



# 2TouchPOS DataKey with Power BI and Excel

---

## Table of Contents

About this Document .....	2
What's new! .....	2
<b>Power BI .....</b>	<b>3</b>
Desktop Installation .....	3
Using Predefined templates .....	3
Power BI Website.....	7
<b>Microsoft Excel 2016.....</b>	<b>9</b>
Using Predefined templates .....	9
<b>Query Editor .....</b>	<b>12</b>
Columns .....	12
Filtering .....	13
Sorting.....	14
Query Settings.....	14
<b>Appendix: Custom templates .....</b>	<b>15</b>
Creating Power BI templates .....	15
Creating Excel templates .....	19

## About this Document

This document describes the steps needed to configure Power BI and Excel using Power Query and the 2Touch DataKey OData API.

## What's new!

- The DataKey OData API now supports server side filtering, sorting and column selection.
- The DataKey OData API works with Power Query in both Power BI and Microsoft Excel 2016 windows desktop.
- Timeclock data is now available in the DataKey OData API
  - Note, some fields require 2Touch version 4.10 or higher
- New and updated templates with improved performance.

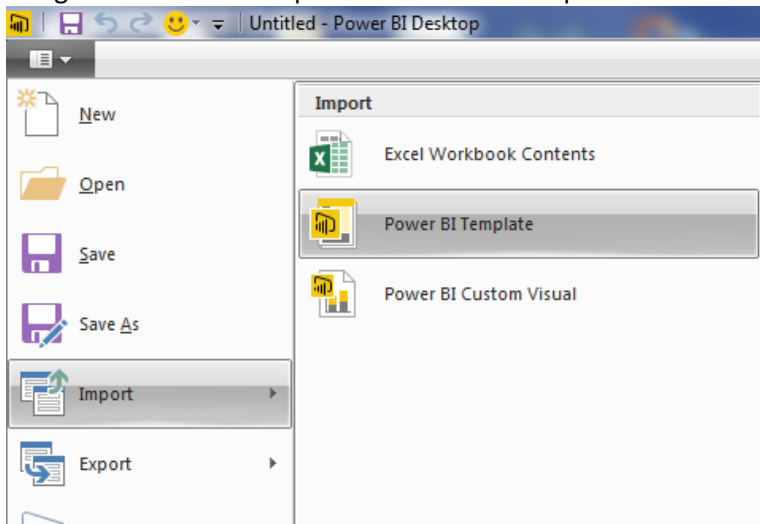
# Power BI

## Desktop Installation

1. Go to <https://powerbi.microsoft.com/en-us/>
2. Under Products, select Power BI Desktop
3. Download and install Power BI Desktop

## Using Predefined templates

1. It is strongly recommended that you close all applications prior to running these steps.
2. From the following page, download and save the one of the Power BI templates.  
<https://datakey.2tpos.com/2TouchPOS/DataKey/V4/OData/Templates.html>
3. Using the main menu Import the Power BI Template file saved in step 2.



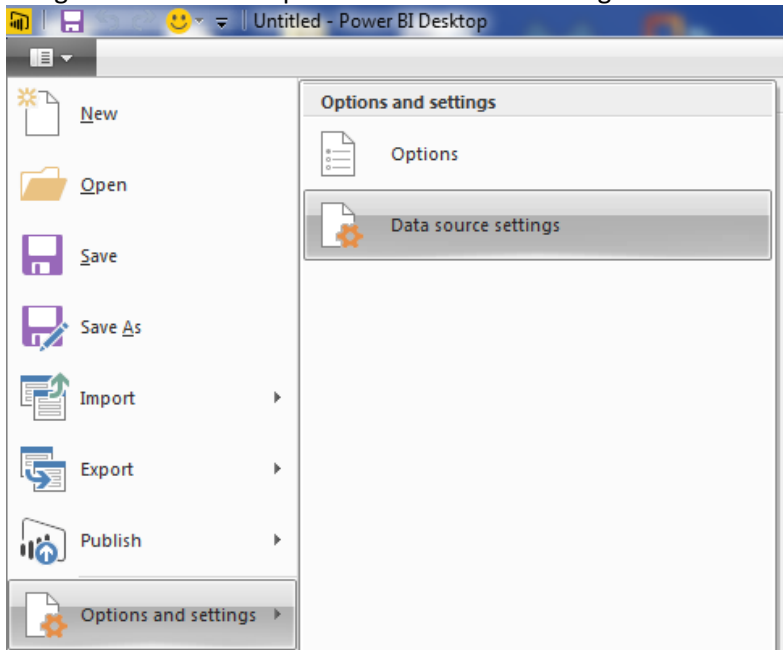
4. When prompted for credentials select Basic, enter **00000000-0000-0000-0000-000000000000** for the username and password and change apply these settings to the URL (matching the url in the image below)



