

# Using Stata at WRDS

This document demonstrates how to connect Stata on a Windows PC with WRDS data.

## Connection Details

- **Host:** [wrds-pgdata.wharton.upenn.edu](http://wrds-pgdata.wharton.upenn.edu)
- **Port:** 9737
- **Database:** wrds
- **Username:** The same username you use to log in to the WRDS Cloud
- **Password:** The same password you use to log in to the WRDS Cloud
- **Connection options:** Some PostgreSQL clients require that you specify 'sslmode=require' in the connection string. Most are smart enough to figure it out.

## ODBC

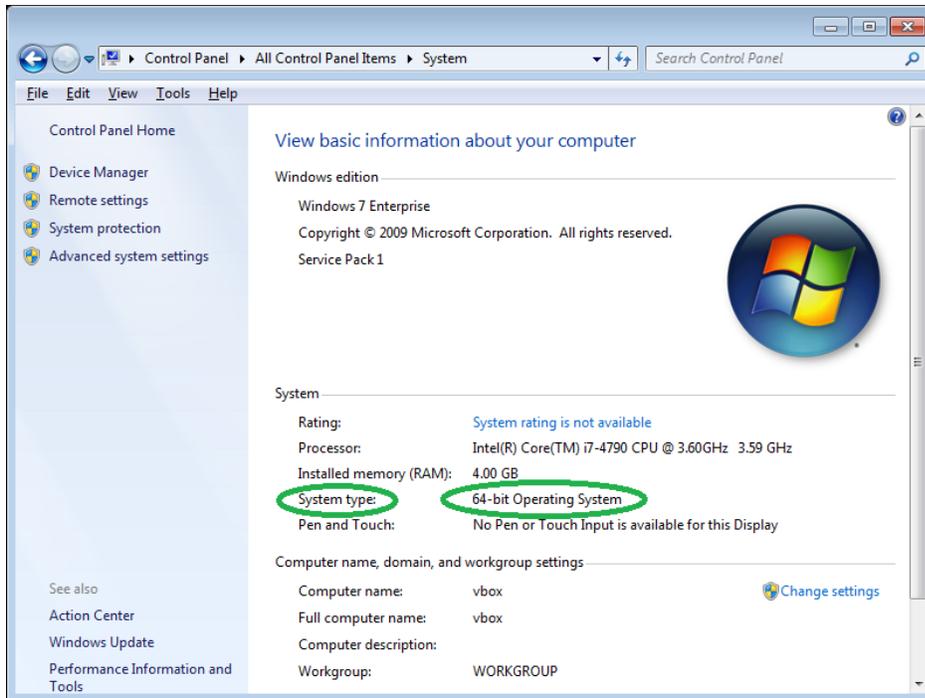
Stata accesses WRDS through a PostgreSQL database. The first part of these instructions show how to install an ODBC driver on Windows.

### Windows ODBC Driver Installation

Windows separates its 32-bit and 64-bit ODBC configurations, and it can be very confusing to determine which one an application is accessing. We will therefore install both. You must be logged on to your computer with local Administrator privileges to continue. If you are the only user of your computer, you should already have Administrator access. If you are installing this software on a computer connected to a Windows domain, please see your friendly local Windows expert.

