

Knowledge Base Article: Article 256

How to use the new OData Data Source with Click&DECiDE V16? (OData means Open Data Protocol)

Last Update: November 28th, 2016

Requirement:

You need to install Click&DECiDE Version 16.0 (64-bit) or greater.

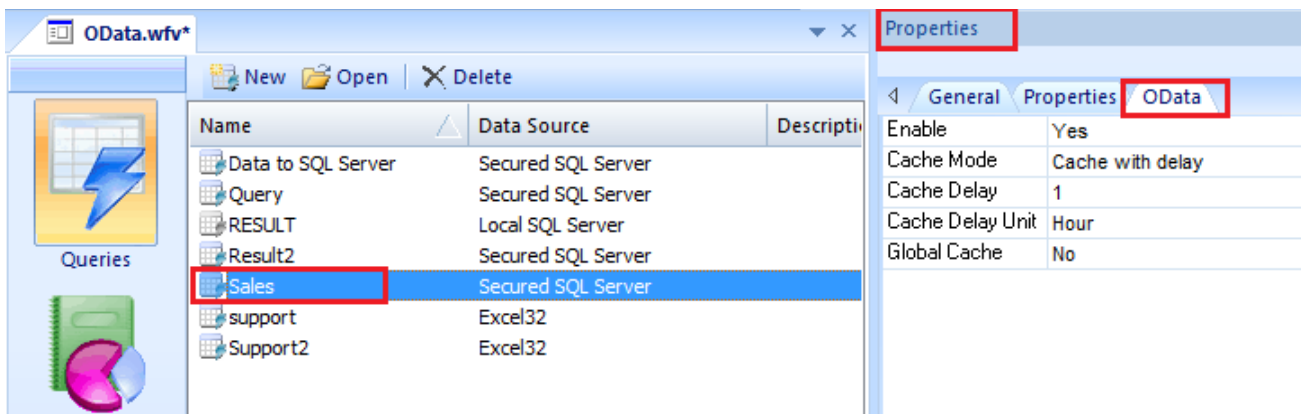
Explanation:

Click&DECiDE version 16 provides a new data source protocol “**OData (Open Data Protocol)**” allowing to use the generated URL from other applications such as Microsoft Excel Power Pivot or PowerView for example etc.

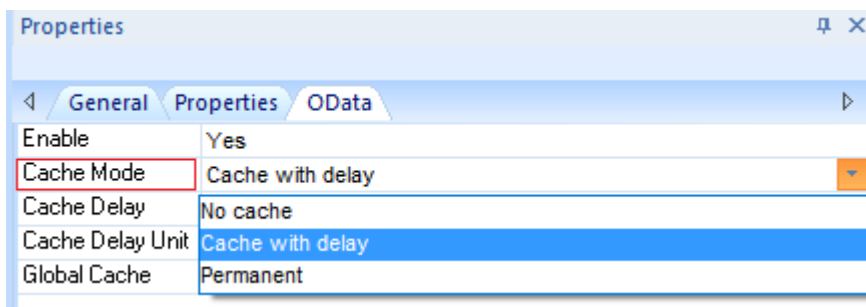
This OData option is defined for each concerned query inside a Click&DECiDE project file (*.wfv). This project file must be “saved as” any name inside a Menu Shared Folder for the Web Portal on the Server where Click&DECiDE V16 Enterprise is installed. This OData protocol provides some options such as Enable/Disable OData, Use a Cache, Define a Cache Delay, Define a Delay Unit, Define a Global Cache.

Defining some Click and DECiDE Queries for OData support:

1. Open Click&DECiDE Builder and create or open a Project file (*.wfv).
2. Create or select the required query to be used later with an OData link.
3. With Click&DECiDE Builder Version 16 or greater, a new **OData** Tab appears in the Properties box:



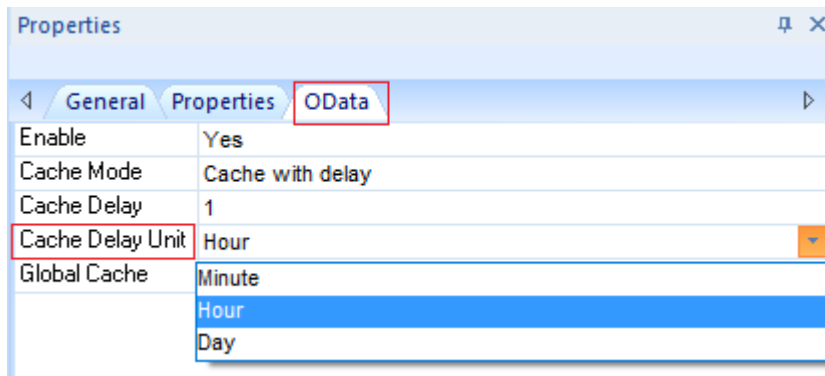
4. **Enable OData:** Yes/No (Default value is Yes when creating a new query). If Enable is set to “No”, then other options are grayed and cannot be changed. If Enable is set to “Yes”, you can specify other options:
5. **Cache Mode:** you can choose among No Cache, Cache with Delay or Permanent Cache:



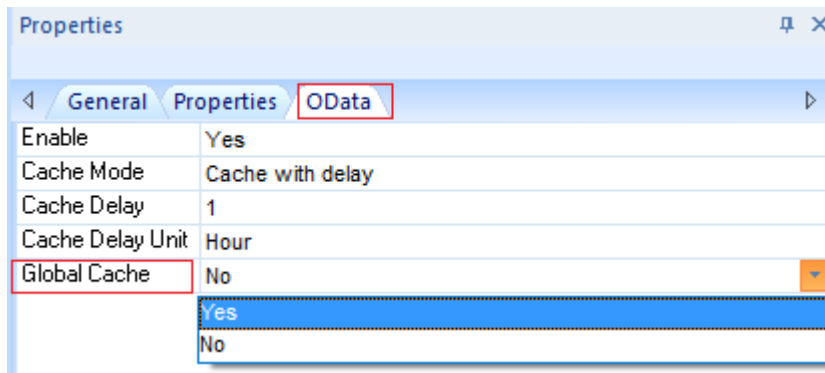
6. **Cache Delay:** if Cache Mode is set to “Cache with Delay” you can choose the duration for this delay. This must be an integer number.