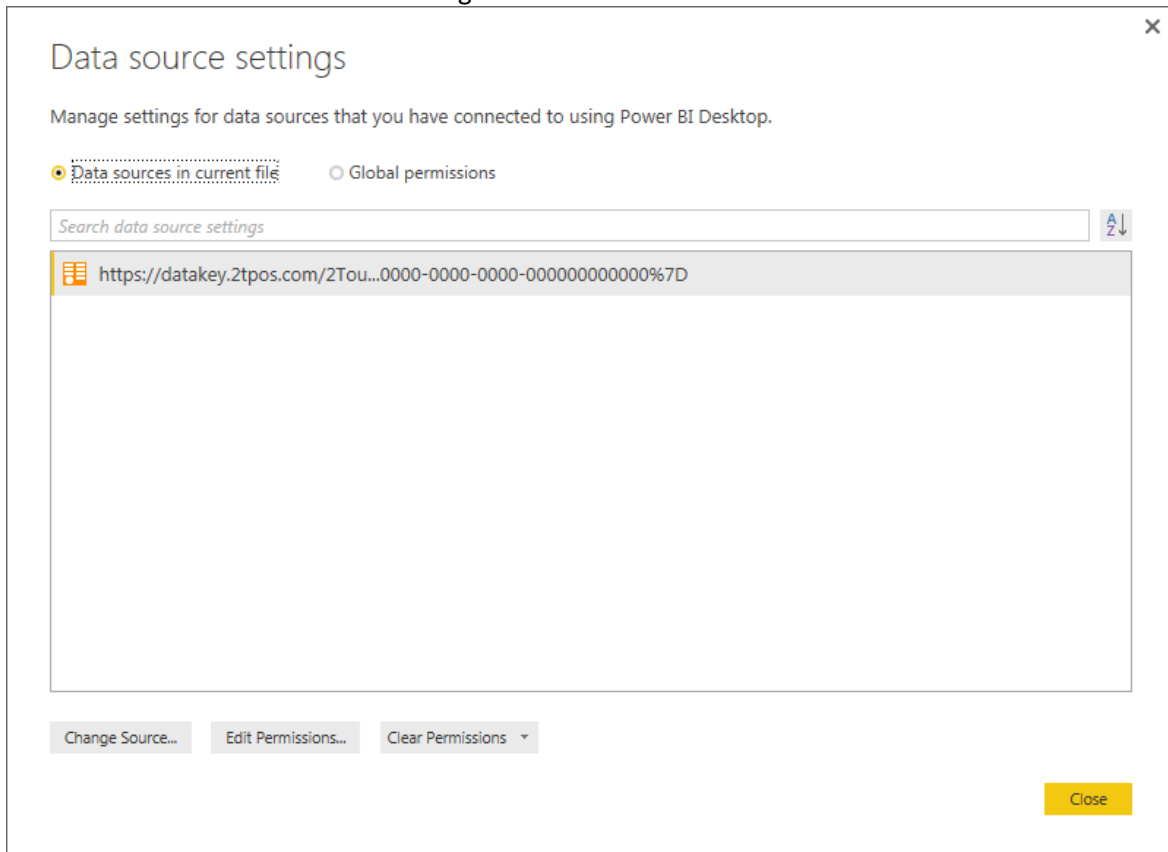
5. Wait for the refresh to complete

*Note: Wait for the refresh to complete and the window to close.*

6. Using the main menu Open the Data source settings

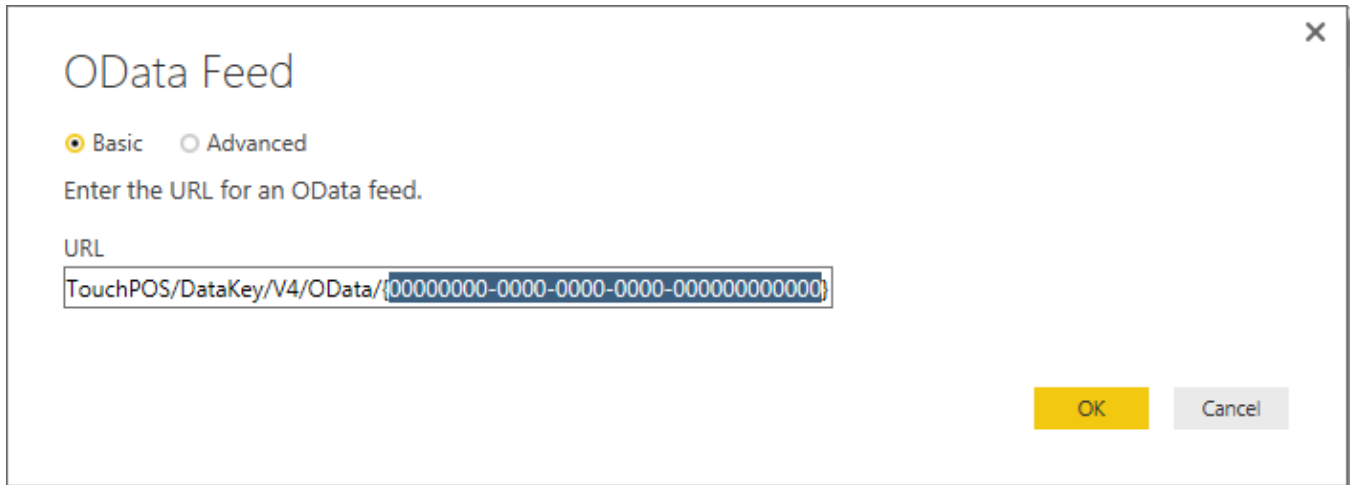


7. Select the data source and select change source



8. Replace the highlighted value 00000000-0000-0000-0000-000000000000 with your Site ID

*Note: Please make sure to include “{” before the Site ID and “}” after the Site ID.*



OData Feed

Basic  Advanced

Enter the URL for an OData feed.

URL

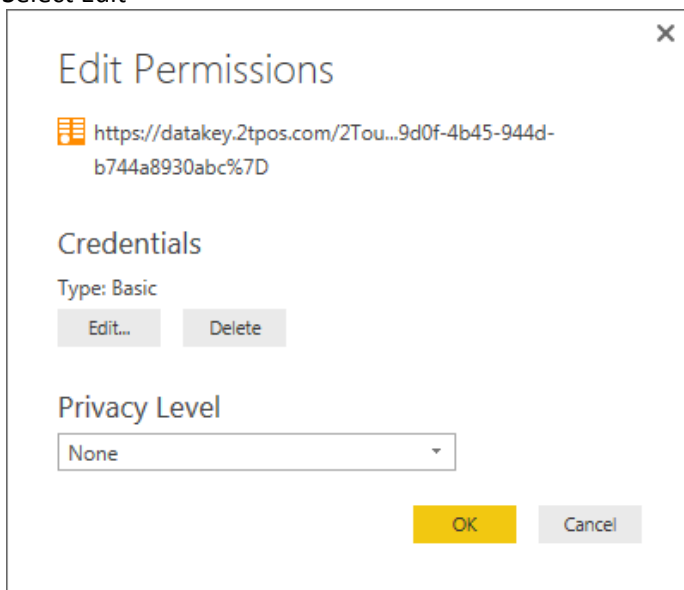
TouchPOS/DataKey/V4/OData/{00000000-0000-0000-0000-000000000000}

OK Cancel


9. Select OK

10. Select Edit Permissions

11. Select Edit



Edit Permissions

 <https://datakey.2tpos.com/2Tou...9d0f-4b45-944d-b744a8930abc%7D>

Credentials

Type: Basic

Edit... Delete

Privacy Level

None

OK Cancel

12. Select Basic; Enter **b3047071-95bc-4450-ada9-4ca000083b66** for the username and your auth code for the password.

Access an OData feed

Anonymous

Windows

Basic

Web API

Marketplace key

Organizational account

https://datakey.2tpos.com/2TouchPOS/DataKey/V4...

Username

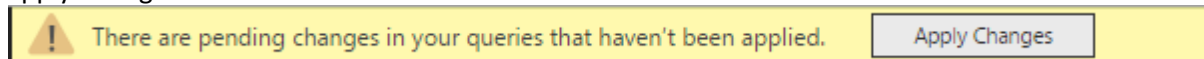
b3047071-95bc-4450-ada9-4ca000083b66

Password

.....

Save Cancel

13. Save
14. Close
15. Apply Changes



*Note: This step will be importing your data and will take a while depending on the amount of information.*

16. If you plan on using Power BI Website
  - a. Login
  - b. Click Publish (save the file if prompted)

*Note: This step will be uploading your data to the Power BI cloud and will take a while depending on the amount of information.*

- c. If the publish fails you may need to upload it via the Power BI Website section

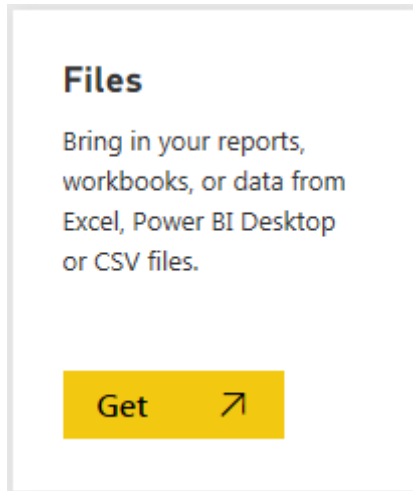
## Power BI Website

1. <https://powerbi.microsoft.com/en-us/>
2. Sign In (Create an account if needed)
3. This step can be skipped if you successfully published from Power BI Desktop