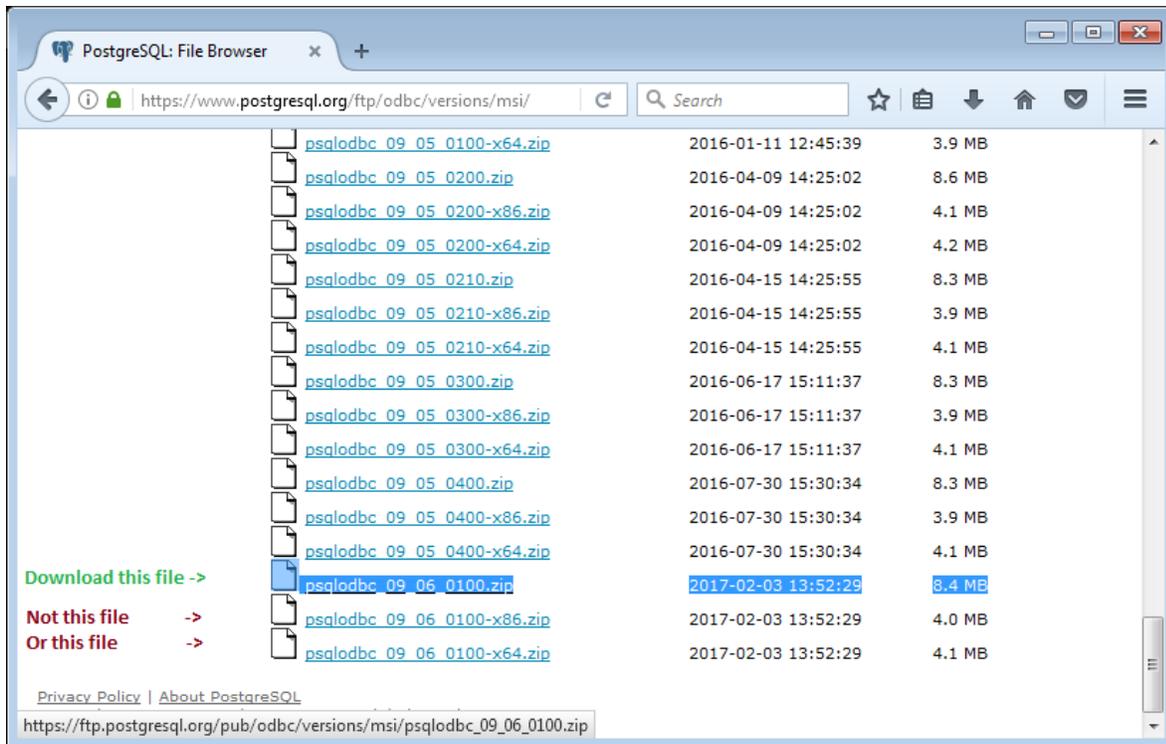
### Determining your Windows Architecture

Most computers sold in the past 5 years are 64-bit capable, and run 64-bit Windows, but these computers are all capable of running 32-bit software as well. The architecture of ODBC (64-bit vs 32-bit) that an application uses matches the architecture of the application itself, not the Windows architecture. Therefore, running 64-bit Windows just means both 64-bit and 32-bit libraries will be installed, and both will need to be configured. To determine the architecture of Windows you're running, click the Start menu, type "Control Panel", click the "System" icon, and look for the entry marked "System type:". For instance, the architecture of this Windows 7 computer is 64-bit:



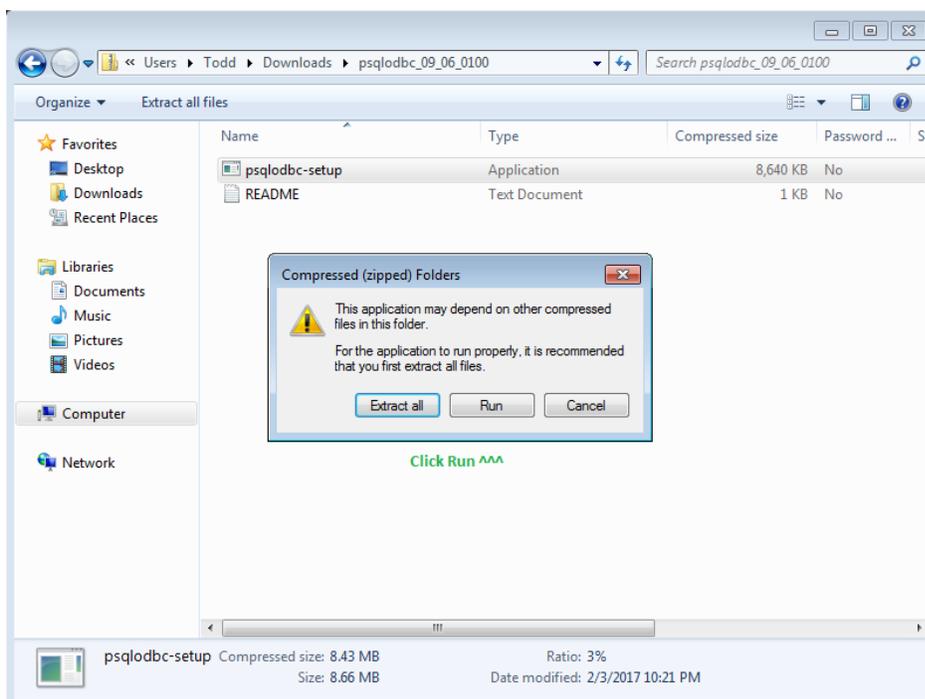
## Download the official PostgreSQL ODBC driver