7. **Cache Delay Unit:** if “Cache Delay” is not grayed, you can specify here the Unit among Day, Hour or Minute.



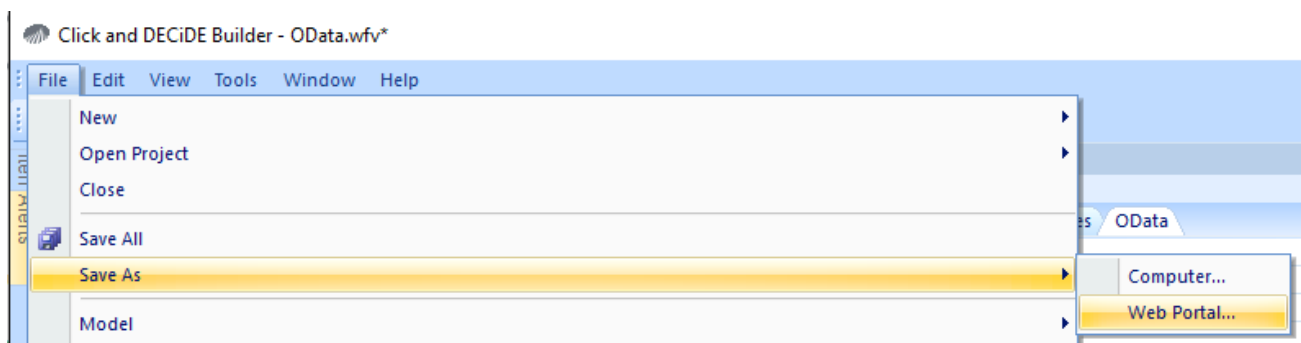
8. **Global Cache:** Yes/No. Default value is “No”. In that case the Cache will apply to the Connected User. If you wish to have a global cache for everyone (any user), then select Yes for this option.



9. Repeat the steps 2 to 8 for each concerned query inside this Builder project file.

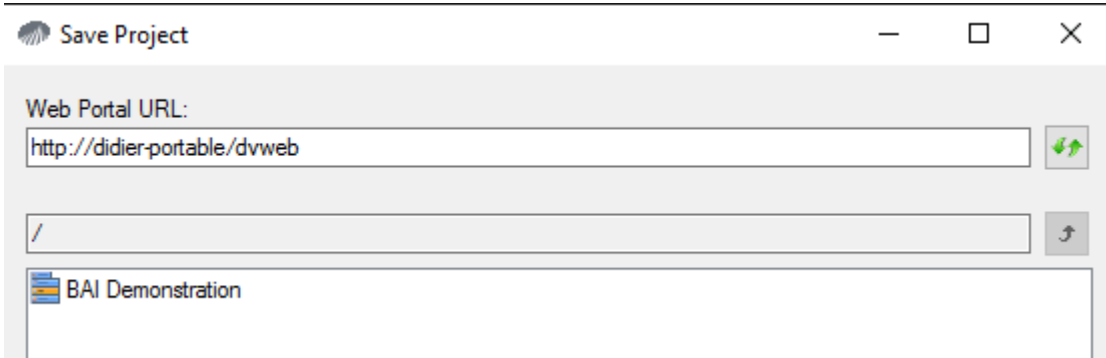
Saving the Click&DECiDE Builder project file for OData Support

This project file must be “saved as” any name inside a Menu Shared Folder for the Web Portal on the Server where Click&DECiDE V16 Enterprise is installed. Even if you are working on the Server machine, do not used the “Save As” command selecting “Computer...”: you absolutely need to “Save as” your project by selecting the “Web Portal” option:

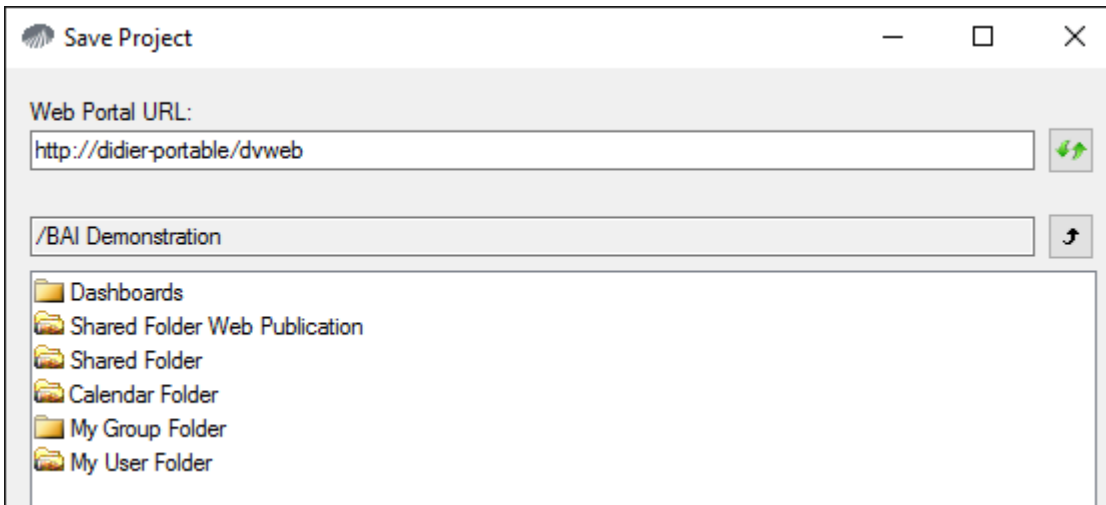


Warning: this “Save as” command to the Web Portal doesn’t work with the Forms mode if using the Click&DECiDE Authentication. You must use the HTTP Digest or the HTTP Basic modes, or the Windows Authentication mode.