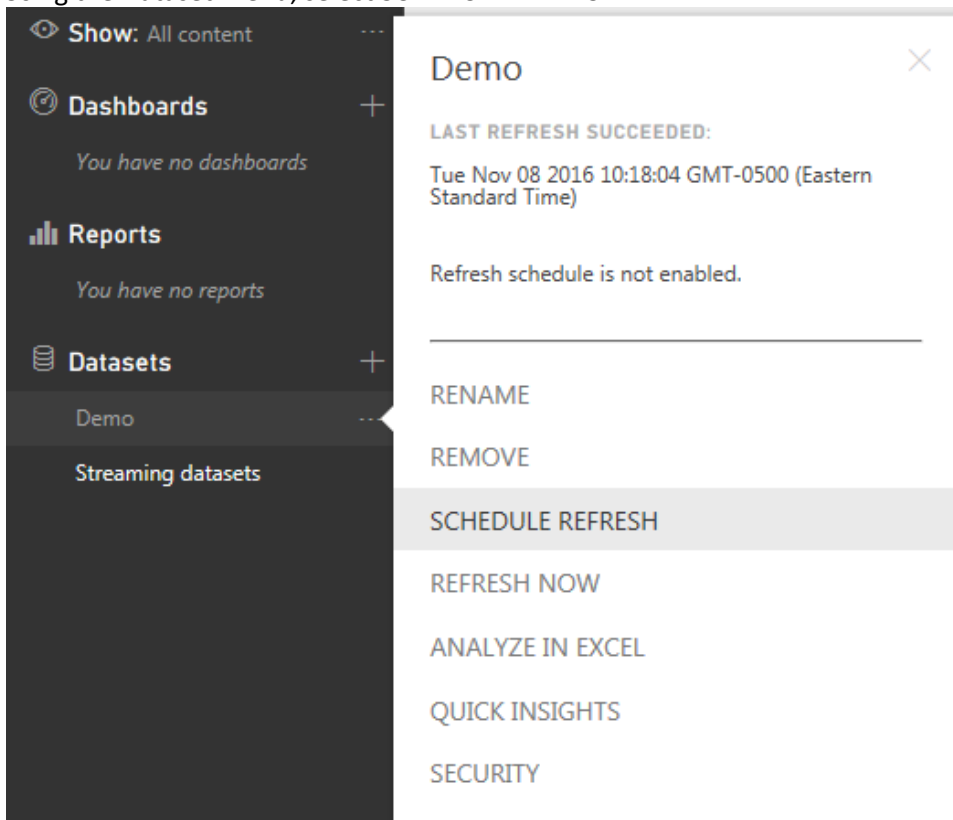
- a. Select Get Data



- b. Select Get under files

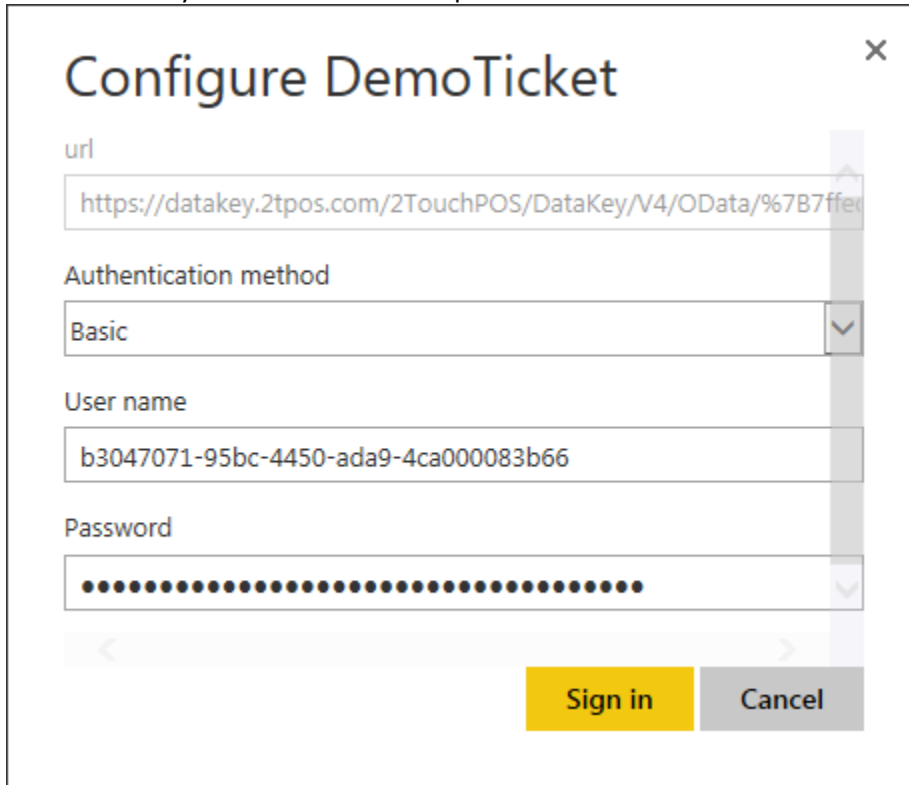


- c. Select Local File
  - d. Browse to the file saved from Power BI Desktop
4. Using the Dataset Menu, select SCHEDULE REFRESH





5. Expand Data source credentials and hit Edit credentials
6. Change Authentication method to Basic, enter **b3047071-95bc-4450-ada9-4ca000083b66** for the username and your auth code for the password



**Configure DemoTicket** [X]

url  
https://datakey.2tpos.com/2TouchPOS/DataKey/V4/odata/%7B7ffec...

Authentication method  
Basic [v]

User name  
b3047071-95bc-4450-ada9-4ca000083b66

Password  
..... [v]

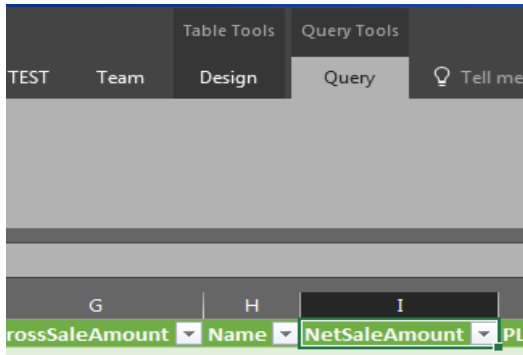
[<] [Sign in] [Cancel] [>]