You can download the official PostgreSQL ODBC driver from <https://odbc.postgresql.org>. To go directly to the download page, click here: <https://www.postgresql.org/ftp/odbc/versions/msi/>. The files are named `psqlodbc_<major-version>_<minor-version>_<patch-level>-<architecture>.zip`. You generally want the latest version (all the way at the bottom). Download the file without `-x64` or `-x86` appended at the end of the filename; the one without either of those things contains drivers for both 32-bit and 64-bit applications. For instance, download `"psqlodbc_09_06_0100.zip"`, not `"psqlodbc_09_06_0100-x86.zip"` or `"psqlodbc_09_06_0100-x64.zip"`, as shown here:



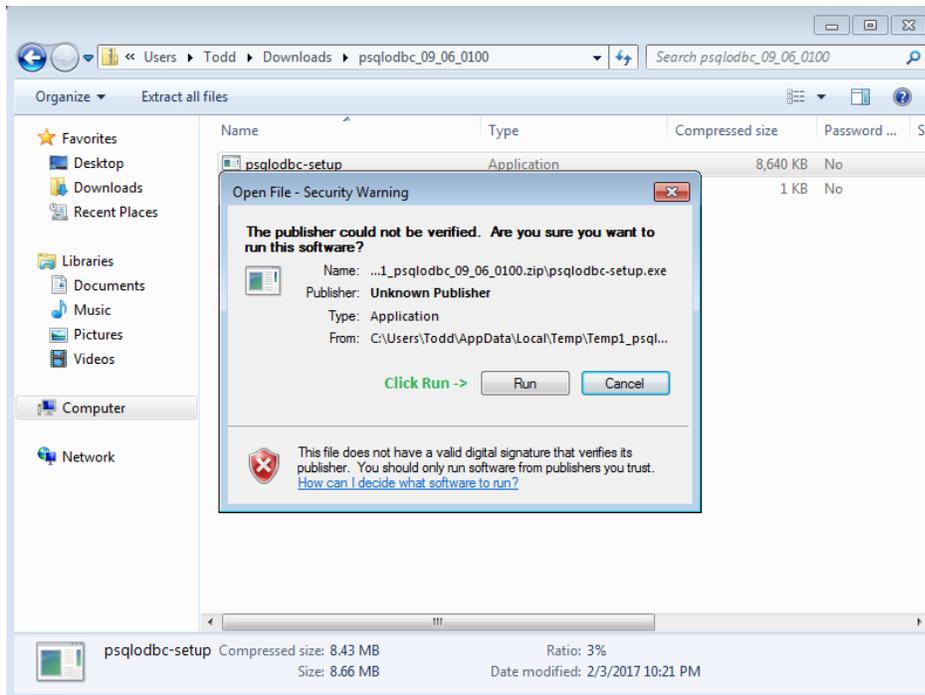
## Install the ODBC Driver

Double-click on the file you have just downloaded when it's finished. Next, double-click on the psqlodbc-setup entry in the list. Depending on your version of Windows, you may see the following dialog box:



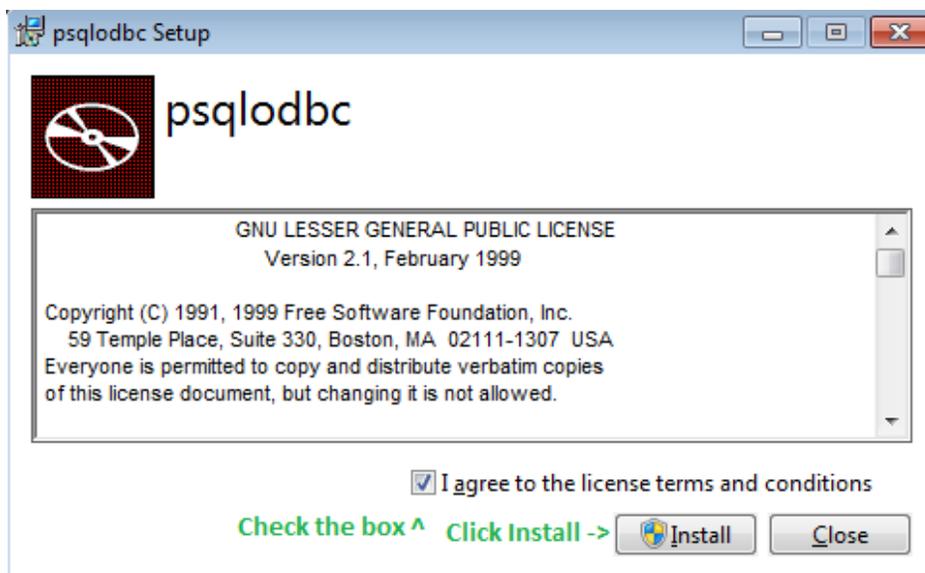
It is safe to click "Run", since the psqldb-setup program does not depend on other files in the archive.

Next, you may see the following dialog box:

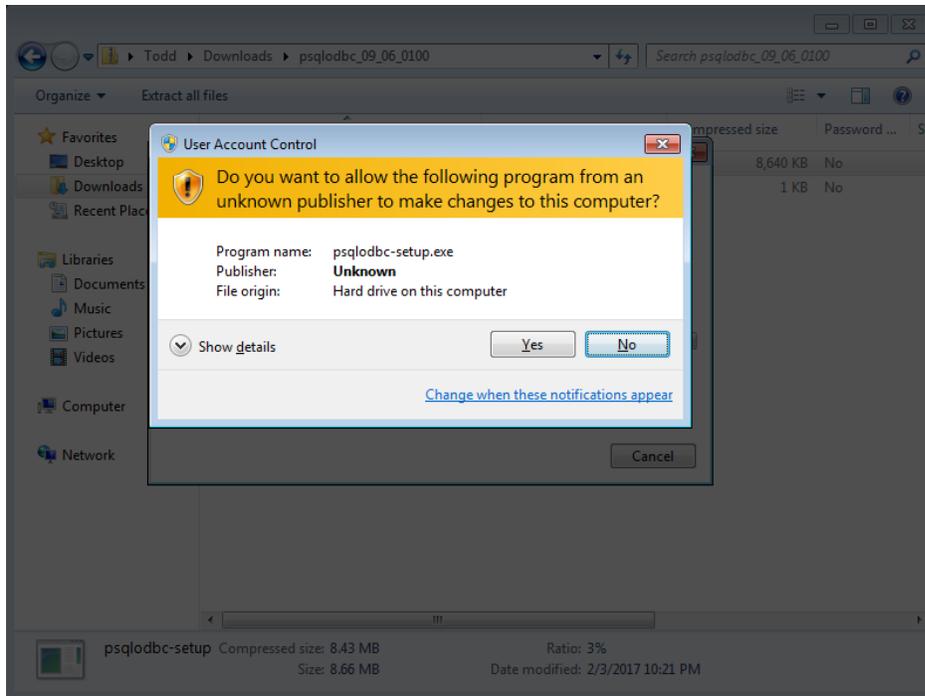


You can once again safely click "Run".

