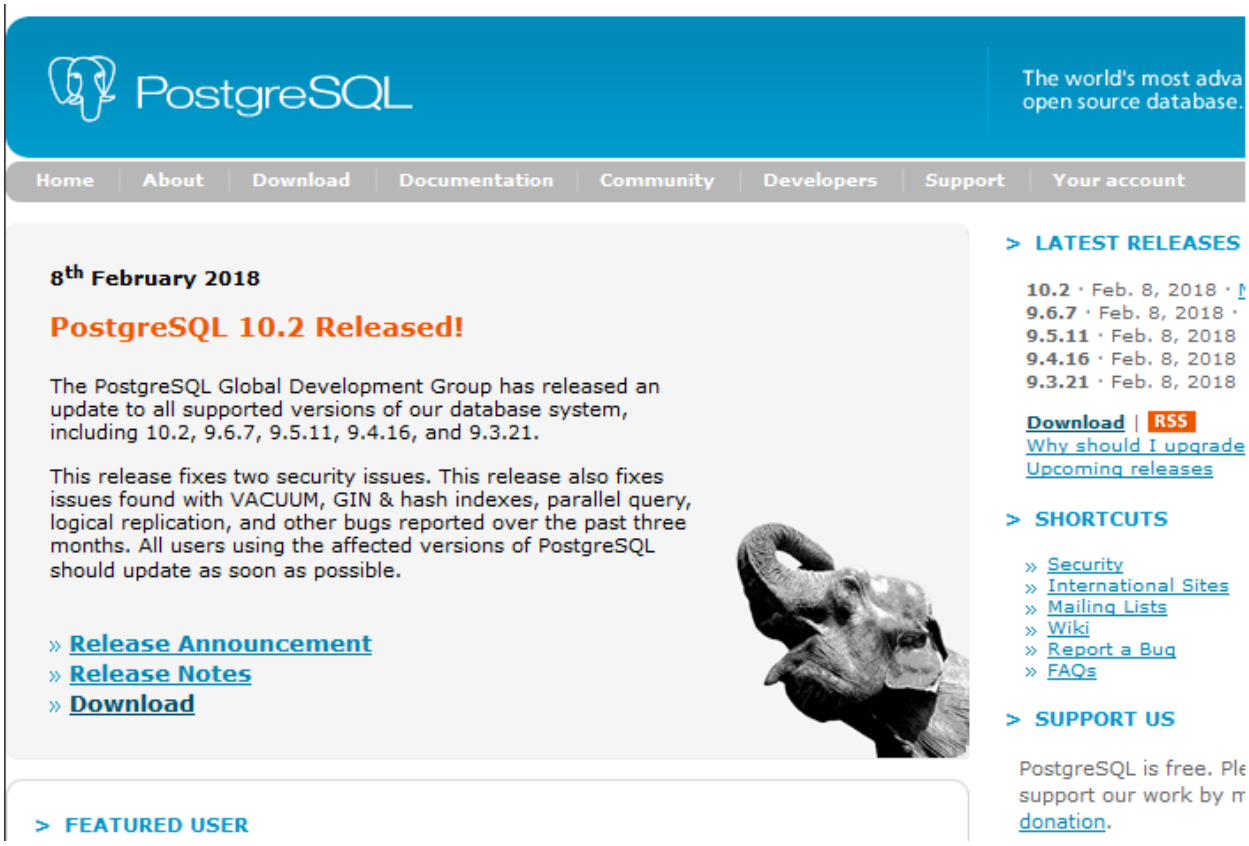
Limit	**Value**
Maximum Database Size	Unlimited
Maximum Table Size	32 TB
Maximum Row Size	1.6 TB
Maximum Field Size	1 GB
Maximum Rows per Table	Unlimited
Maximum Columns per Table	250 - 1600 depending on column types
Maximum Indexes per Table	Unlimited

Downloading PostgreSQL

This section guides you through the downloading of the PostgreSQL database and admin tool from the PostgreSQL website.