7. Scheduled Refresh (Optional)
  - a. Select Weekly refresh
  - b. Select the day(s) and time to refresh
  - c. Apply

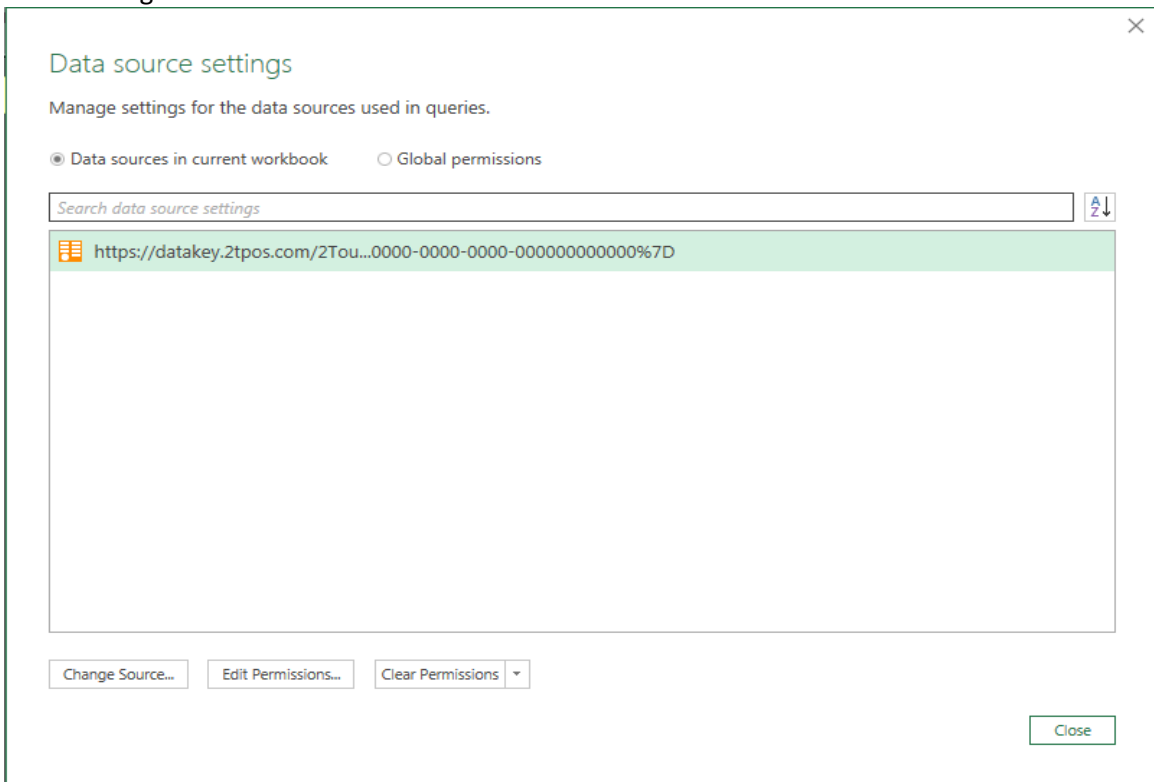
# Microsoft Excel 2016

## Using Predefined templates

1. It is strongly recommended that you close all applications prior to running these steps.
2. From the following page, download and save the one of the Excel templates.  
<https://datakey.2tpos.com/2TouchPOS/DataKey/V4/OData/Templates.html>
3. Open the template using the desktop version of Microsoft Excel 2016.
4. Select one of the column headers and select the Query tab.

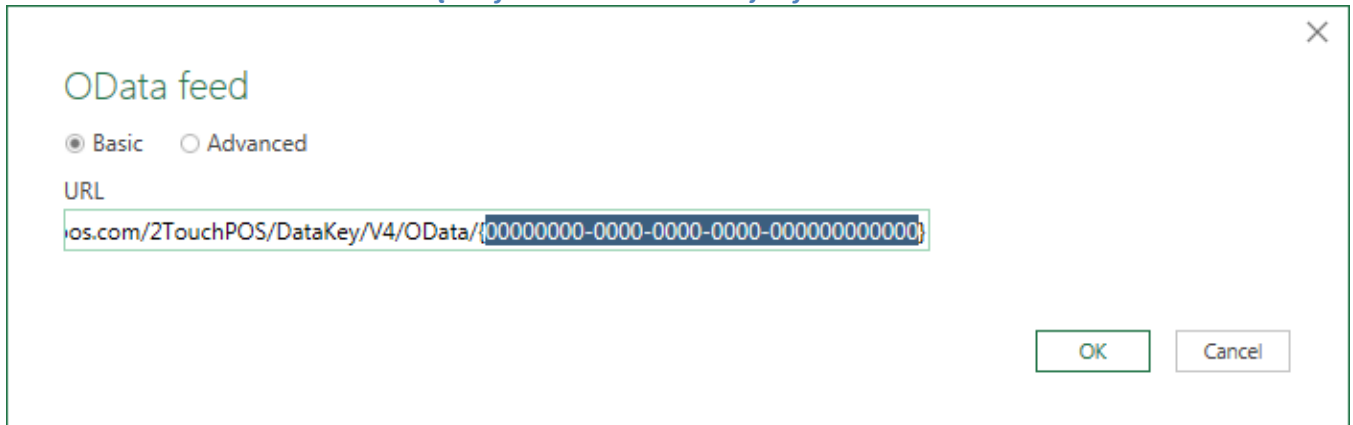


5. Select "Edit" from the toolbar to call up the Query Editor.
6. Select "Data source settings" from the Query Editor toolbar.
7. Select change source



8. Replace the highlighted value 00000000-0000-0000-0000-000000000000 with your Site ID

*Note: Please make sure to include "{" before the Site ID and "}" after the Site ID.*

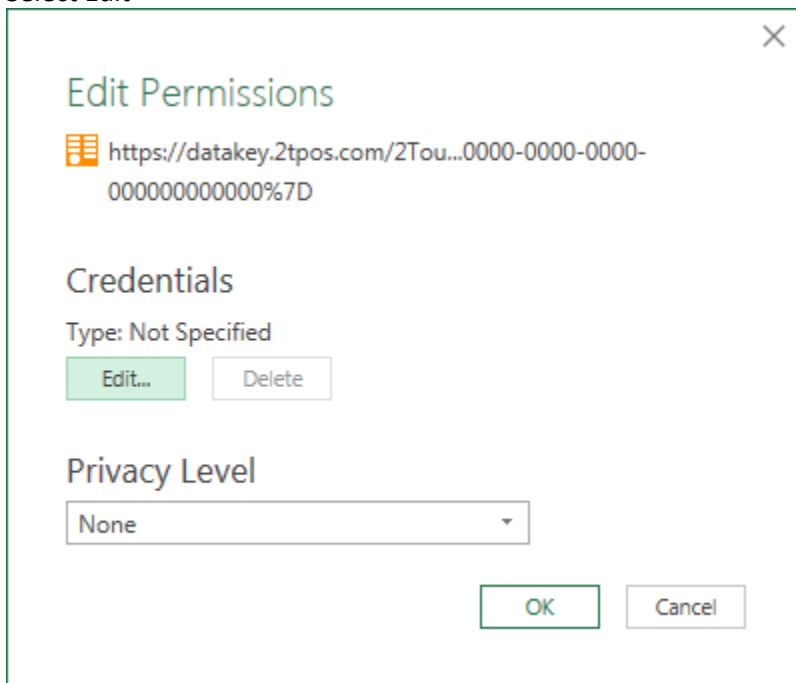


The screenshot shows a dialog box titled "OData feed" with a close button (X) in the top right corner. Below the title, there are two radio buttons: "Basic" (selected) and "Advanced". Underneath, there is a label "URL" and a text input field containing the URL: "os.com/2TouchPOS/DataKey/V4/OData/{00000000-0000-0000-0000-000000000000}". The value in the curly braces is highlighted in blue. At the bottom right, there are two buttons: "OK" and "Cancel".