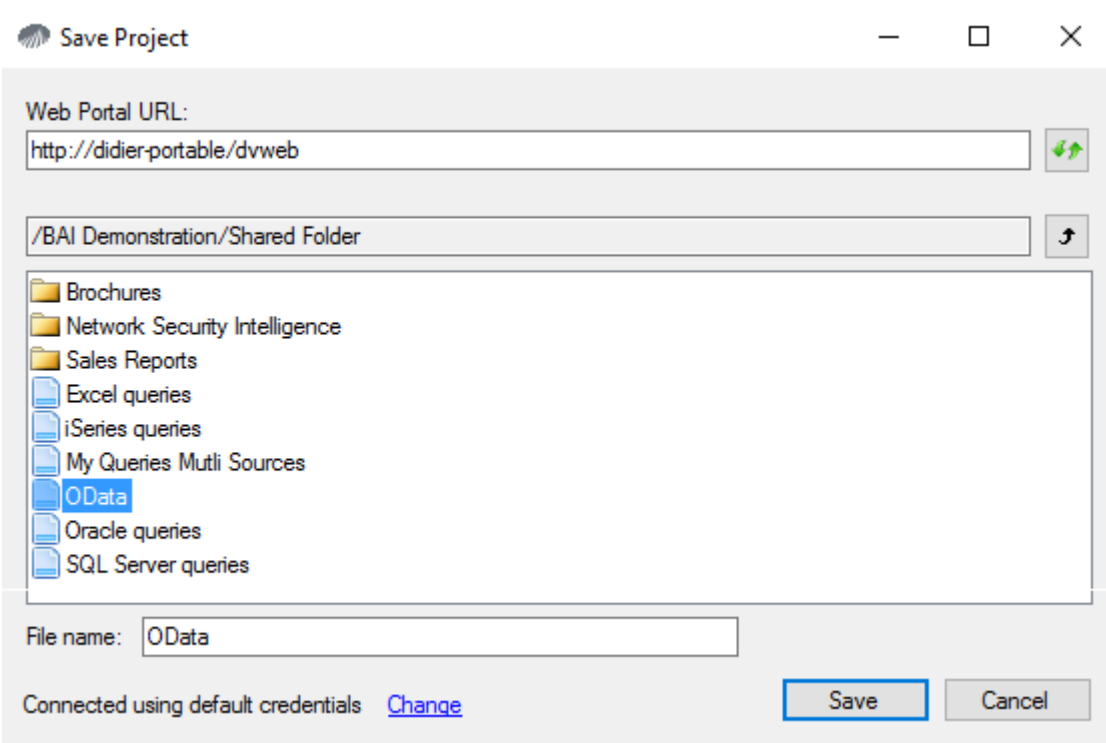
Once Web Portal is selected, you get this dialog box to connect to the Web Portal:



Select the required Menu, and then browse to the Shared Folder list:

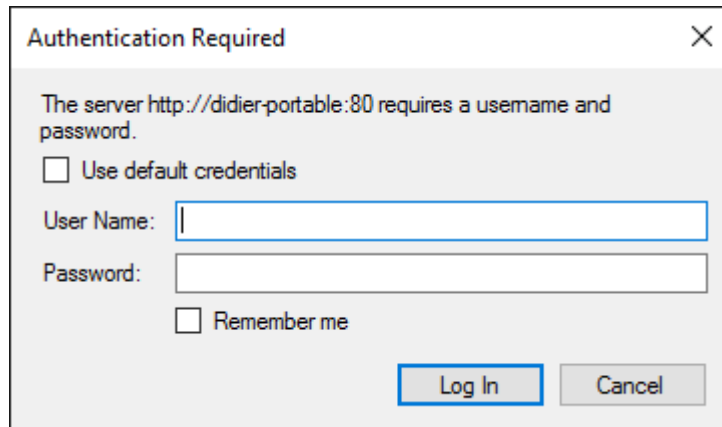


Select the required Shared Folder and then enter a project file name or select an existing project file if needed:

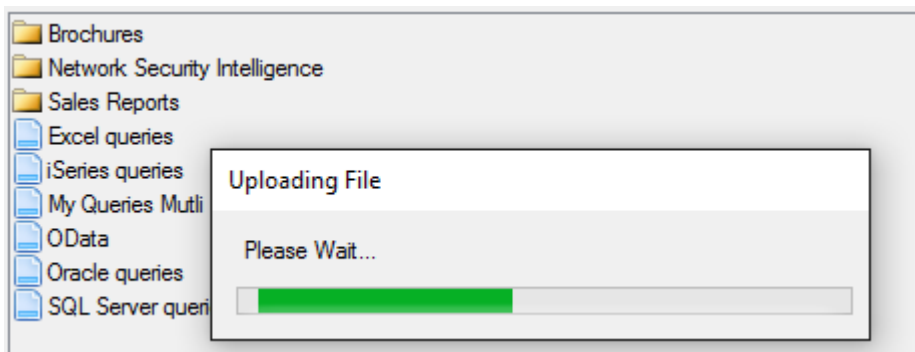




Note that if you do not see the expected Menus or Shared Folders, you can change the default credentials by clicking the **Change** button:



Finally click the Save button to start the upload of your project file to the Server Shared Folder:



Accessing to the Click&DECiDE Builder project file having for OData Support

Connect to the Click&DECiDE Web Portal. According to your profile and Authentication Mode you should see your authorized Menus:



Select the Menu inside of which you expect find some Builder project files having some OData links:
It must be a project file saved inside a Shared Folder having the OData option enabled for one or several queries.