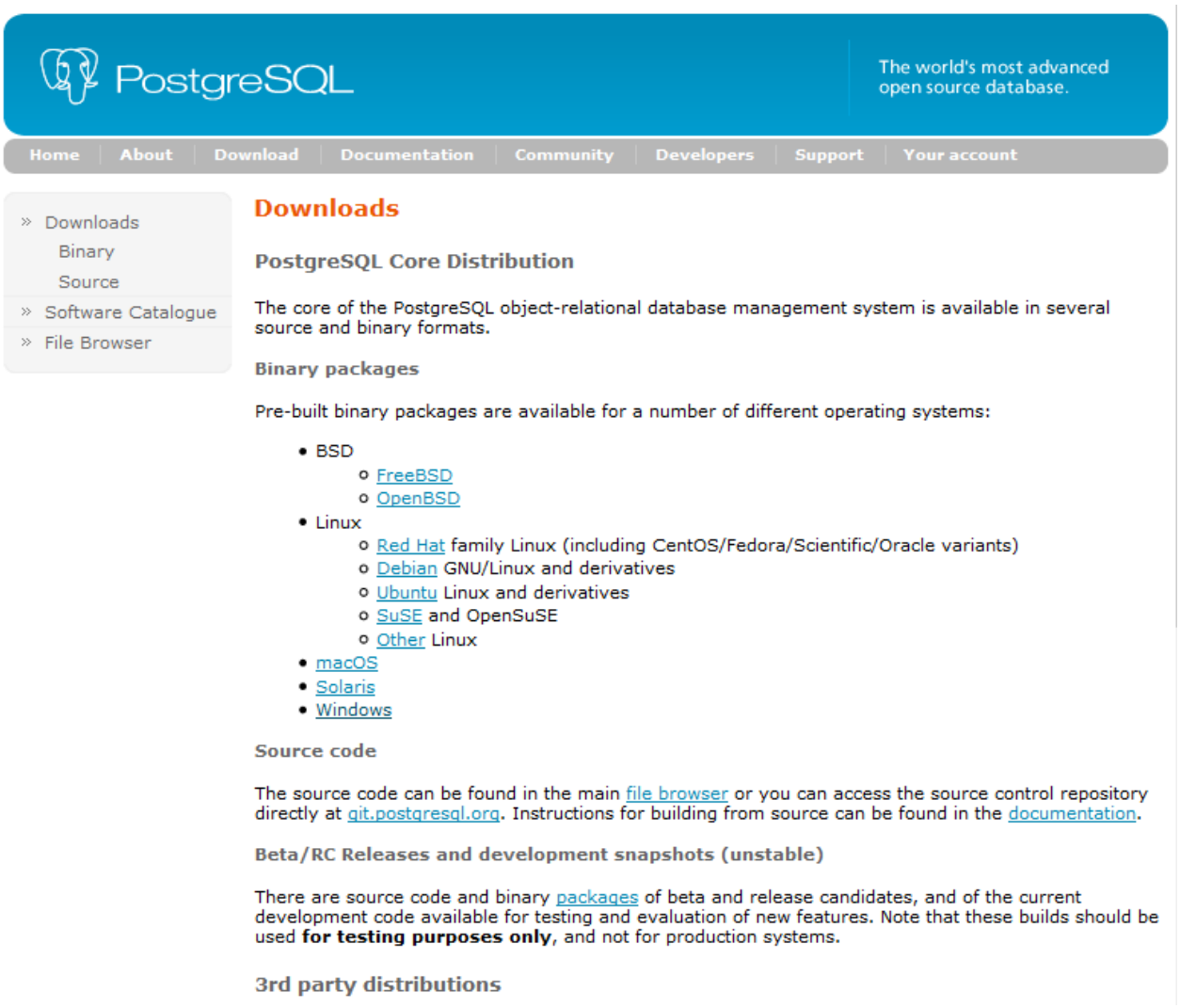
Step 1: Accessing the URL

Browse to address https://www.postgresql.org/ (if the URL has become outdated, just search for "PostgreSQL download" on Google.) You will see a screen similar to the following:



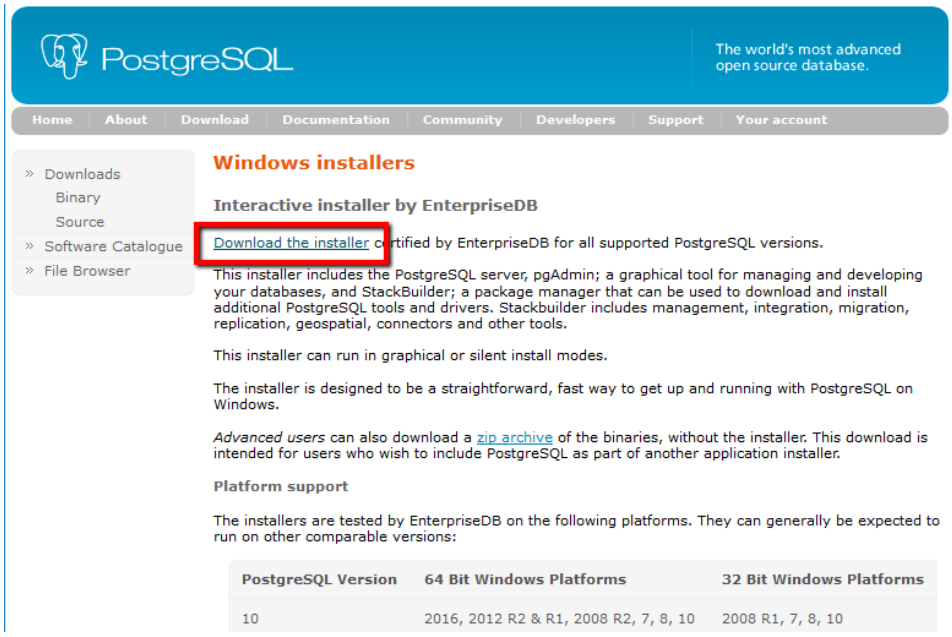
Step 2: Download page and options

From this page you will see there are several supported options for downloading pre-built packages for a number of operating systems and VM Options.

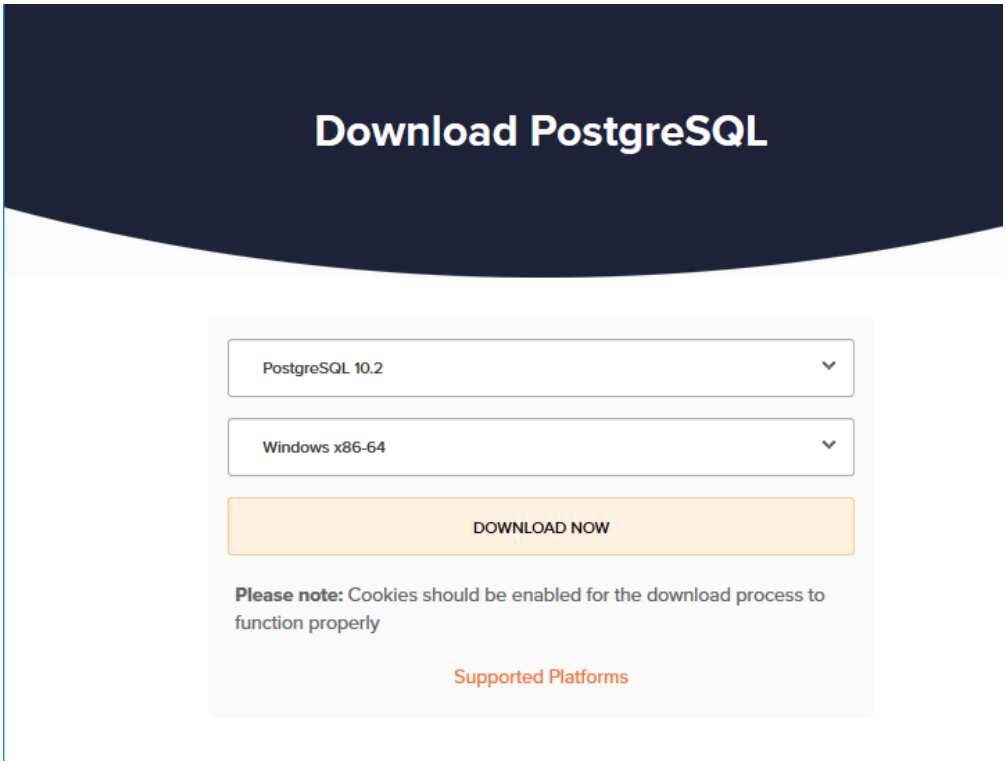


Step 3: Windows Installers by EnterpriseDB

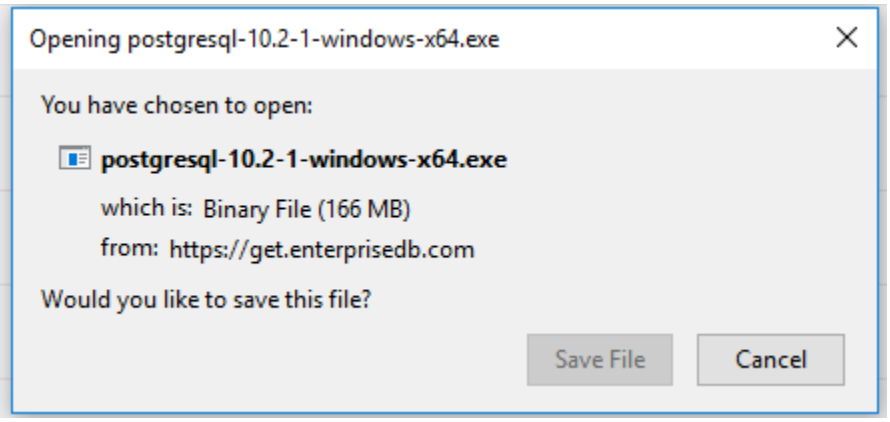
This is a packaged installation that includes both the PostgreSQL DB and pgAdmin tool. Alternatively, the DB binaries can be downloaded and installed and then separately download a SQL tool of choice for connecting to the DB and SQL coding.