9. Select OK

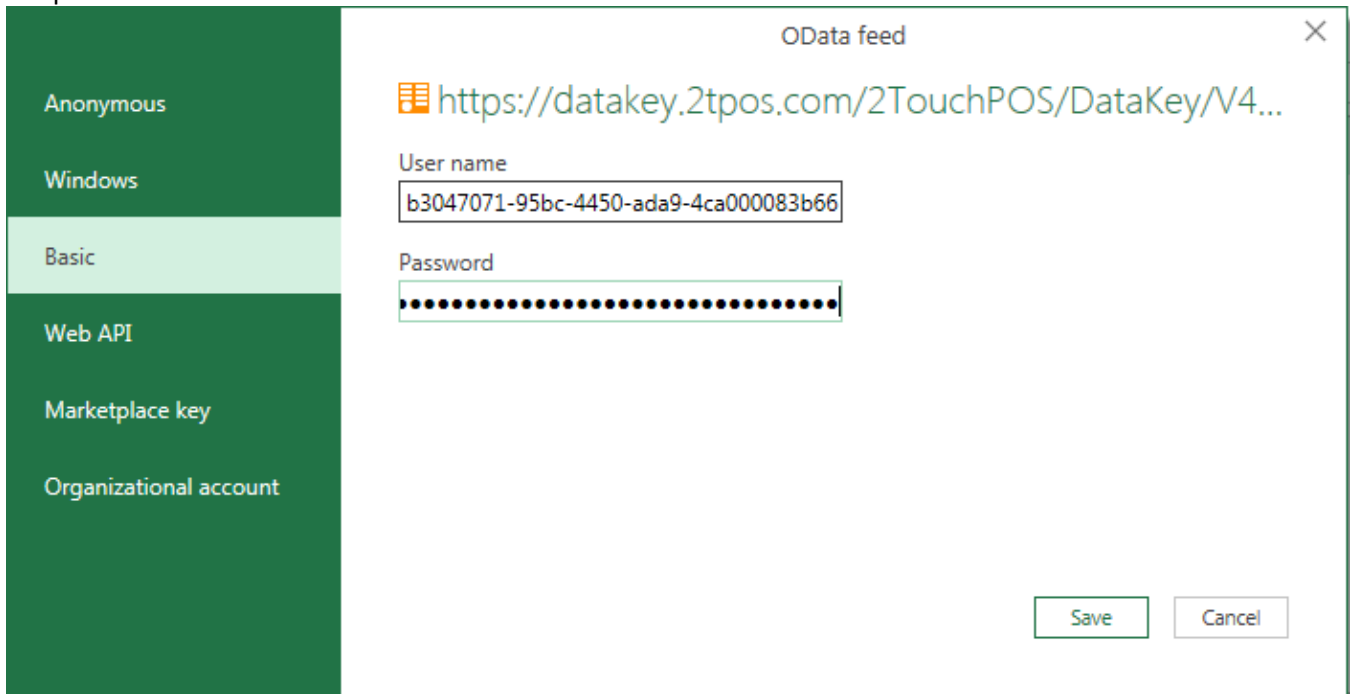
10. Select Edit Permissions

11. Select Edit

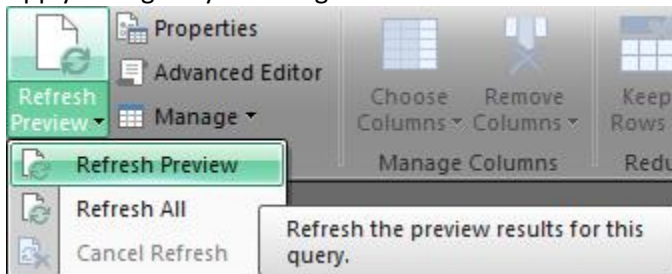


The screenshot shows a dialog box titled "Edit Permissions" with a close button (X) in the top right corner. Below the title, there is a list icon and a URL: "https://datakey.2tpos.com/2Tou...0000-0000-0000-000000000000%7D". Underneath, there is a section titled "Credentials" with the text "Type: Not Specified" and two buttons: "Edit..." and "Delete". Below that, there is a section titled "Privacy Level" with a dropdown menu showing "None". At the bottom, there are two buttons: "OK" and "Cancel".

12. Select Basic; Enter **b3047071-95bc-4450-ada9-4ca000083b66** for the username and your auth code for the password.



13. Save
14. OK
15. Close
16. Apply Changes by selecting Refresh Preview



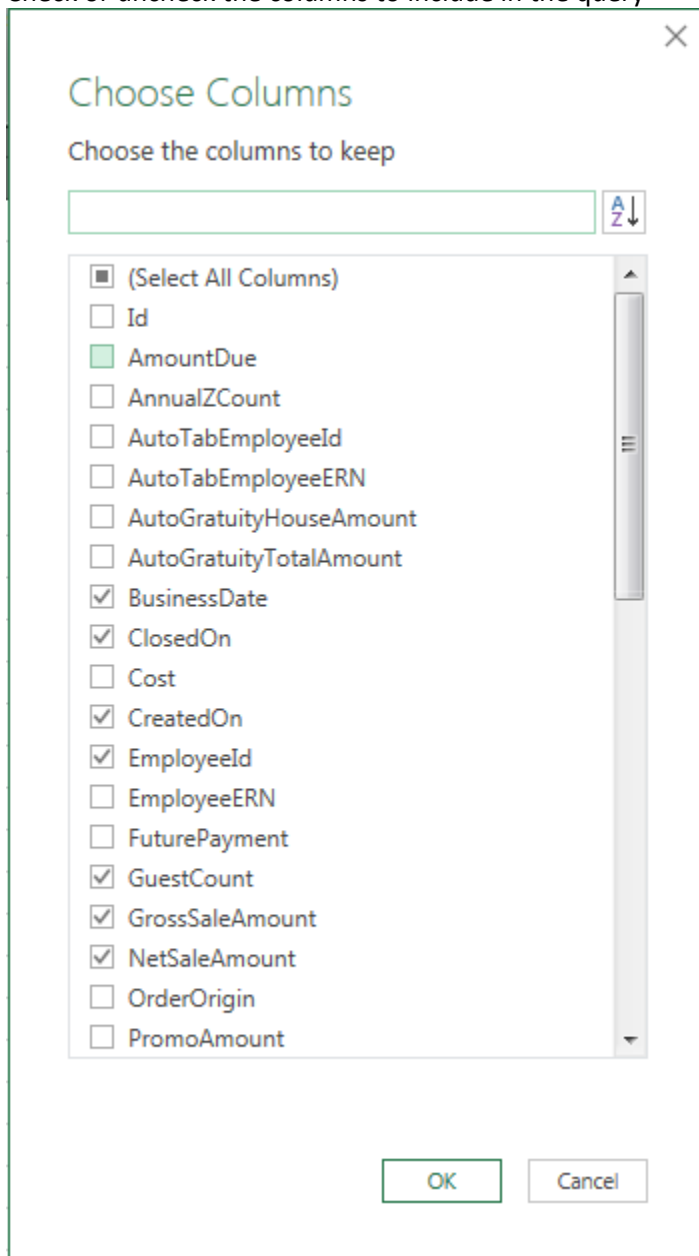
*Note: This step will be importing your data and will take a while depending on the amount of information.*

17. Repeat this step for each sheet and query in the template as needed.

# Query Editor

## Columns

1. Open Query Editor
2. Select Choose Columns from the toolbar
3. Check or uncheck the columns to include in the query



## Filtering

1. Open Query Editor
2. Select drop down arrow
3. Select the filter type

BusinessDate	ClosedOn	CreatedOn	EmployeeId
12/12/2014 12:00:00 AM -05			LucianJ
12/12/2014 12:00:00 AM -05			LucianJ
12/12/2014 12:00:00 AM -05			LucianJ
12/12/2014 12:00:00 AM -05			IonaE
12/12/2014 12:00:00 AM -05			IonaE
12/12/2014 12:00:00 AM -05			IonaE