Next, you should see the main setup screen:



Accept the license to install the libraries. You may now see a User Account Control prompt:



Click Yes to continue. The drivers will be installed. You can now close the psqldb Setup window.

## Configuring ODBC

Most recently-released software capable of connecting to PostgreSQL is 64-bit, therefore WRDS supports access to PostgreSQL only through 64-bit applications. Both your operating system and application program must be 64-bit to continue. Follow the instructions in the "Determining your Windows Architecture" section above to determine which architecture your computer uses before continuing. Please note that 64-bit Windows contains both a 32-bit and 64-bit ODBC Data Sources Administrator, and you must use the 64-bit version to configure 64-bit drivers. Here is how to configure ODBC on recent versions of Windows.

### Starting ODBC Data Source Administrator in Windows 7

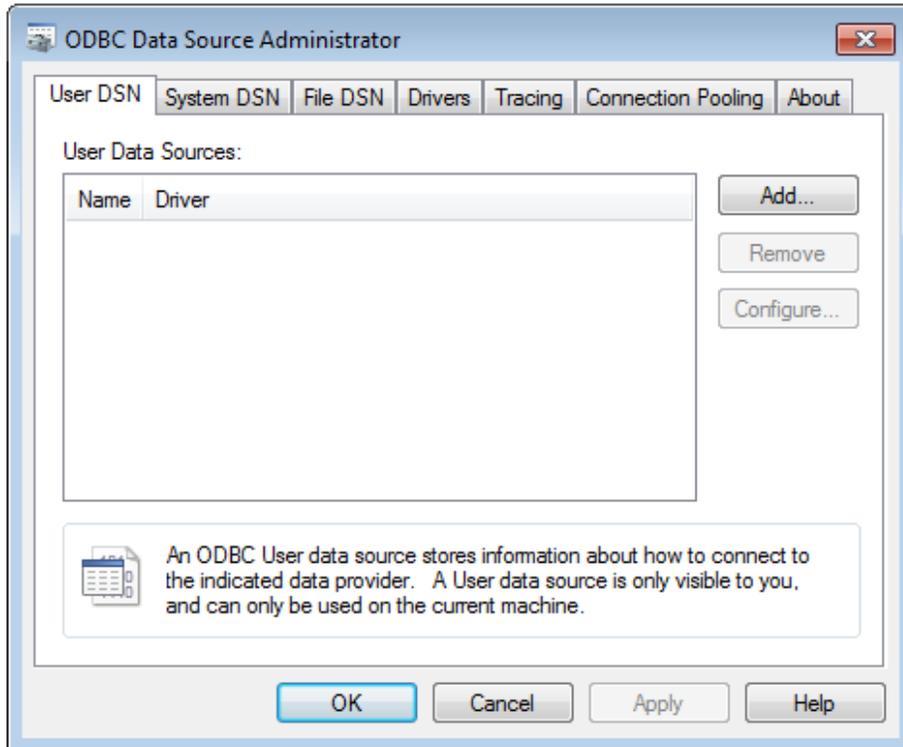
Click the Start menu, type "administrative tools", and press Enter. Double-click on "Data Sources (ODBC)". The "ODBC Data Source Administrator" window appears.

### Starting ODBC Data Source Administrator in Windows 8/8.1/10

Click the Start menu, type "administrative tools", and press Enter. Double-click on "ODBC Data Sources (64-bit)". The "ODBC Data Source Administrator (64-bit)" window appears.

