

**Subject:** HOW TO Query SQL databases with Excel

Microsoft Excel is a common end-user tool for view tabular data.

I do believe Access to be a lot better tool for querying/reporting on data from a SQL server, but it is possible to view SQL data in an Excel spreadsheet

When you establish a connection to a SQL database with Excel, you use the Data tools in Excel to import data into the spreadsheet through an Data Connection pointed at the relevant SQL server database and table.

I control the following databases that you can use this technique with.

AirFacilities

DamPermits

FacilitiesFinancialManagement (AKA Unified PTS)

FocusOnFloods

GroundWaterInterference

IronPIG

PublicRecordTracking

RiversDMS

Rolodex

StreamAlts

WellDrillerReports (the Well Driller Reports area within the WS Inventory)

WSInventory

WWInventory

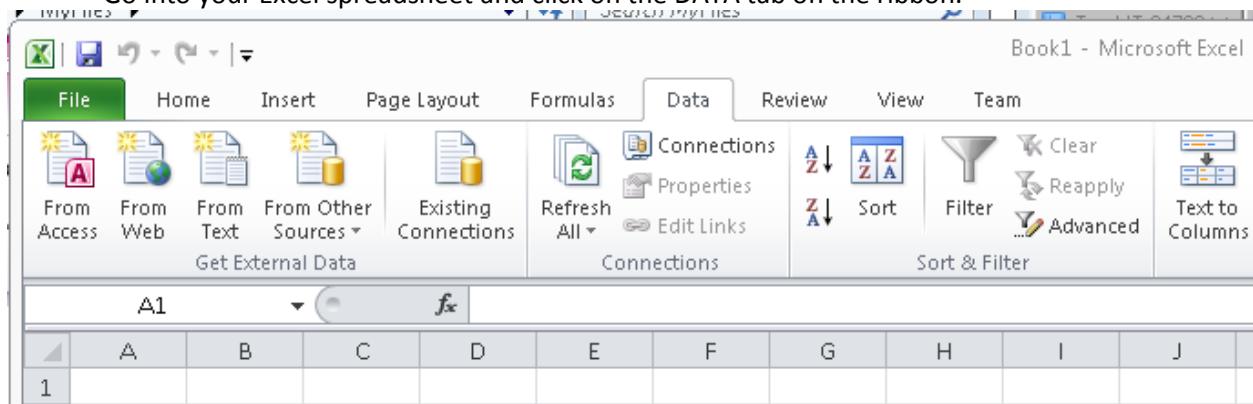
WWRegionalTracking

NOTE 1: not all of these databases currently have public views that you can query against. Email me if you can't access a database you want to and I will get the views created.

NOTE 2: you can only do queries/reports via this technique. If you want to change the actual data in the databases, you need to use the programs I've provided

NOTE 3: you have to either be on our main network or logged in via a VPN connection to use the Linking option (described below). If you really need a "stand alone" database, you can do the Importing option, but the data is only current to the moment you do the import.

Go into your Excel spreadsheet and click on the DATA tab on the ribbon.



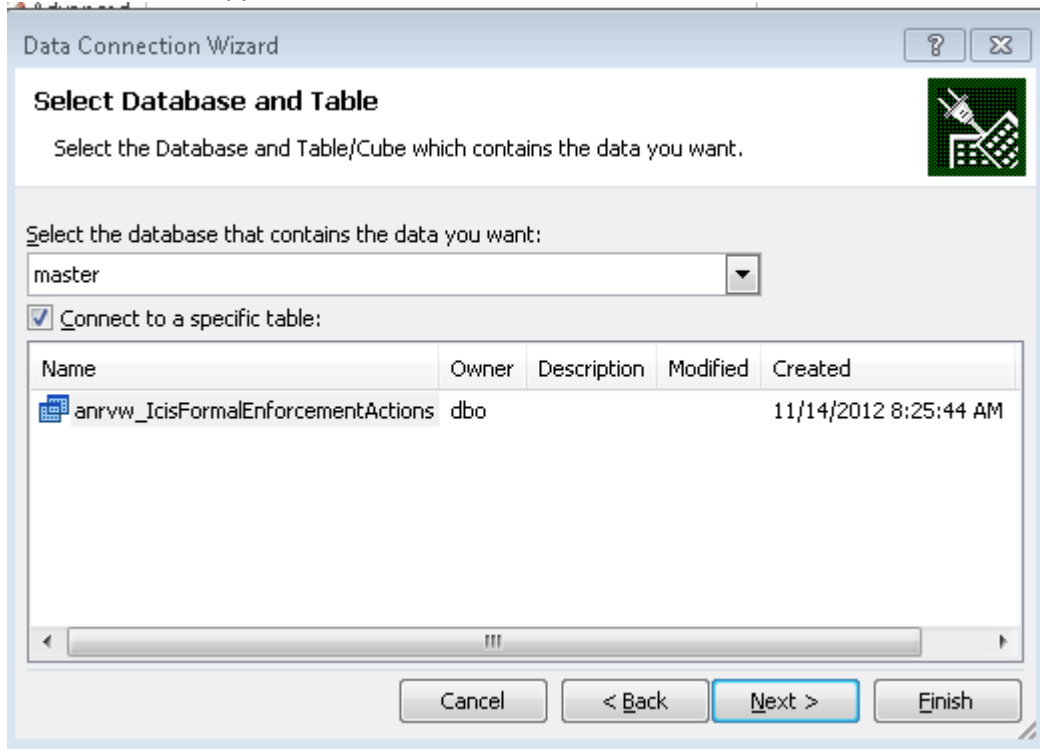
On the ribbon, click on the From Other Sources icon.  
The topmost item on the dropdown menu is From SQL Server. Click on that.  
This window will appear