**Filter Rows**

Basic  Advanced

Show rows where: BusinessDate

is after or equal to 01/01/2017

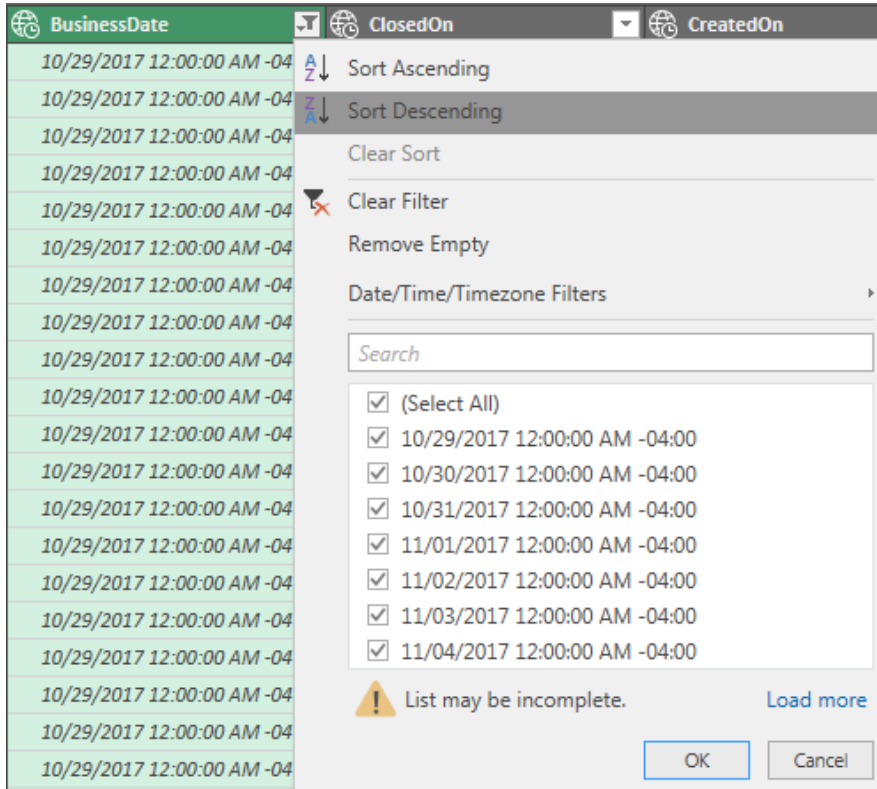
And  Or

is before or equal to 12/31/2017

OK Cancel

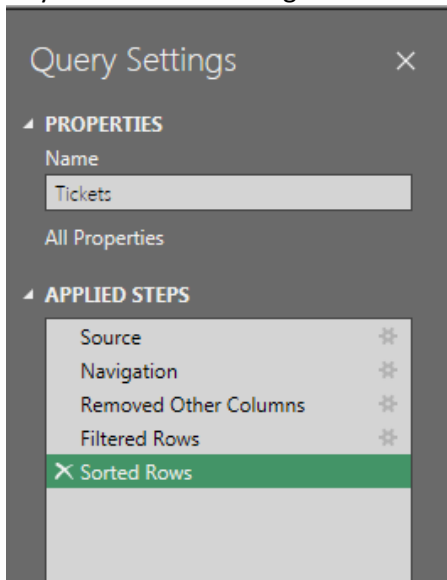
## Sorting

1. Open Query Editor
2. Select drop down arrow
3. Select the Sort direction



## Query Settings

1. Any of the above settings can be edited or removed using the Query Settings window

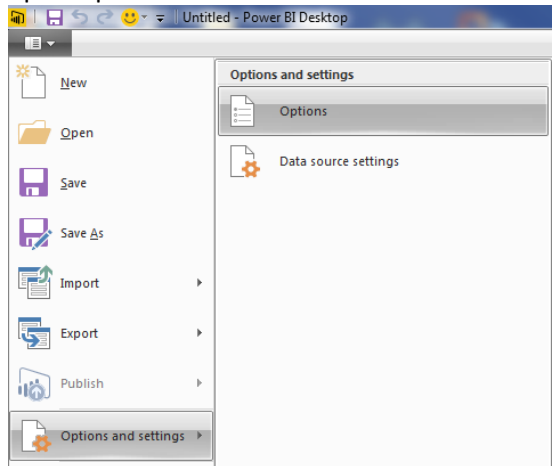


# Appendix: Custom templates

## Creating Power BI templates

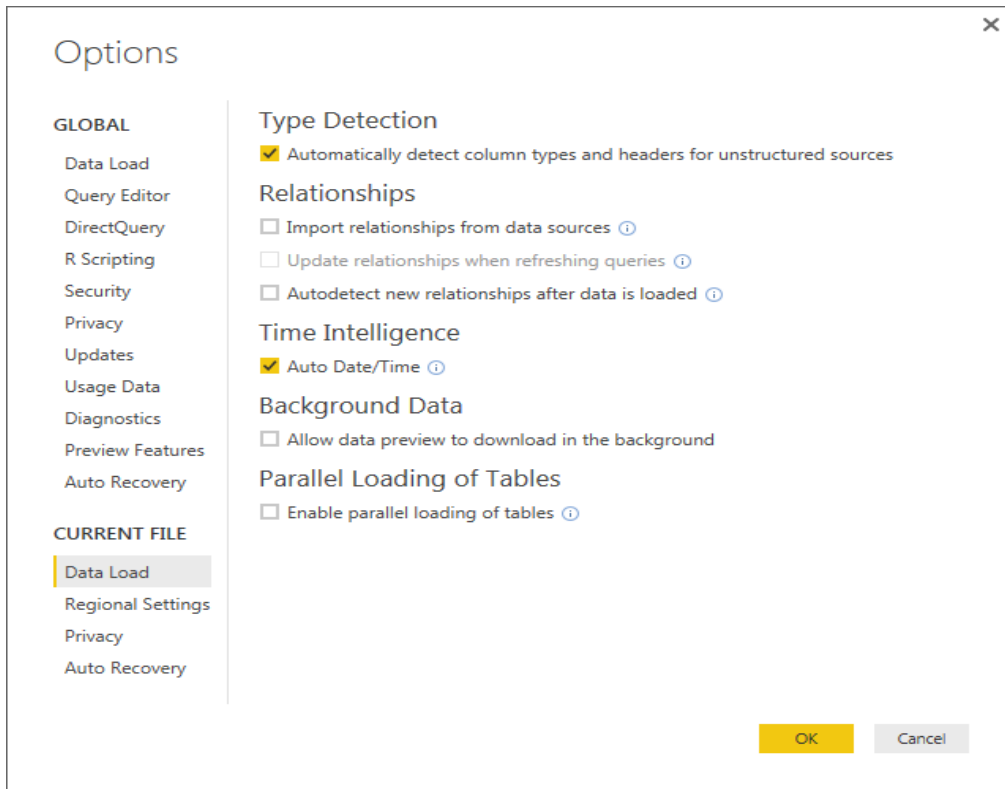
*Note: This section is for advanced Power BI users and not required when importing the 2Touch Power BI Templates.*

