



Power Query
Week 2 Documentation

Prepared by: Traci Williams

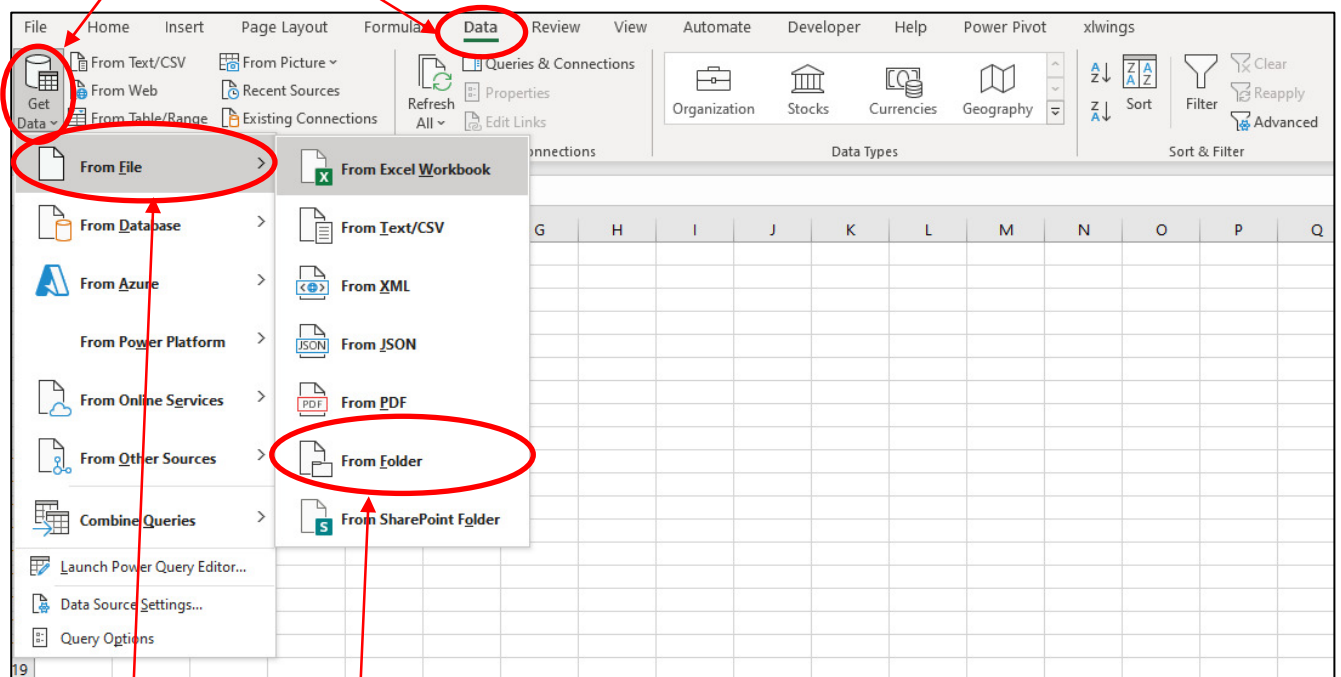
2025

Contents

- 1) Create Queries (Folder)
- 2) 'M' Code & Advanced Editor
- 3) Intermediate Transformation Options
- 4) Merge Queries