This will take you to https://www.enterprisedb.com/downloads/postgres-postgresql-downloads to perform the download. Here you will select the DB version and the OS version for the download:



Save the file to local folder for execution

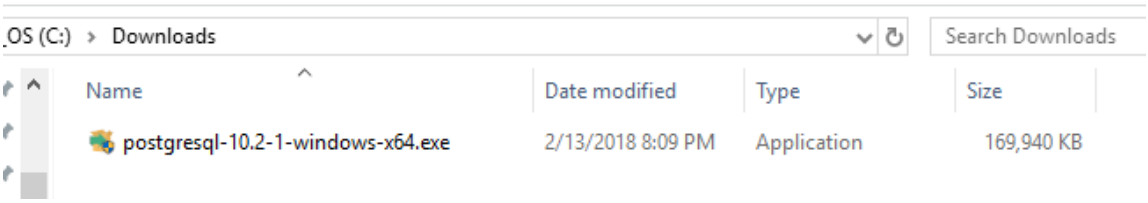


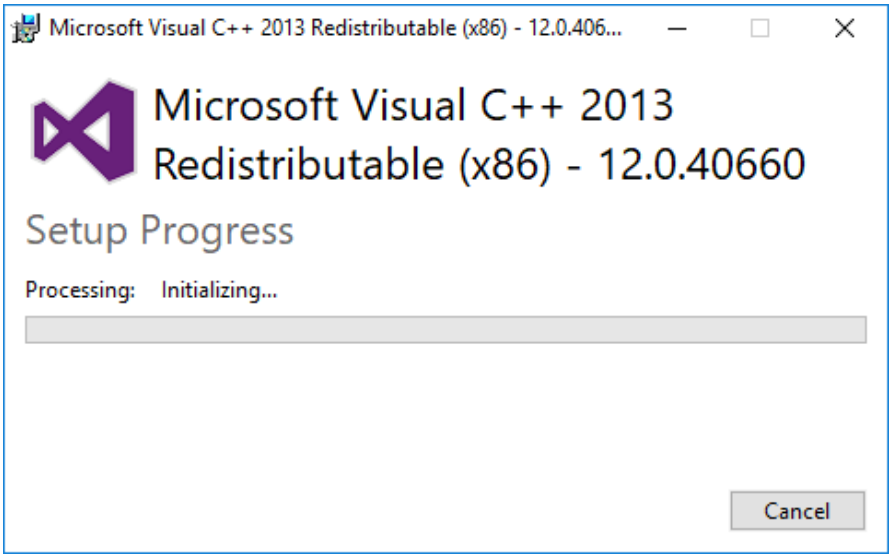
Installing PostgreSQL

Now that you've downloaded the installer, you'll need to execute the installation program and follow the prompts during the installation. Accept the defaults unless there are specific needs and requirements for your personal computer.

Step 4: Starting the Installer

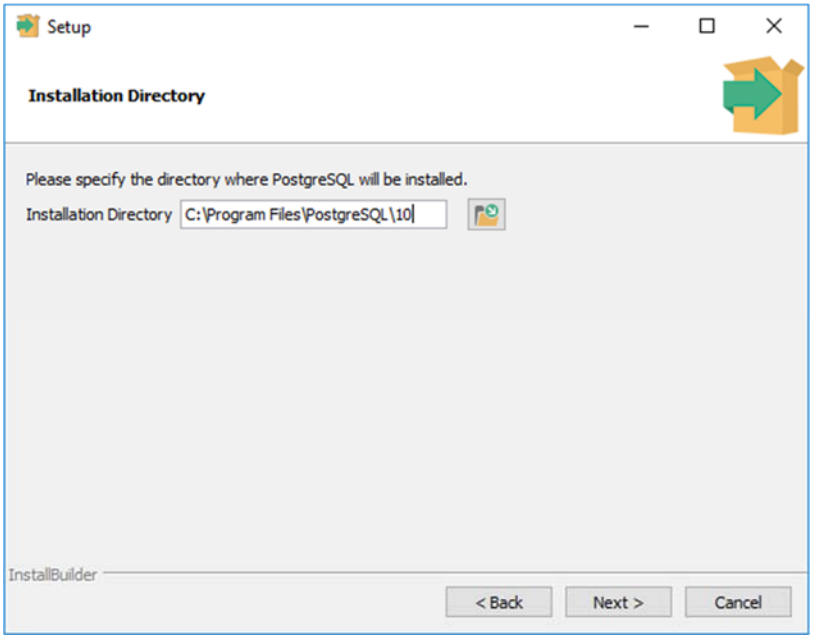
Navigate to the download folder where the exe file was saved and execute the file. Once the installer starts up it may run MS Visual C++ precheck and install.