### 1. Open Options

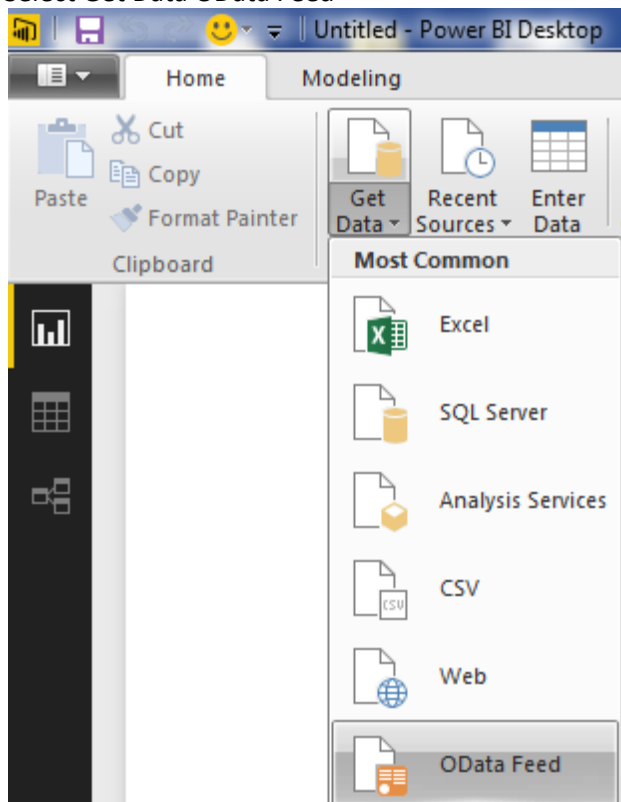


2. Turn off the following options on the Data Load tab for the best performance
  - a. Import relationships from data sources
  - b. Update relationships when refreshing queries
  - c. Autodetect new relationships
  - d. Allow data preview to download in the background
  - e. Enable parallel loading of tables



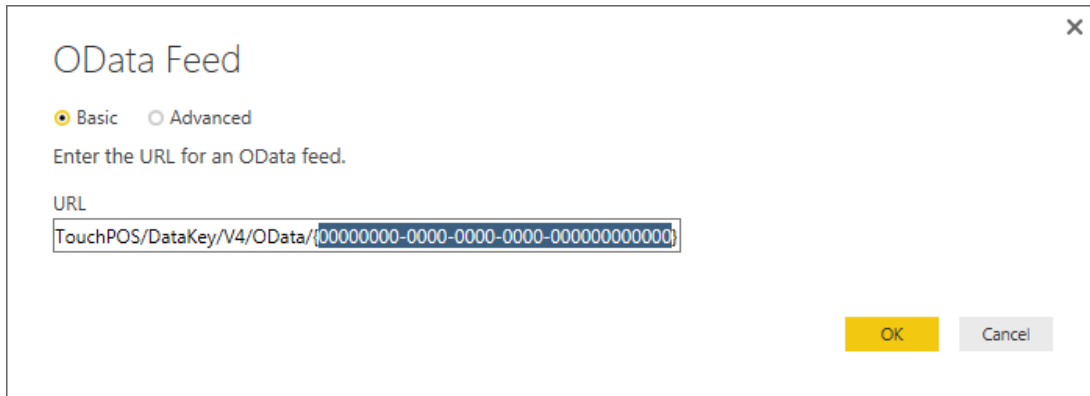


### 3. Select Get Data OData Feed

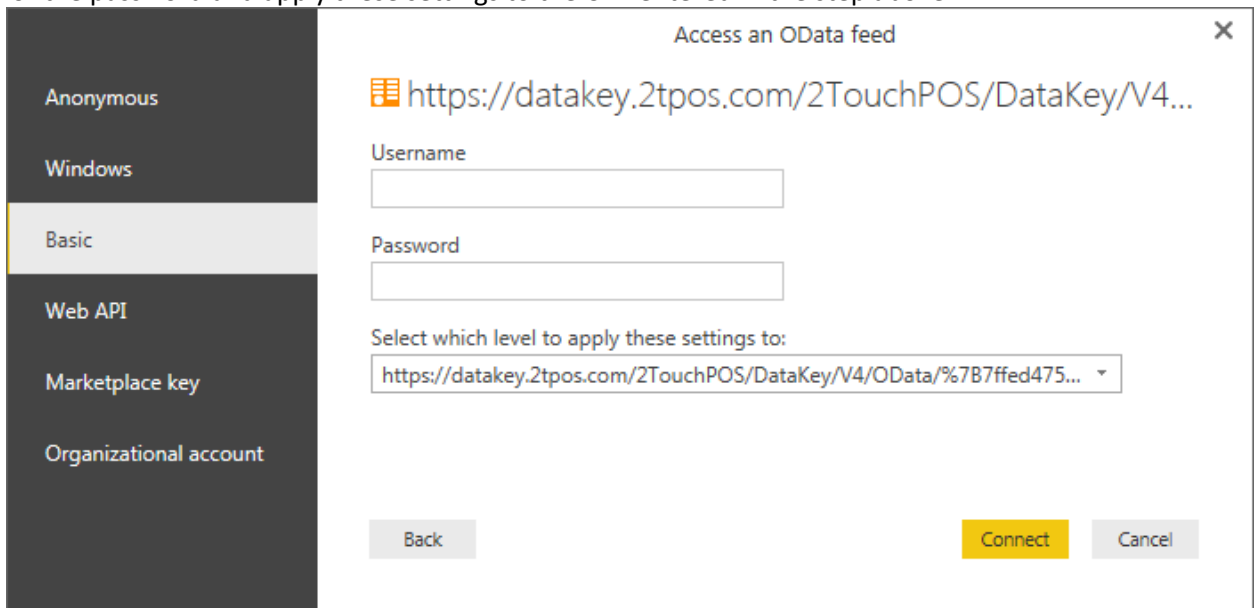


4. Enter the URL <https://datakey.2tpos.com/2TouchPOS/DataKey/V4/OData/{00000000-0000-0000-0000-000000000000}> replacing the zeros with the site id

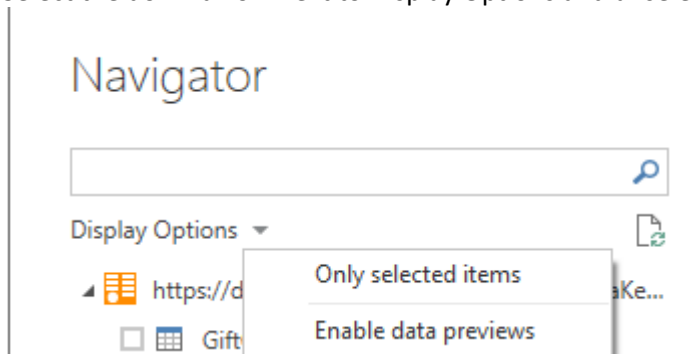
*Note: Please make sure to include “{” before the Site ID and “}” after the Site ID.*



- 5.
6. Select Basic and enter **b3047071-95bc-4450-ada9-4ca000083b66** for the username and your auth code for the password and apply these settings to the URL entered in the step above.