1) Create Query linked to a Folder

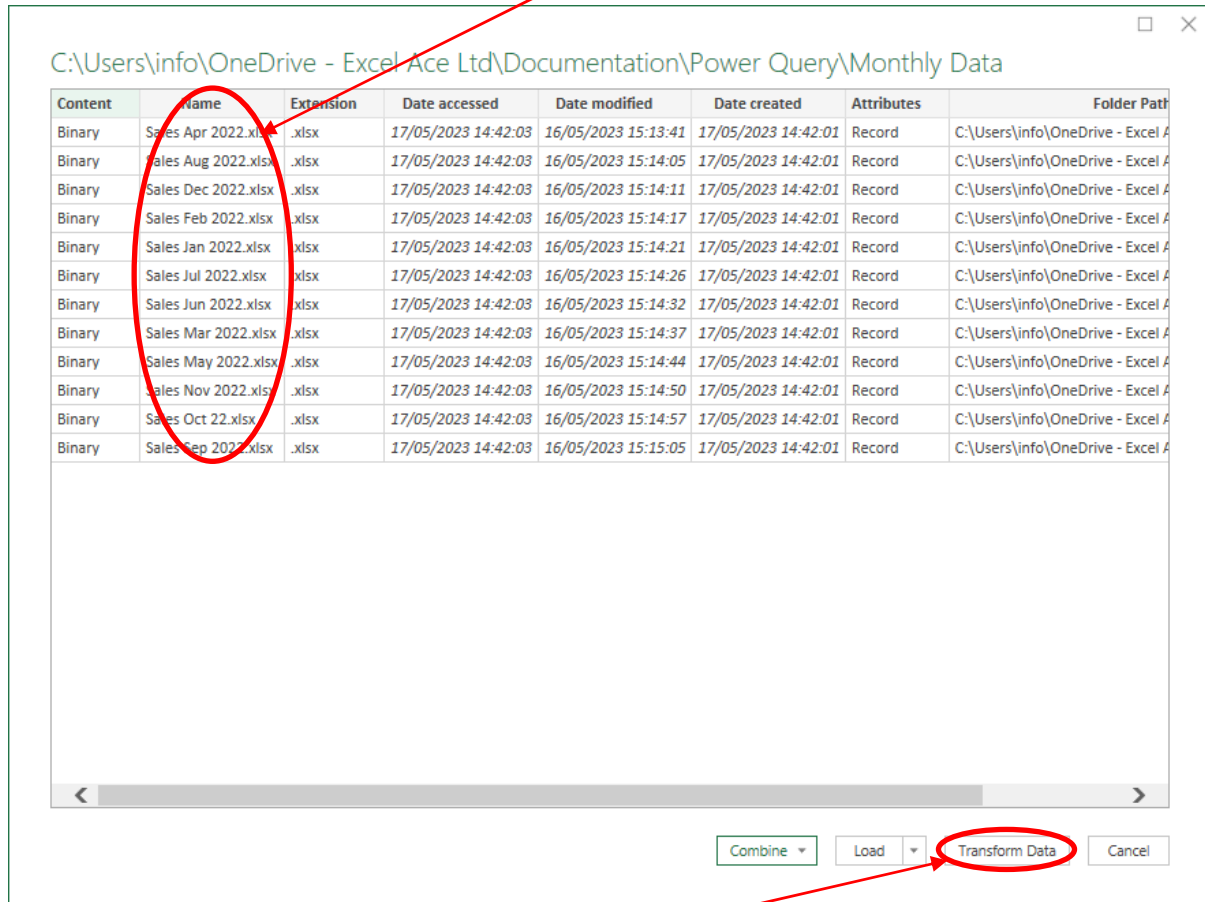
Select 'Get Data' from the 'Data' ribbon:



Select 'From File', then 'From Folder' and the browse window will appear.

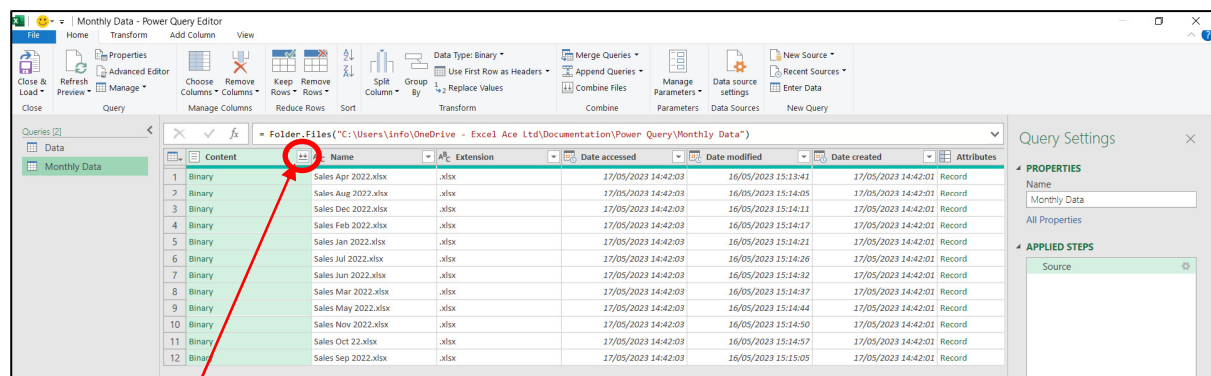
Navigate to the relevant Folder, then press 'Open'.