for the first field, type the name anrgdb (this is the name of the SQL server where all our data is stored).  
For the second field, leave the default of Use Windows Authentication alone (this will use your network permissions to establish permissions to the SQL server without you having to do anything further).

Press the Next button

This window will appear

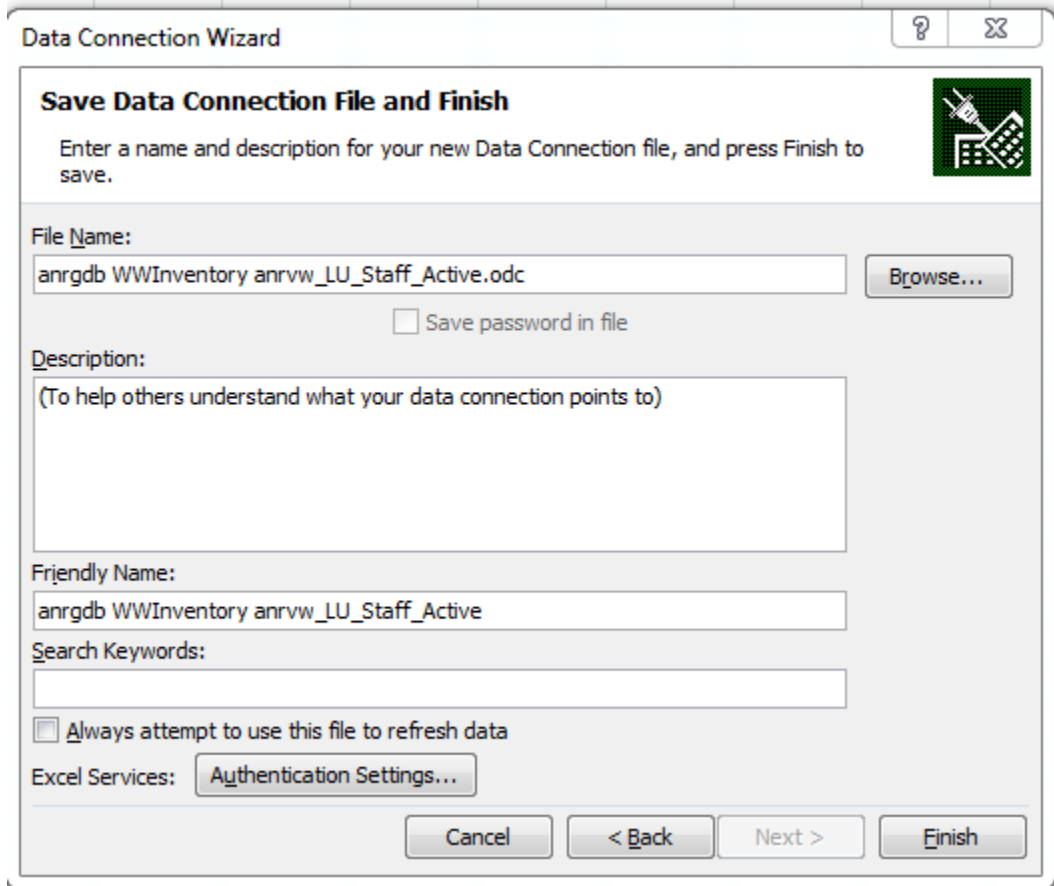


In the first field, you indicate the database on the server that you want to draw data from. The dropdown list should show all the databases you have access to. As you select various databases, the list of views/tables you can access in that database should be displayed in the list at the bottom of the window.