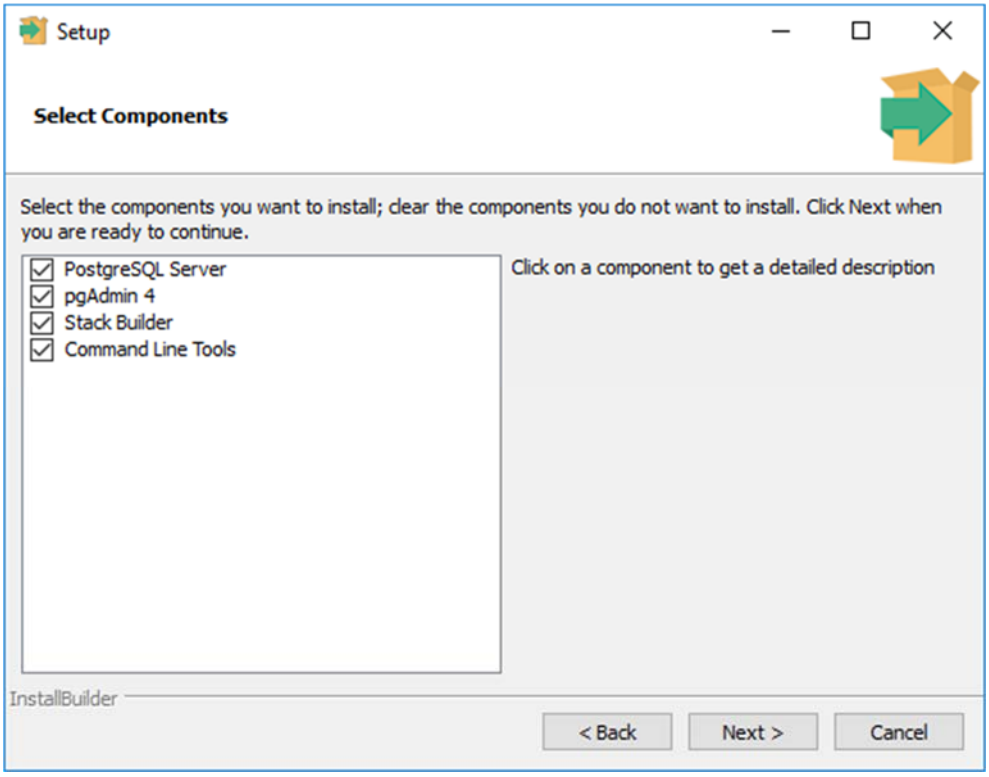


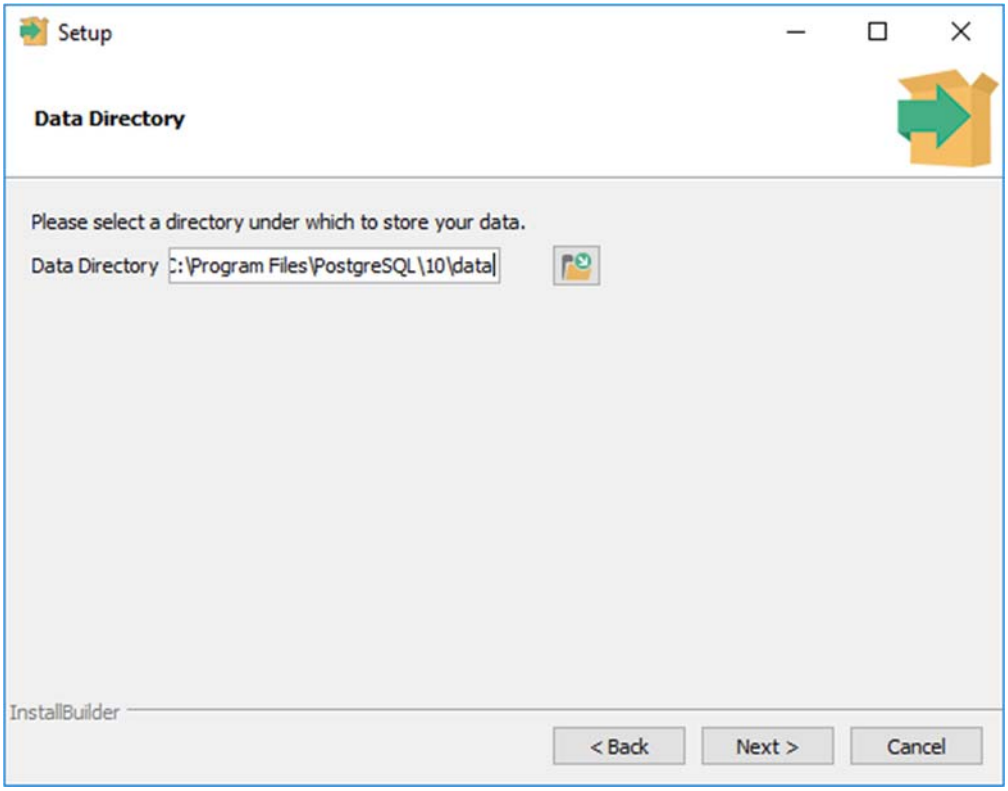
Step 5: Progress Through the Installation Wizard

The following are installation screens from the wizard for version 10.