Option 1: Working with the link of a Project file:

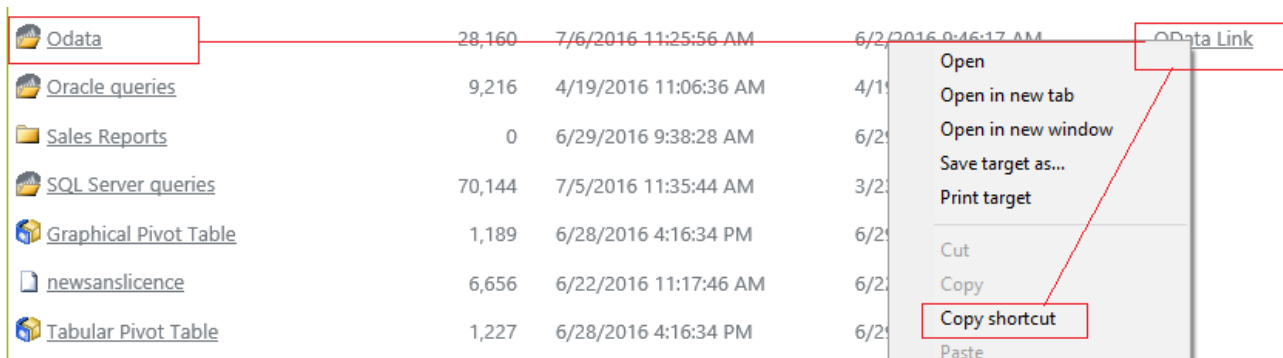
In this example we have saved the Builder project inside the Shared Folder of the BAI Demonstration menu.

Select the Shared Folder branch inside this Menu:

All Click&DECiDE Builder project files having some queries ready to use with the OData protocol will appear as follow:

Name	Size	Modification	Creation	
Brochures	0	6/29/2016 9:38:21 AM	6/29/2016 9:38:21 AM	
Excel queries	13,312	7/5/2016 11:48:04 AM	6/7/2016 12:20:33 PM	OData Link
iSeries queries	29,184	3/23/2016 4:14:12 PM	3/23/2016 4:07:26 PM	
My Queries Mutli Sources	28,672	7/6/2016 10:15:36 AM	6/9/2016 10:15:19 AM	OData Link
Network Security Intelligence	0	6/29/2016 9:38:22 AM	6/29/2016 9:38:21 AM	
Odata	28,160	7/6/2016 11:25:56 AM	6/2/2016 9:46:17 AM	OData Link

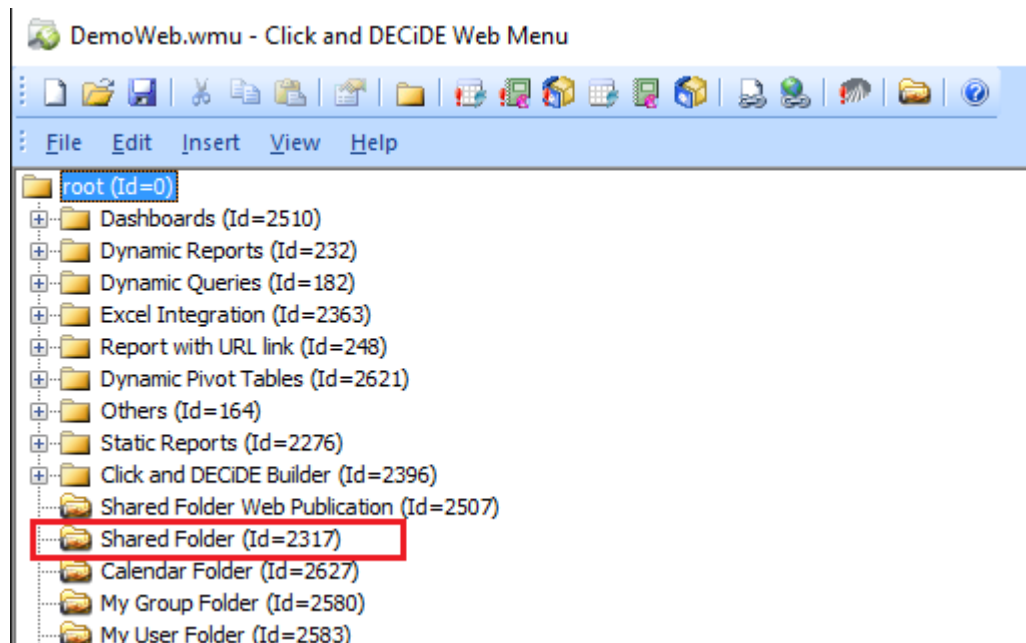
On the right side, some OData Links appear. Do no click this link but make a right mouse click and select copy shortcut:



This shortcut will contain something like:

<http://servername/CnDOData/OData/BAI%20Demonstration/2317/OData.svc>

where 2317 is the Menu ID of this Shared Folder branch



This link can be then used for example from Excel to create a Power Pivot as follow as describe later in this document.



Option 2: Working with a specific link from one query of this project file:

If you directly select a project file inside a Shared Folder, that will display all the existing queries and reports. Select the query level, and click the required query from which you wish to use the OData link:

Example: select the OData.wfv project, knowing that the OData Link displayed at the project level means that at least on query supports the OData protocol.

Name	Size	Modification	Creation
Queries	0	7/6/2016 12:14:13 PM	7/6/2016 12:14:13 PM

Click the queries level:

Name	Size	Modification	Creation
Data to SQL Server	0	7/6/2016 2:37:30 PM	6/29/2016 10:11:00 AM
Result	0	7/6/2016 3:05:21 PM	6/29/2016 10:55:47 AM
Sales	0	7/6/2016 3:06:44 PM	6/2/2016 9:44:35 AM
support	0	6/30/2016 12:17:17 PM	6/28/2016 11:38:05 AM

Click now the "Sales" query and click the **Share** button to search for the Odata link:

Output Format: Preview PDF Other: Atom

Share

- OData (Open Data Protocol)
- Web Link to this page
- OData (Open Data Protocol)
- Excel® Web Query
- Google® Data Table

http://localhost/CnDOData/OData/BAI Demonstration/2317/OData.svc/Sales

Select the OData row in the Share list box:

Output Format: Preview PDF Other: Atom

Share

OData (Open Data Protocol)

http://localhost/CnDOData/OData/BAI Demonstration/2317/OData.svc/Sales

Data will be cached for 1 hour(s) for each user.