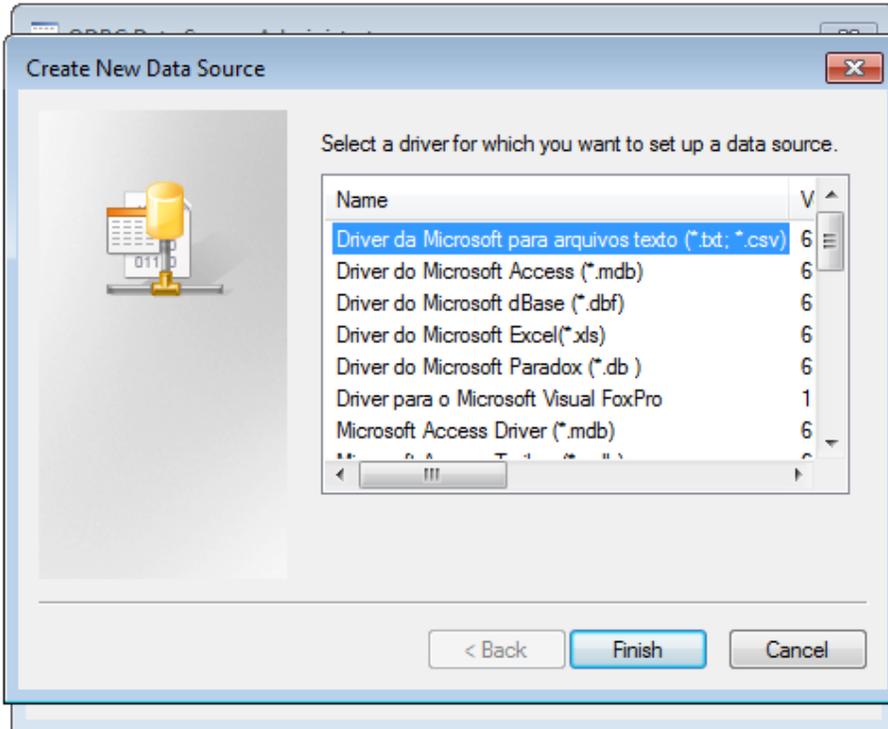
### Configuring ODBC for WRDS PostgreSQL

Regardless of the Windows version, the "ODBC Data Source Administrator" window should look similar to this:

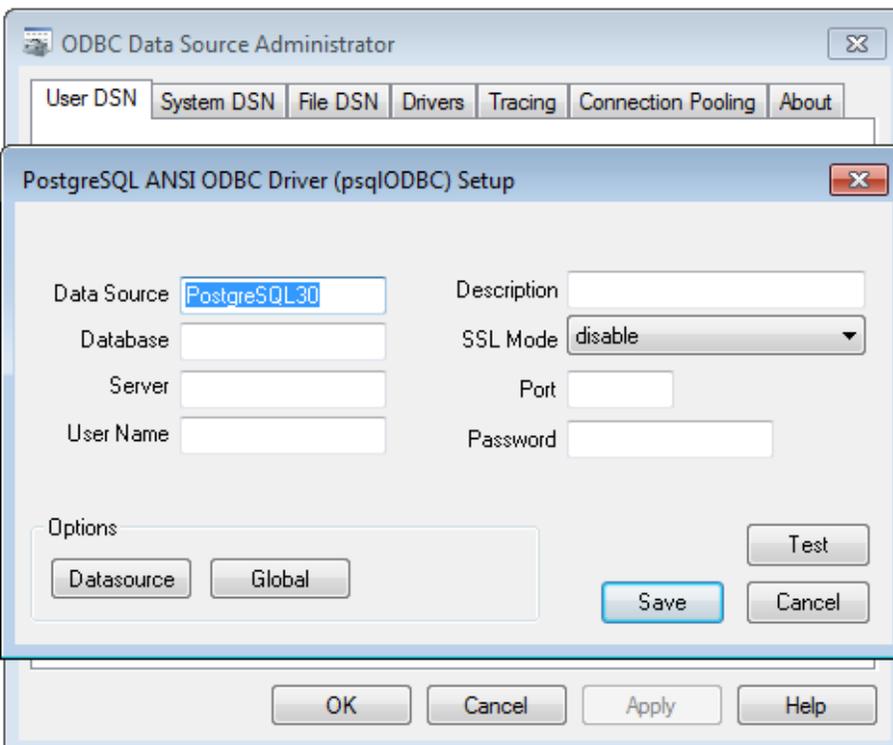


Click the "Drivers" tab to ensure that the PostgreSQL drivers (ANSI and Unicode) are installed. There may be multiple drivers in this list, but if you scroll through it, you should be able to find the drivers in question. Next, click on the "User DSN" tab. You may already have entries in the "User Data Sources" list. It is safe to leave them there.