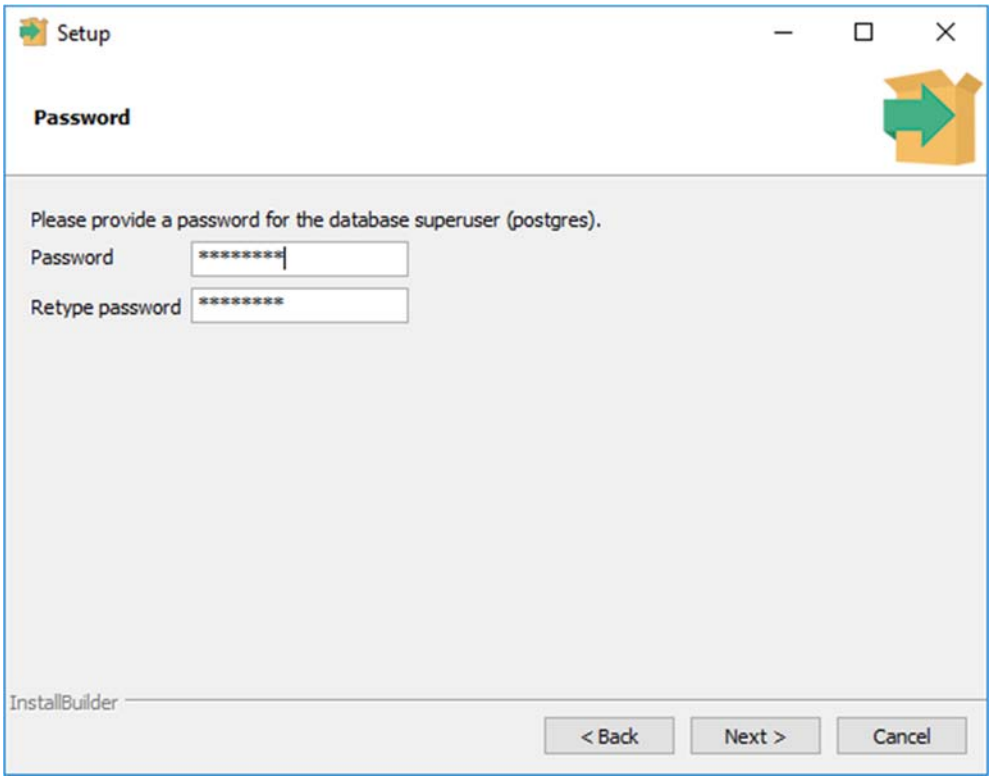


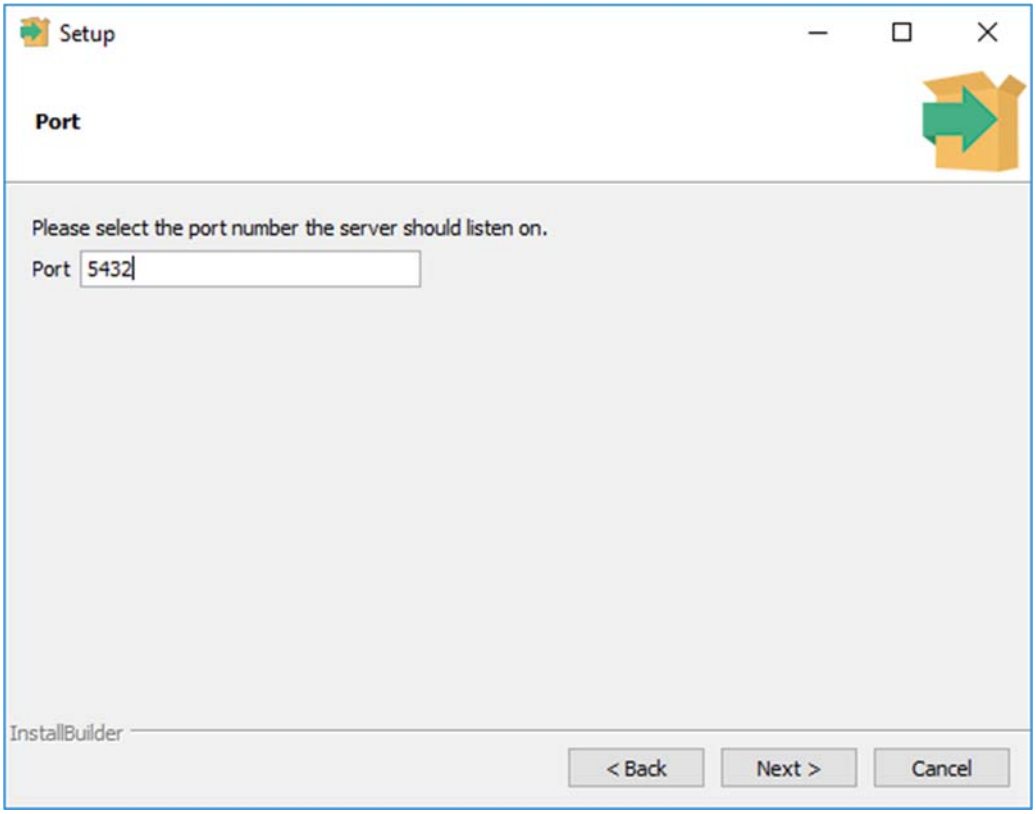
Keep pgAdmin check for install unless you have a specific SQL development tool you want to use.

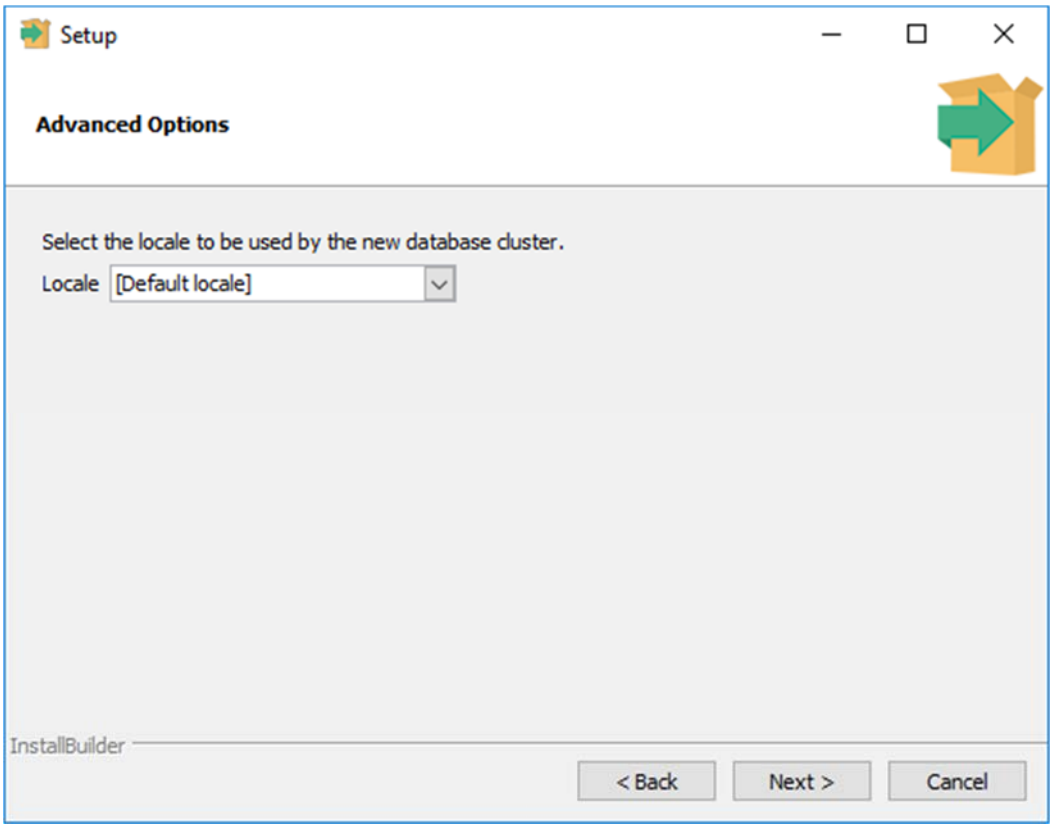




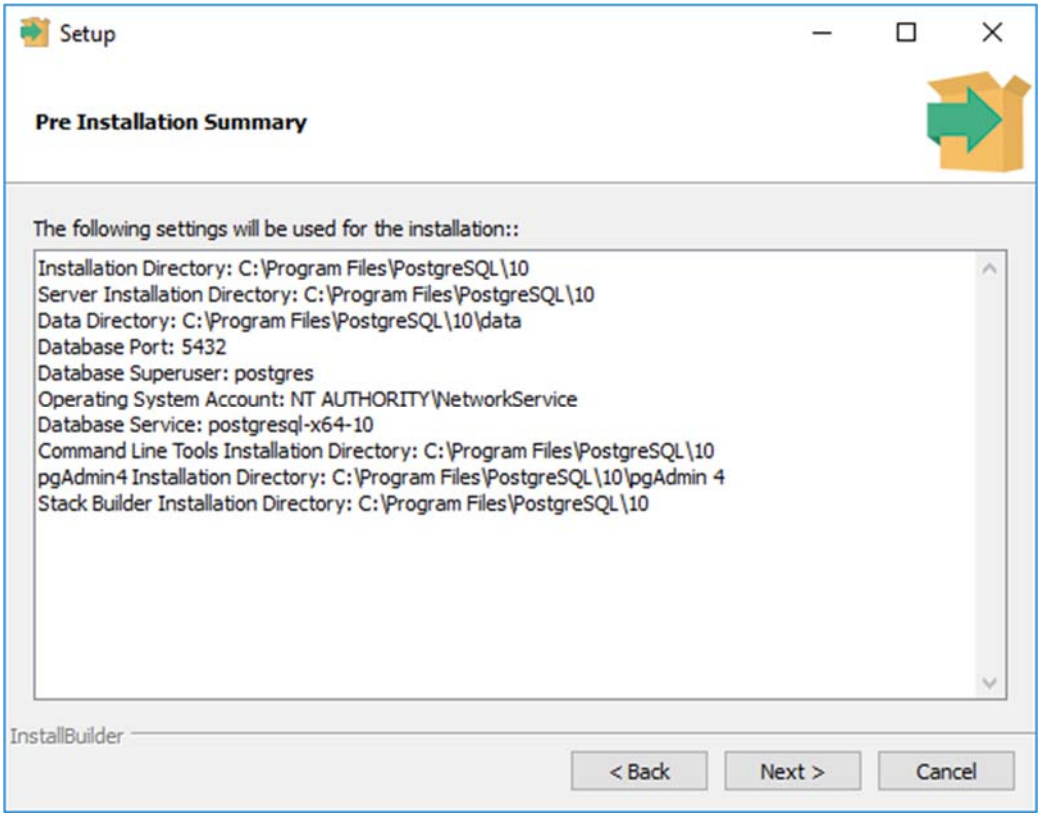
**** Enter an initial password for the default postgres user. (i.e. password = BU669)**