As you can see, the link for this specific query appears as: (localhost being the server name)

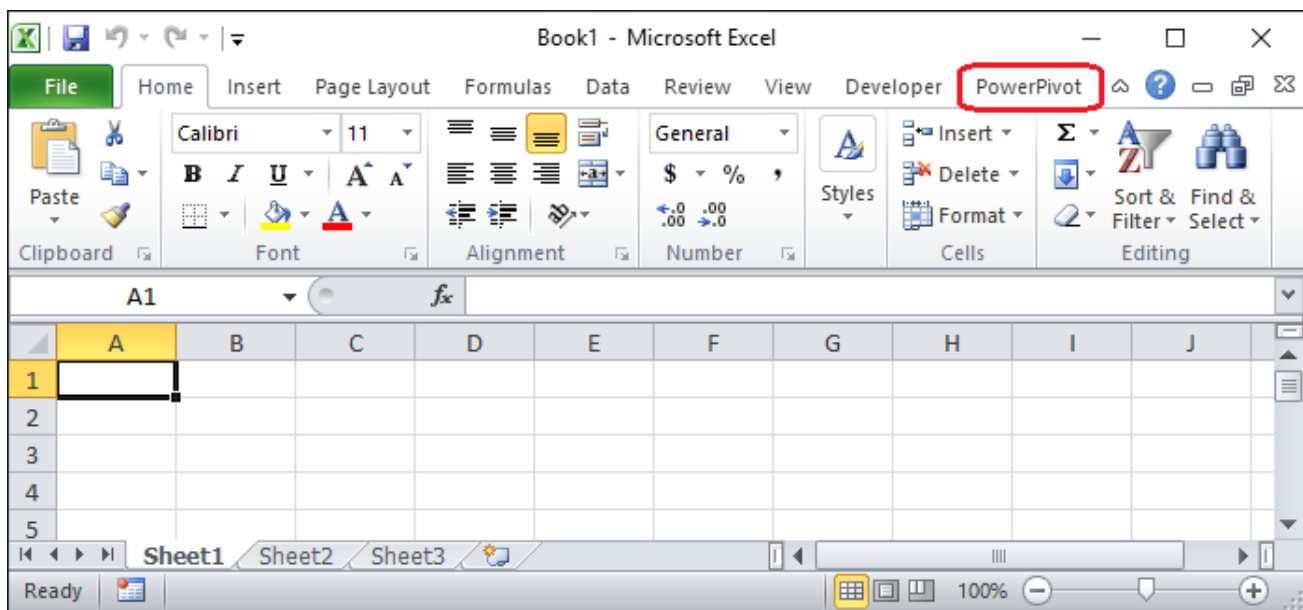
<http://servername/CnDODData/OData/BAI Demonstration/2317/OData.svc/Sales>

and the Cache options are displayed as “Data will be cached for 1 hour(s) for each user”, according to the specified options in the Builder project file for this query, done by the Author.

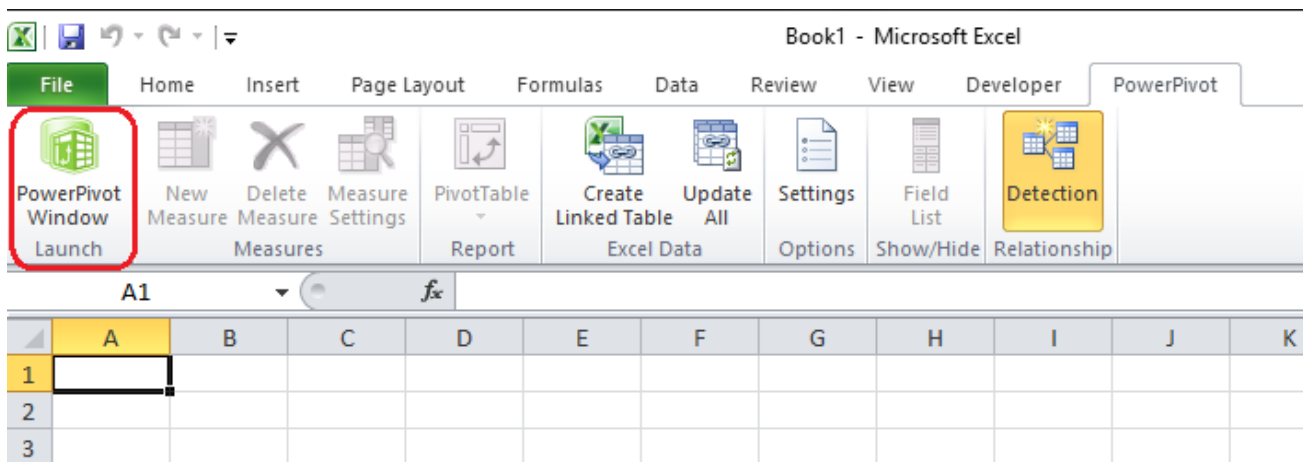
Using an OData link from Excel Power Pivot:

If we use the OData link given by the project file OData.wfv in the Shared Folder,
<http://servername/CnDODData/OData/BAI%20Demonstration/2317/OData.svc>