Click the "Add..." button. The "Create New Data Source" window appears:



There may be many drivers in this list, for several different spoken languages. Find the "PostgreSQL ANSI(x64)" entry in the list and click "Finish". The "PostgreSQL ANSI ODBC Driver (psqlODBC) Setup" window will appear:



Configure it as follows:

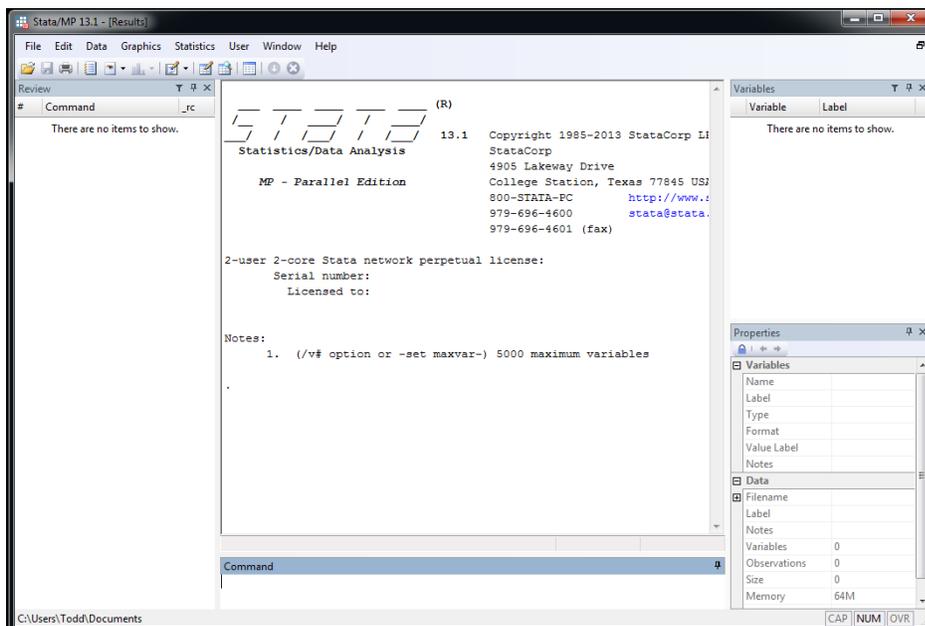
- Data Source: The name applications will use to access this DSN (Data Source Name). We suggest something to differentiate it from other DSNs, such as "wrds-pgdata-64".
- Description: A descriptive name for this DSN, such as "WRDS PostgreSQL DSN for 64-bit programs".
- Database: The database on the server you will be connecting to. This must be "wrds".
- SSL Mode: Whether or not to encrypt all data during transfer, including authentication. This must be set to "require".
- Server: The hostname of the server to connect to. This must be "wrds-pgdata.wharton.upenn.edu".
- Port: The port on the server to connect to. This must be 9737.
- User Name: Your WRDS username.
- Password: Your WRDS password.

For regular usage, you should not need to change any options found by clicking either the "Datasource" or "Global" buttons.