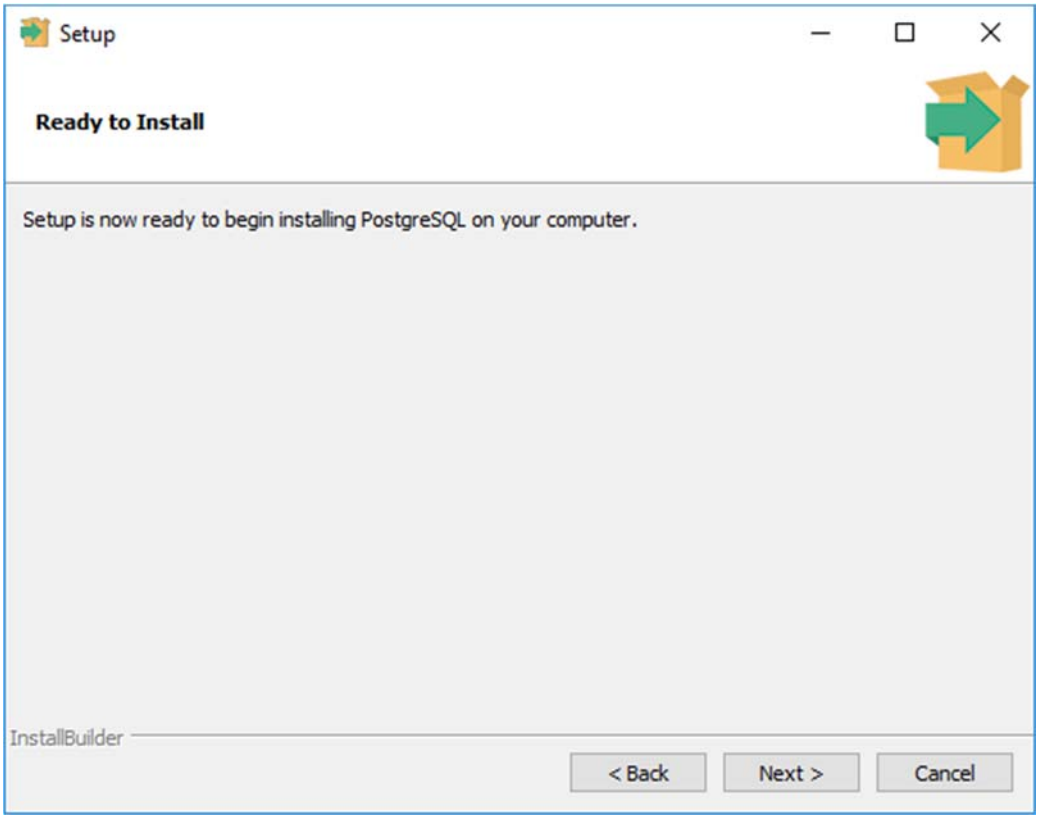




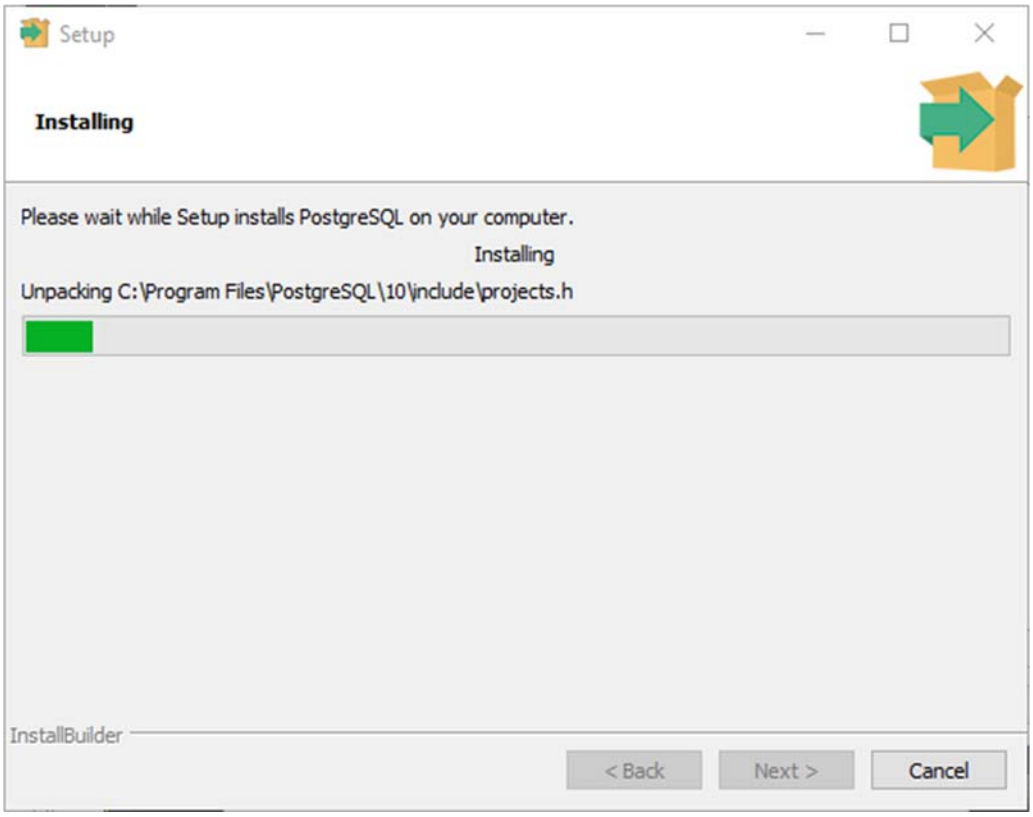


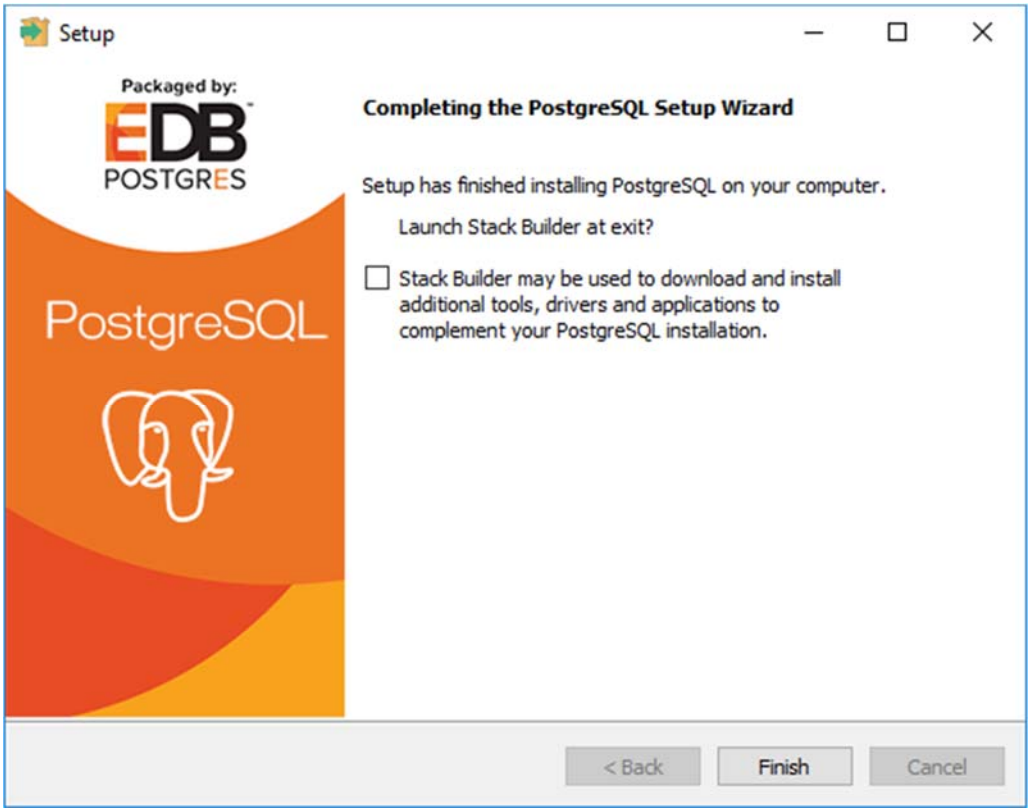
Recommendation is to copy this screen for reference later.





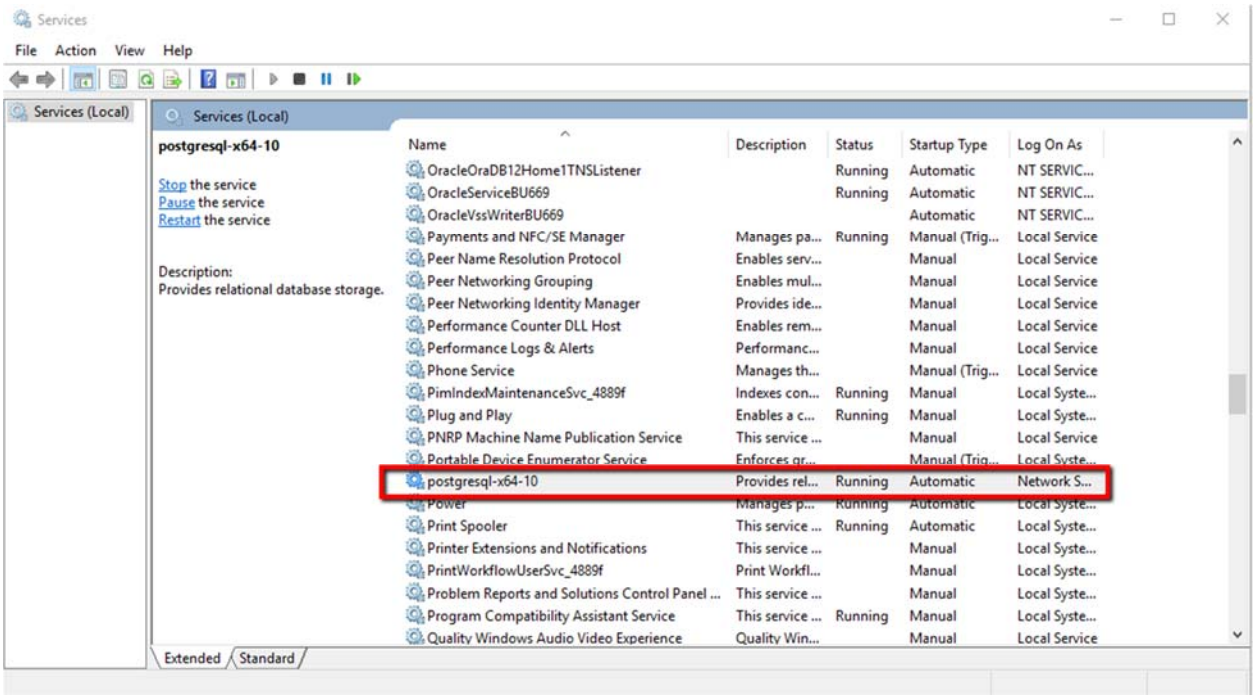
Now allow the installer to run.


Setup
Installing
Please wait while Setup installs PostgreSQL on your computer.
Installing
Unpacking C:\Program Files\PostgreSQL\10\include\projects.h
InstallBuilder
< Back
Next >
Cancel


Setup
Packaged by:
EDB
POSTGRES
PostgreSQL
Completing the PostgreSQL Setup Wizard
Setup has finished installing PostgreSQL on your computer.
Launch Stack Builder at exit?
Stack Builder may be used to download and install additional tools, drivers and applications to complement your PostgreSQL installation.
< Back
Finish
Cancel

Step 6: Check that PostgreSQL Service

Once the wizard has completed you should check that the PostgreSQL DB is running. Navigate to 'Services' and look for postgresql-x64-10 (or the appropriate service for the DB version installed) and verify the status is 'Running'