I have set things up so anyone in ANR should have the ability to see and query against a collections of views instead of the tables themselves. These views are named with the following convention anrww\_<name of table>\_Active. The views put the fields in alphabetically order to make them easier to find.

I would make sure the Connect To A Specific Table checkbox is set, high-light the table I want to see data for and press the Next button.

This window appears



The screenshot shows a window titled "Data Connection Wizard" with a help icon and a close icon in the top right corner. The main heading is "Save Data Connection File and Finish" with a green icon of a plug and a grid. Below the heading is the instruction: "Enter a name and description for your new Data Connection file, and press Finish to save." The form contains the following fields and controls:

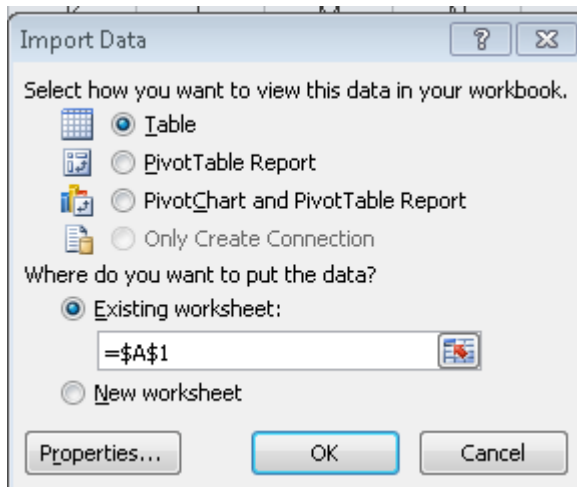
- File Name:** A text box containing "anrgdb WWInventory anrww\_LU\_Staff\_Active.odc" and a "Browse..." button to its right.
- Save password in file
- Description:** A text box containing "(To help others understand what your data connection points to)".
- Friendly Name:** A text box containing "anrgdb WWInventory anrww\_LU\_Staff\_Active".
- Search Keywords:** An empty text box.
- Always attempt to use this file to refresh data
- Excel Services:** A button labeled "Authentication Settings..."

At the bottom of the window are four buttons: "Cancel", "< Back", "Next >", and "Finish".

The only thing I might change on this window is to edit the File Name and remove the word anrgdb...since all of our databases are on anrgdb....but that is definitely optional. As is writing a bit of a description to describe what table this connection is for.