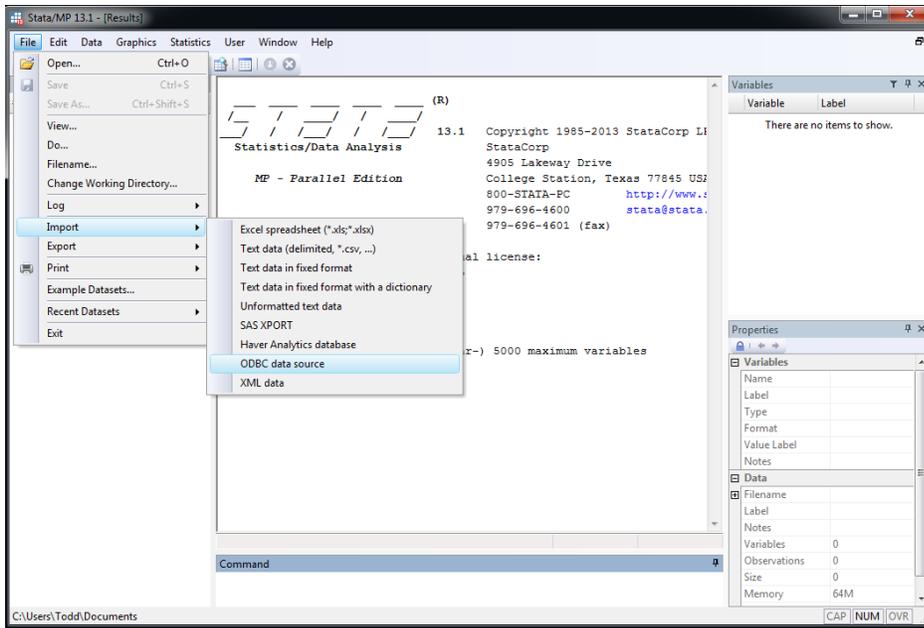
Provided you entered everything correctly, you can now click the "Test" button, and the driver will attempt to connect to the WRDS PostgreSQL server. If it does not return "Connection successful", please double-check all your settings; if it continues to fail, please contact us and provide the exact error message you get.

## Connecting to WRDS

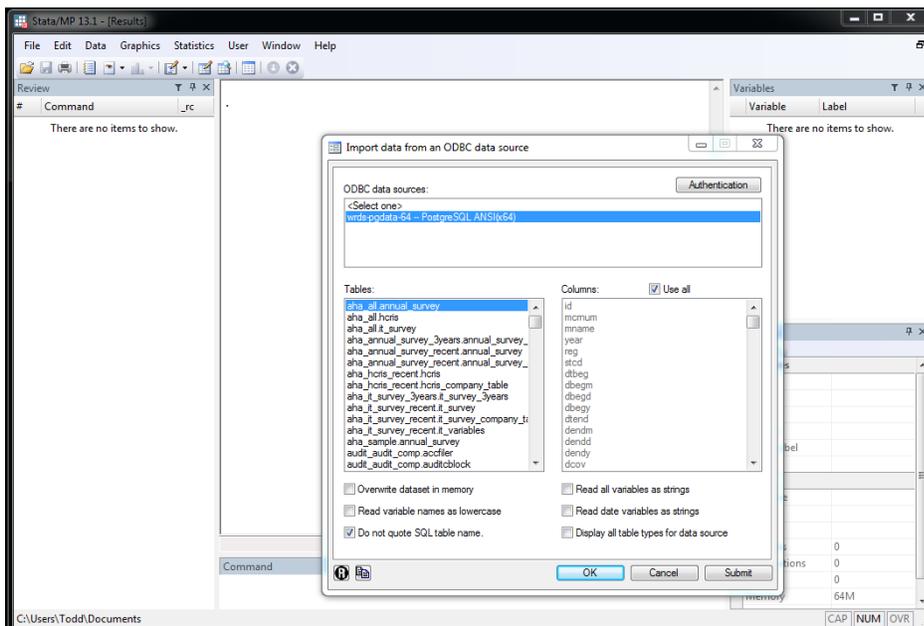
These instructions are for Stata 13, but should work with most recent versions.



Start Stata as usual. Click the "File" menu, click "Import", then "ODBC data source".



The "Import data from an ODBC data source" window appears. Click the entry for the ODBC Postgres DSN you created above.



Make sure "Do not quote SQL table name" is selected, because Stata quotes table names differently. If you get an error like, "The ODBC driver reported the following diagnostics ERROR: relation <tablename> does not exist; Error while executing the query SQLSTATE=42P01", make sure this check box is checked. When you click "OK" or "Submit", the query is sent to the server and the results are returned to Stata.