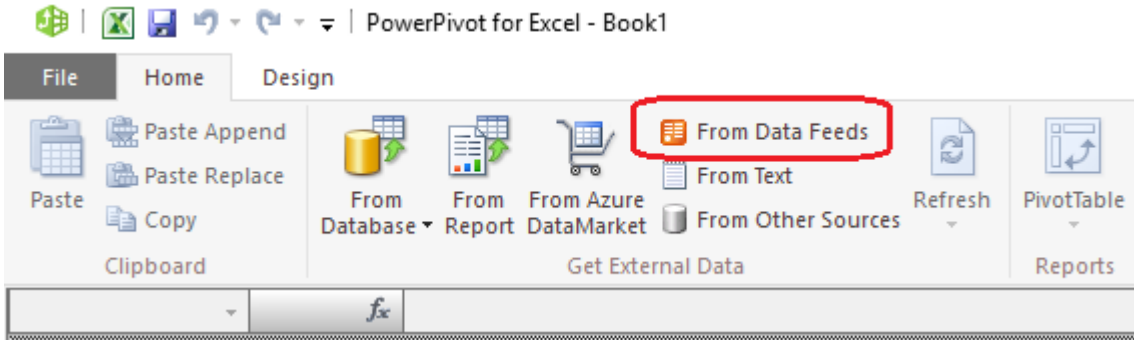
Then start Excel 2010 or greater: (Note that the Add-In PowerPivot should have been installed before)



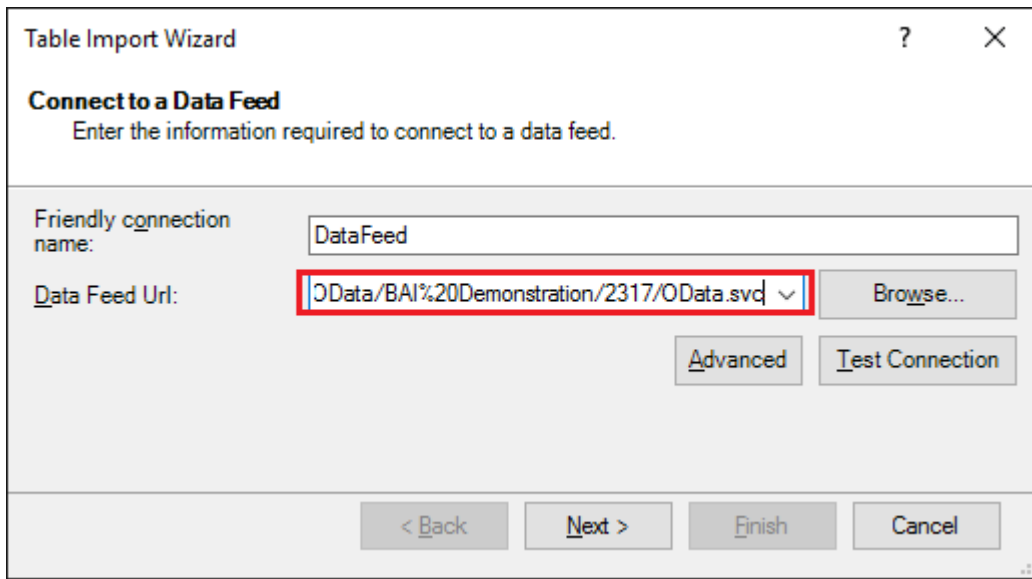
Click **PowerPivot**



Click **PowerPivot Window Launch**



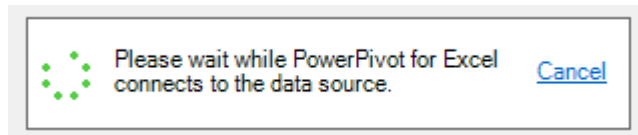
Click From Data Feeds



Paste the OData shortcut inside the Data Feed Url:

<http://servername/CnDOData/OData/BAI%20Demonstration/2317/OData.svc>

Click Next:



You will get a list of all queries from this project having an enabled OData option.



Table Import Wizard [?] [X]

Select Tables and Views
Select the tables and views that you want to import data from.

Data feed URL: http://localhost/CnDODData/OData/BAI%20Demonstration/2317/OData.svc

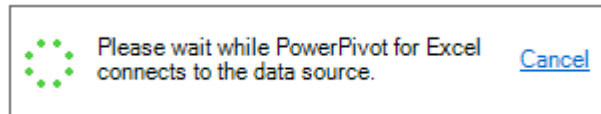
Tables and Views:

<input type="checkbox"/>	Source Table	Friendly Name	Filter Details
<input type="checkbox"/>	Data to SQL Server		
<input checked="" type="checkbox"/>	Result	Result	
<input checked="" type="checkbox"/>	Sales	Sales	
<input type="checkbox"/>	support		

[Select Related Tables] [Preview & Filter]

[< Back] [Next >] [Finish] [Cancel]

Here you can select one or several queries as Source Table(s).
Select at least one table and click Finish. In this example 2 queries are selected.



After a while, the status is displayed with the number of rows for each "Friendly Name" or "Work Item":

Table Import Wizard [?] [X]

Importing
The import operation might take several minutes to complete. To stop the import operation, click the Stop Import button.