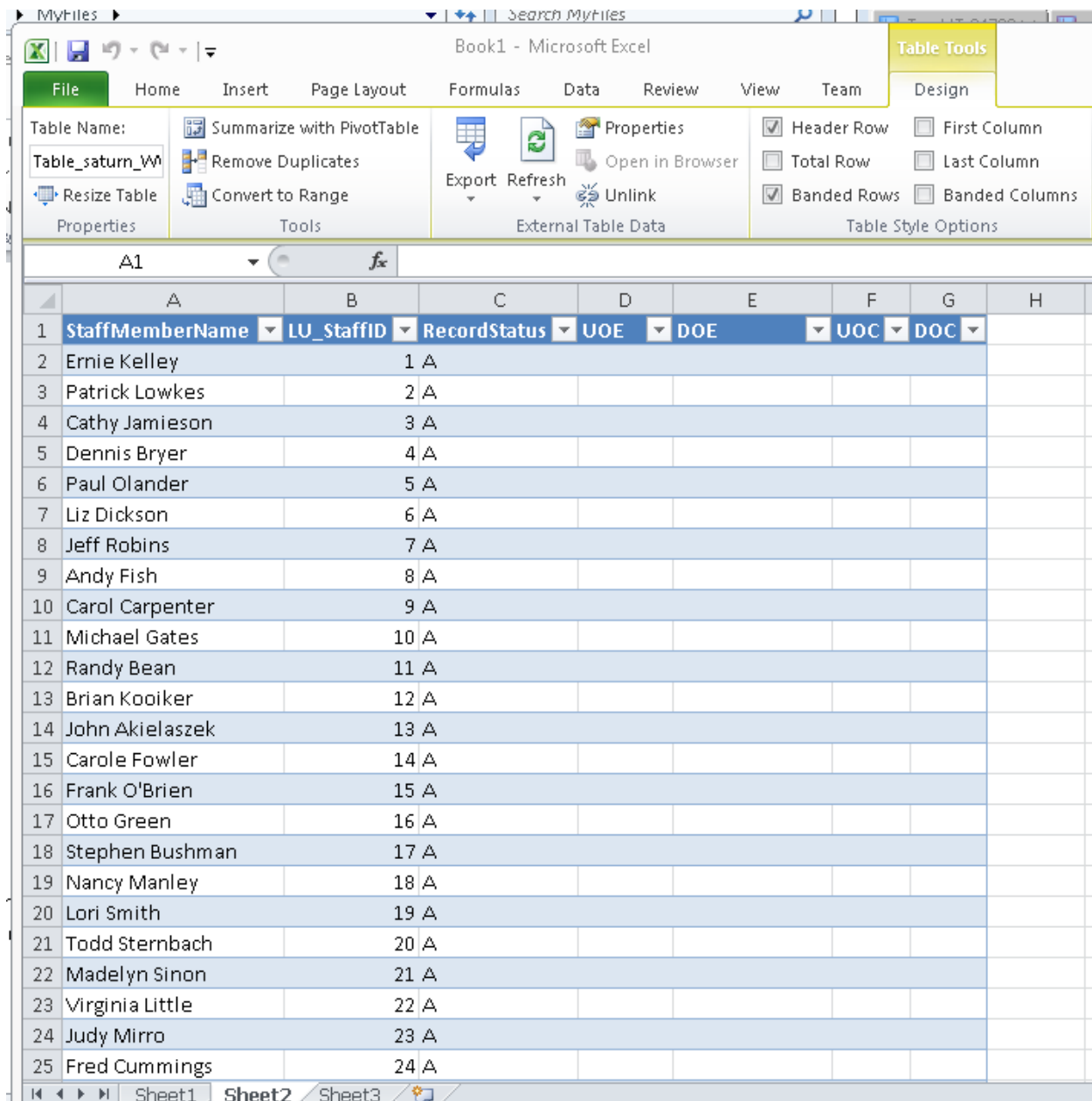
Press the Finish button when you are ready

This window will appear



Excel is attempting to determine how you want to bring the data in. My experience is limited, so I've always just used the defaults and pressed the OK button.

The data is imported and displayed in Excel like below



The screenshot shows Microsoft Excel with a table named 'Table\_satum\_WA'. The table has 25 rows and 7 columns. The columns are: StaffMemberName, LU\_StaffID, RecordStatus, UOE, DOE, UOC, and DOC. The data is as follows:

	A	B	C	D	E	F	G	H
1	StaffMemberName	LU_StaffID	RecordStatus	UOE	DOE	UOC	DOC	
2	Ernie Kelley	1	A					
3	Patrick Lowkes	2	A					
4	Cathy Jamieson	3	A					
5	Dennis Bryer	4	A					
6	Paul Olander	5	A					
7	Liz Dickson	6	A					
8	Jeff Robins	7	A					
9	Andy Fish	8	A					
10	Carol Carpenter	9	A					
11	Michael Gates	10	A					
12	Randy Bean	11	A					
13	Brian Kooiker	12	A					
14	John Akielaszek	13	A					
15	Carole Fowler	14	A					
16	Frank O'Brien	15	A					
17	Otto Green	16	A					
18	Stephen Bushman	17	A					
19	Nancy Manley	18	A					
20	Lori Smith	19	A					
21	Todd Sternbach	20	A					
22	Madelyn Sinon	21	A					
23	Virginia Little	22	A					
24	Judy Mirro	23	A					
25	Fred Cummings	24	A					

My Excel experience is very limited, but I have noticed the following things

- The data is imported from the database, not linked to it the way you can do with Access. You can delete or change the data displayed.
- If you select to import the data as a table and you put the mouse in one of the table cells, the Refresh icon visible on the ribbon under DATA will reimport the data from the sql server (restoring deleted records and overwriting edited ones to match the server)

- Once you've created a Data Connection in an Excel workbook, you can use it in other workbooks by clicking on the Existing Connections icon under DATA on the ribbon.