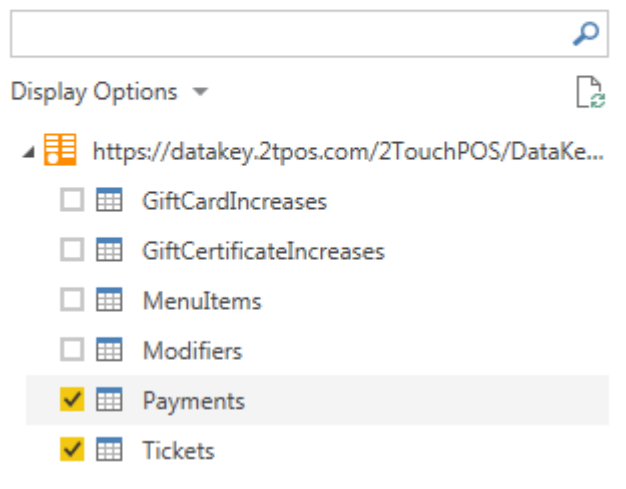


7. Select the down arrow next to Display Options and unselect Enable data previews



8. Check the data items needed for this dataset and click load

## Navigator



9. Wait for the Load to complete

**Note:** *This step will be importing your data and will take a while depending on the amount of information.*

10. Publish (save the file if prompted)

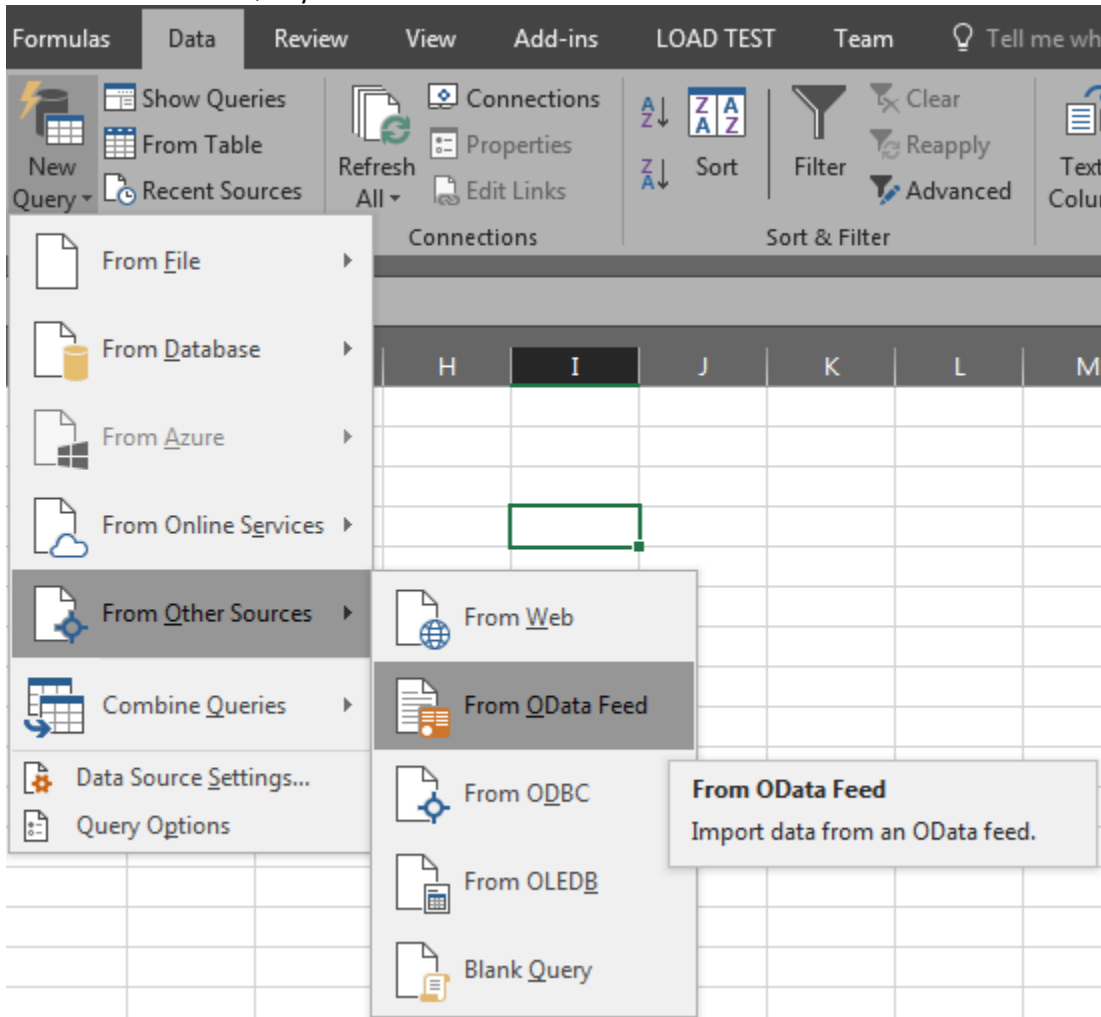
**Note:** *This step will be uploading your data to the Power BI cloud and will take a while depending on the amount of information.*

11. If the publish fails you may need to upload it via the Power BI website (See above section)

## Creating Excel templates

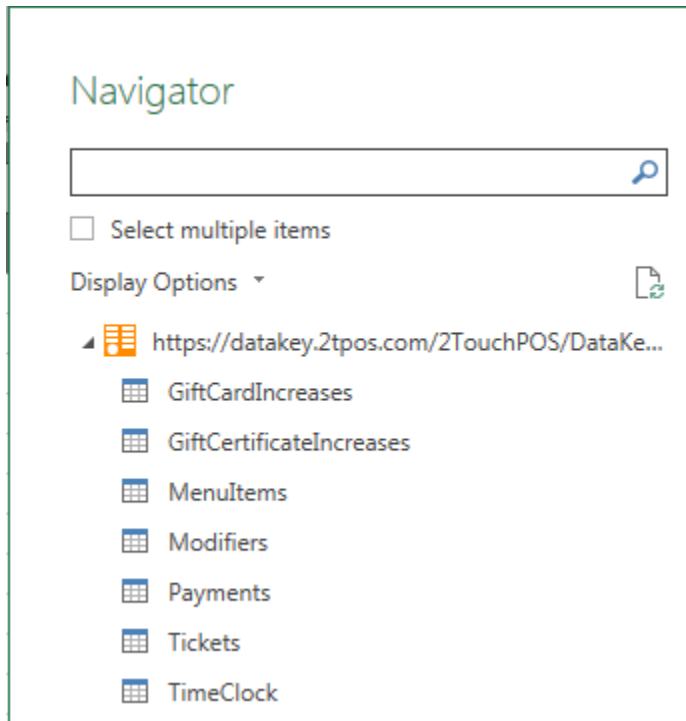
*Note: This section is for advanced Power BI users and not required when importing the 2Touch Power BI Templates.*

1. Open Excel
2. Create a blank workbook
3. Select Data -> New Query -> From Other Sources -> From OData Feed



4. Enter the URL <https://datakey.2tpos.com/2TouchPOS/DataKey/V4/OData/{00000000-0000-0000-0000-000000000000}> replacing the zeros with the site id

5. Select the table



6. Select Load (or edit to call up Query Editor)