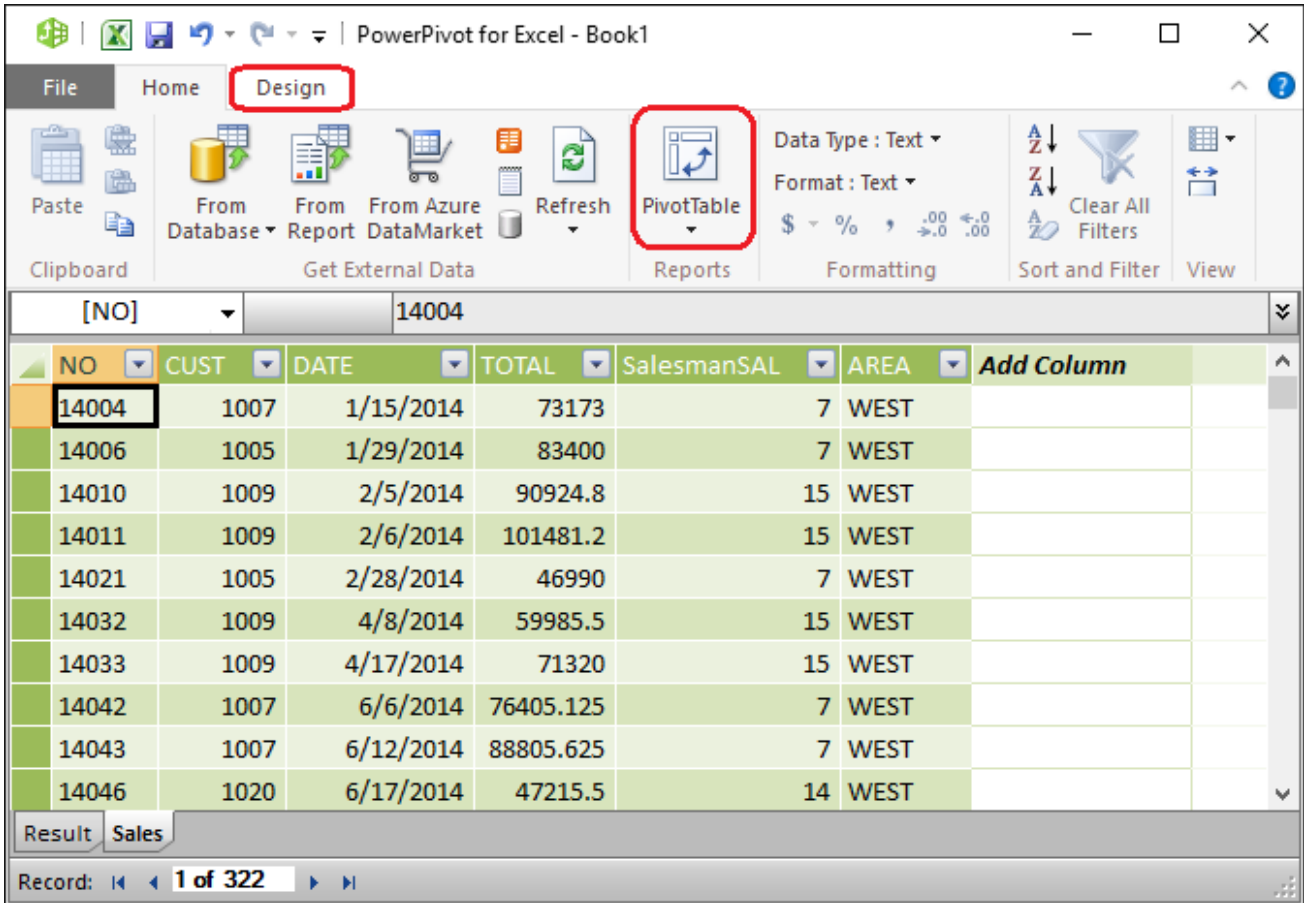
Success Total: 2 Canceled: 0
Success: 2 Error: 0

Details:

	Work Item	Status	Message
<input checked="" type="checkbox"/>	Result	Success. 18 rows transferred.	
<input checked="" type="checkbox"/>	Sales	Success. 322 rows transferred.	

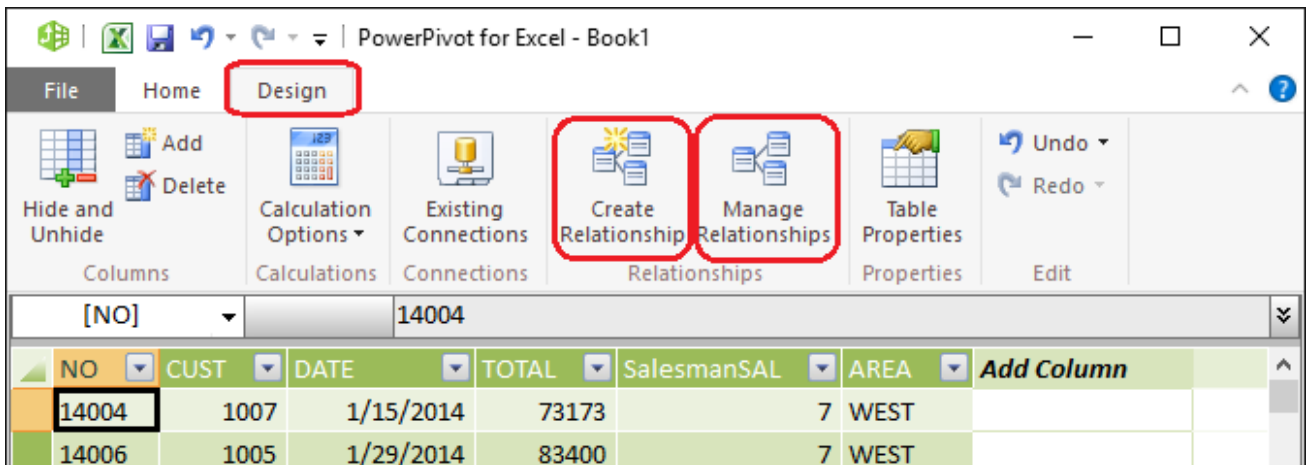
[Stop Import] [Close]

Click Close to continue.