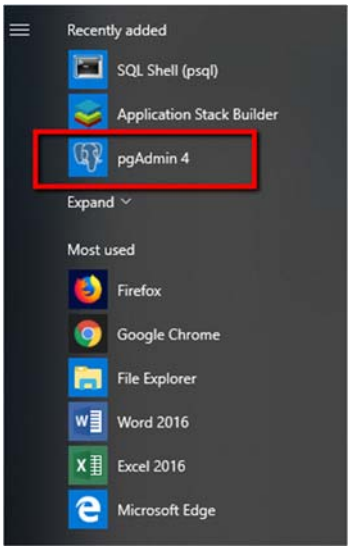


Starting pgAdmin and connecting to DB

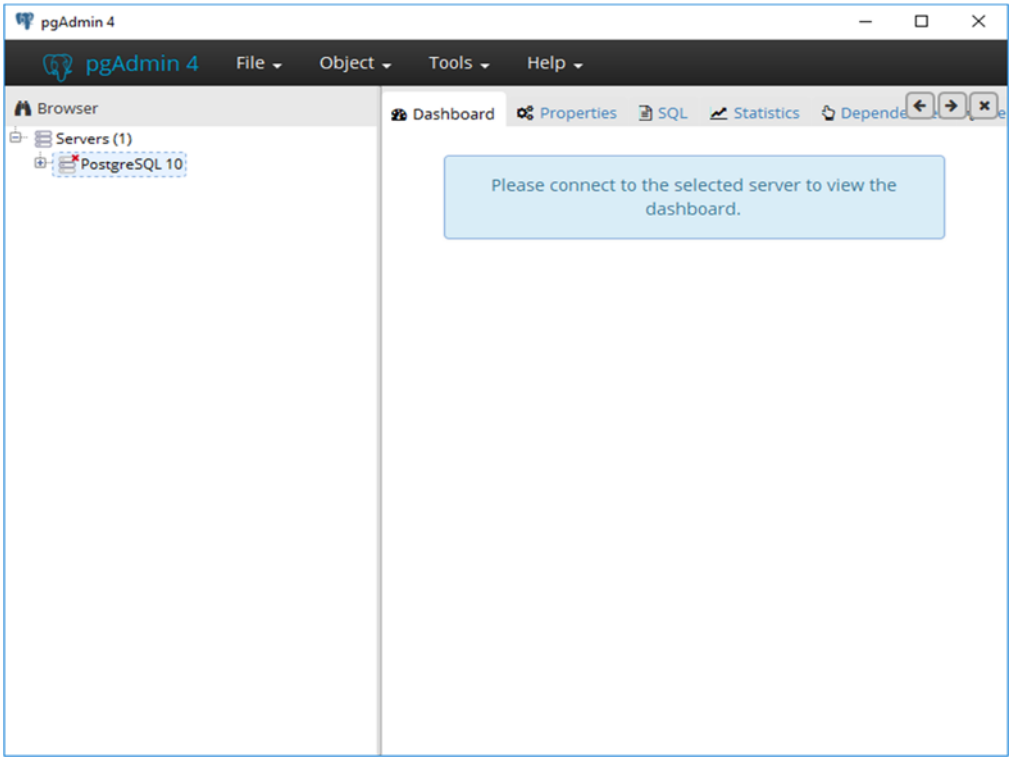
The following section will step through opening up the pgAdmin tool and making an initial connection to the DB.

Step 7: Start pgAdmin

Navigate to pgAdmin and open the application; here we are using version 4

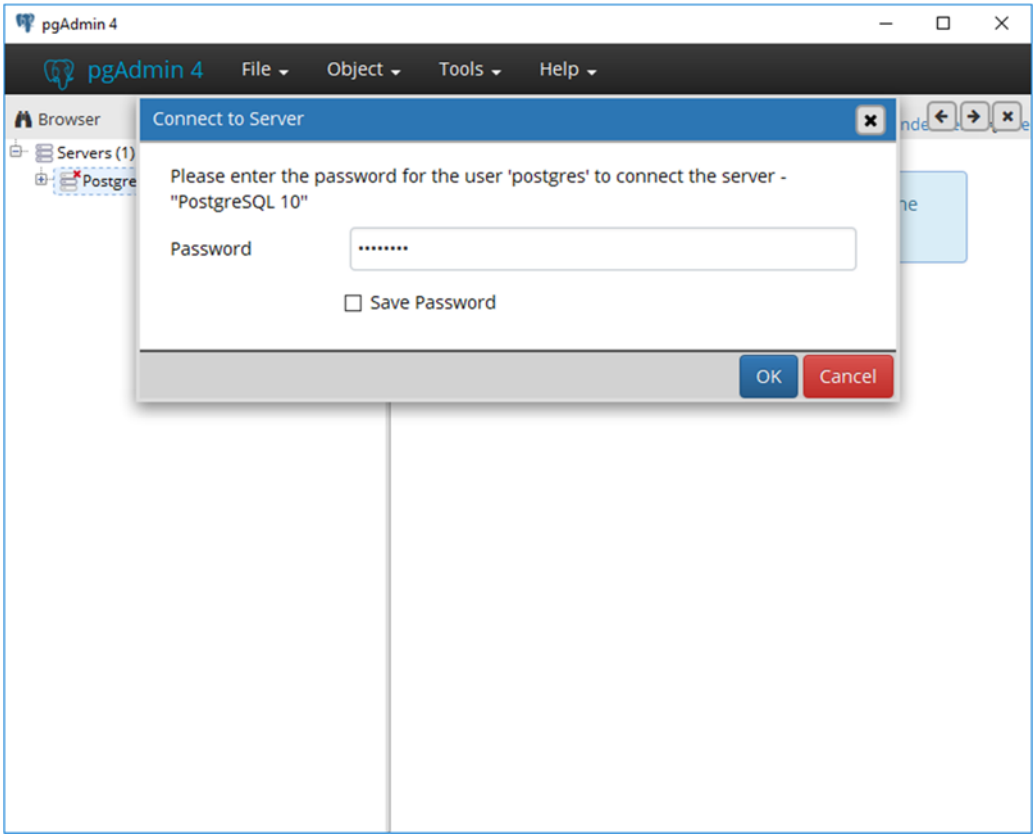


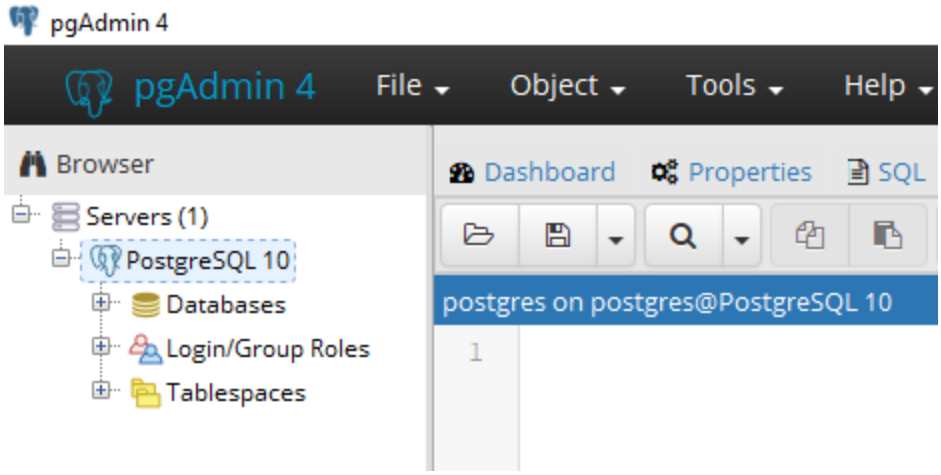
Once the application is started you should see a screen similar to this:



Step 8: Connect to DB

Double click on the server title 'PostgreSQL 10' or right-click and select connect to server. Then enter the password that was entered during the installation process for the initial postgres user.




pgAdmin 4
pgAdmin 4
File
Object
Tools
Help
Browser
Servers (1)
PostgreSQL 10
Databases
Login/Group Roles
Tablespaces
Dashboard
Properties
SQL
postgres on postgres@PostgreSQL 10
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