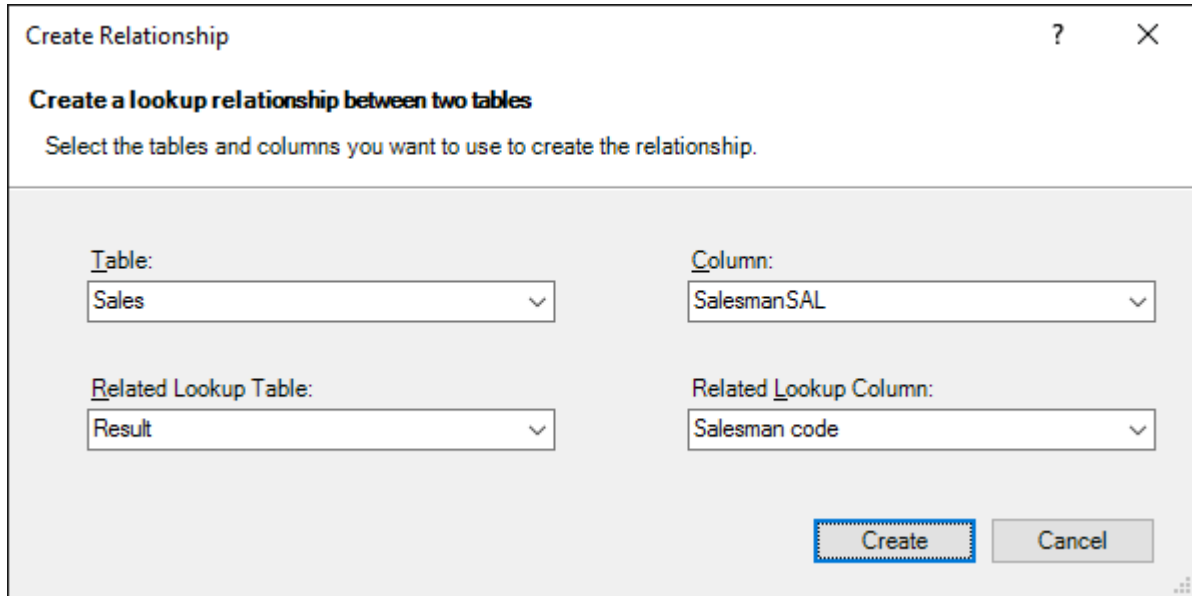


Both Source Tables appear under the Friendly Name with their data.
If a join condition should be defined between 2 or more source tables, click the **Design** command, else you can click directly the **PivotTable** icon to create it.

Design will provide command to create or modify Relationships:



Create Relationships will allow joining some fields together: example the column Salesman.SAL from table source SALES will be joined to column Salesman Code from the RESULT table source:



Create Relationship ? X

Create a lookup relationship between two tables

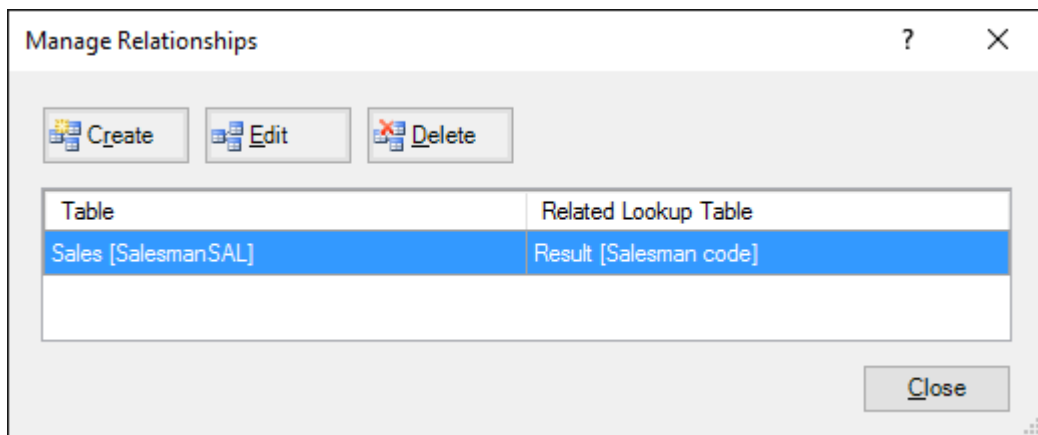
Select the tables and columns you want to use to create the relationship.

Table: Sales	Column: SalesmanSAL
Related Lookup Table: Result	Related Lookup Column: Salesman code

Create **Cancel**

Click Create to validate.

Manage Relationships will allow to create other relations, modify or delete them.



Manage Relationships ? X

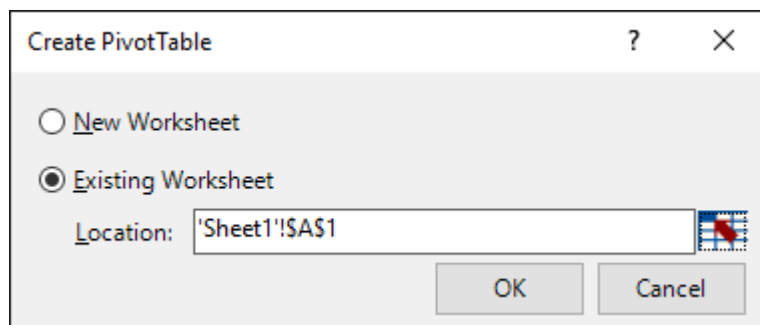
Create **Edit** **Delete**

Table	Related Lookup Table
Sales [SalesmanSAL]	Result [Salesman code]

Close

Once (optional) relationships have been defined, click now the PivotTable icon going back to the Home Tab.

Specify the target location:



Create PivotTable ? X

New Worksheet

Existing Worksheet

Location: 'Sheet1'!\$A\$1

OK **Cancel**

Click OK and create your PivotTable:



Sum of TOTAL	Column Labels	ATLANTIC	NORTH-WEST	SOUTH	WEST	Grand Total
Bill Raley			3,514,254			3,514,254
Diane Meyer	2,792,881					2,792,881
Doug Castro				6,298,989		6,298,989
Georges Dunel				3,019,050		3,019,050
Jean Martin				927,818		927,818
Jim Baxter				971,756		971,756
Joe Kramer			3,917,214			3,917,214
Karen Walker	791,636					791,636
Kim Johnson				703,336		703,336
Ric Smith				6,940,120		6,940,120
Robert Salta			3,013,918			3,013,918
Sandra Davis			2,458,912			2,458,912
Tim Rosenberg	392,397					392,397
Grand Total	3,976,915	12,904,297	2,602,910	16,258,159	35,742,281	

Or with Graph:

Row Labels	Sum of TOTAL
Diane Meyer	\$2,792,881
James Smith	\$3,653,798
Jean Martin	\$927,818
Jim Baxter	\$971,756
John Brown	\$796,902
Karen Walker	\$791,636
Kim Johnson	\$703,336
Tim Rosenberg	\$392,397
Wanda Sanders	\$1,522,315
Grand Total	\$12,552,841

The same method will apply if you are using a link given by the Share button from a specific query.

*** End of Doc ***