The 'Navigator' window will appear containing ALL of the files follows:



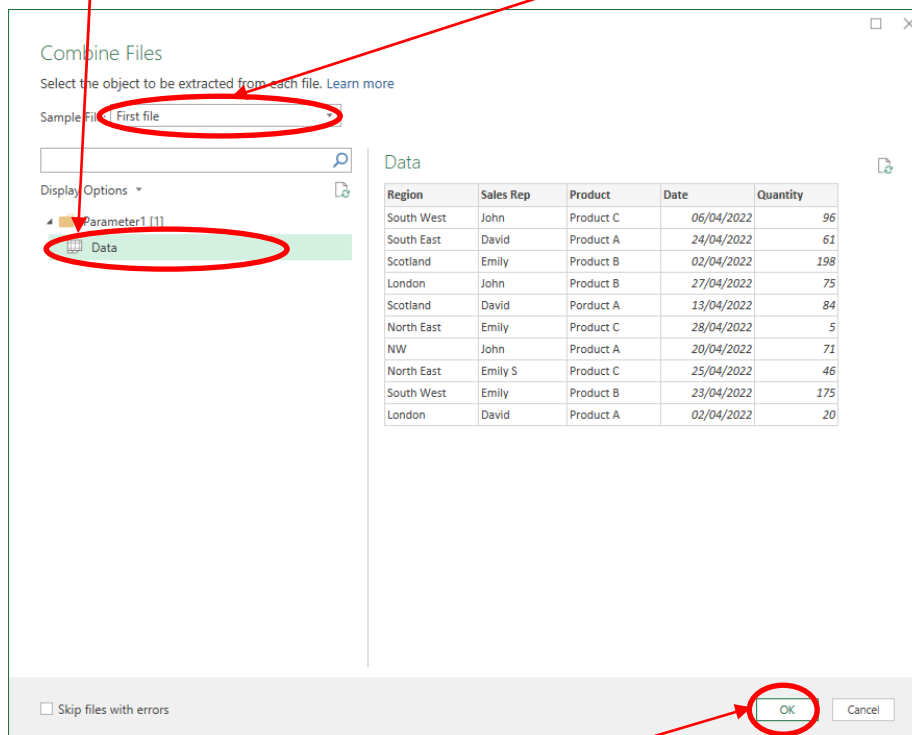
If you are sure this is the correct data, click 'Transform Data' to generate the Power Query.

The Query will then be visible within the 'Power Query Editor' as follows:



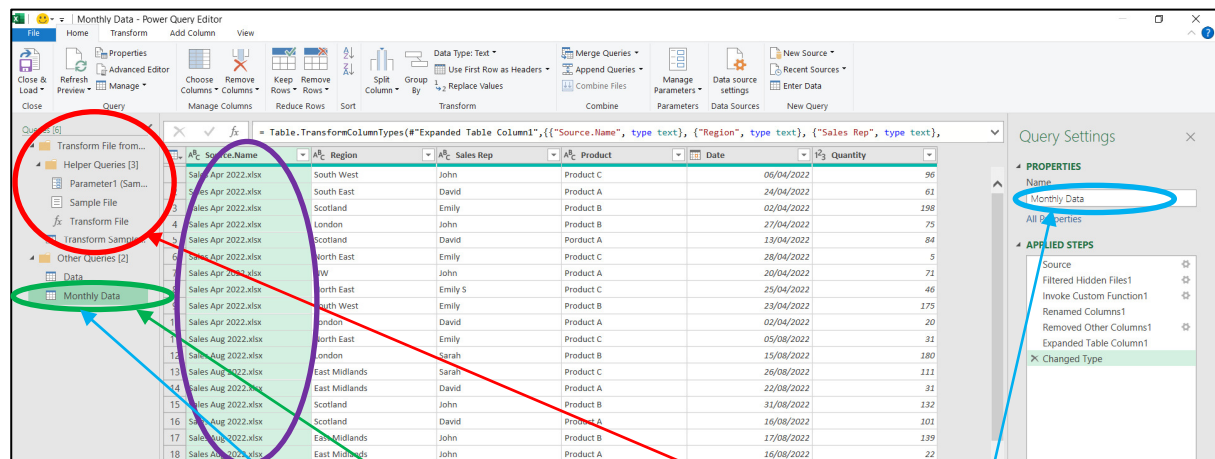
At this stage, the Query is still just a list of the files, so we'll need to extract the data from within them, by clicking this icon at the top of the 'Content' column.

This will then display the 'Combine Files' screen and uses the 'First File' as the sample file, where we can select the Sheet Name or Named Range to use for the Query:



If you are sure this is the correct data, click 'OK' to begin making any adjustments.

The detail from each of the files will then become visible within the Query for us to review, or start Transforming:



You will notice that there are some NEW Queries appeared on the left hand side. These are 'Helper' Queries that Excel has created as it applied them to the 'First File' in the Folder, and it will continue to apply these steps to the data within ALL of the files within the Folder (this Documentation does not cover these Queries).

The result of all the 'Helper' Queries appears in the 'Monthly Data' Query that we just created.

You may also notice this query contains an additional column (versus the Query based on the Excel file), and that is for the Name of the file where the data comes from. This can be removed if not required (see later).

The Name of the Query can be edited by double clicking here, or clicking into this box.

2) 'M' Code & Advanced Editor

Power Query has a super User Friendly frontend, which helps us to tell Power Query what we need, and this automatically generates 'M' code behind the scenes.

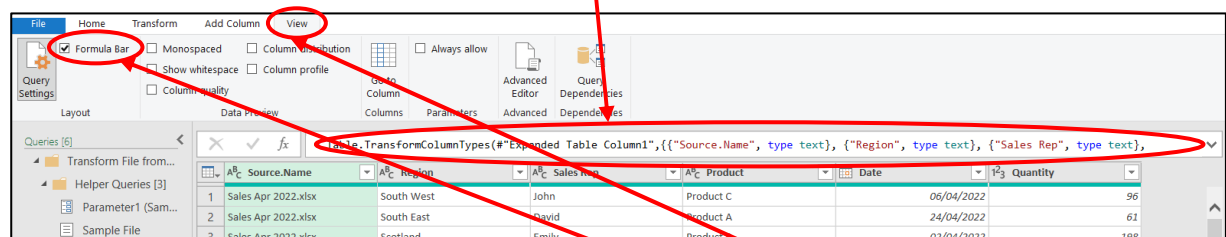
If you prefer, you never need to look at this code and can manage perfectly well without it.

However, I would always recommend having a look at the code that is generated after creating a couple of steps, as you may be surprised how much of it you're able to follow.

The coding language used is 'M' code.

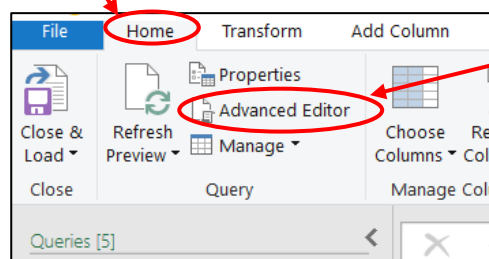
'M' stands for 'Mashup', as the principle is to take data from different sources and mash them up.

The 'M' code can be viewed for each Step in the 'formula bar' which will appear between the ribbons and data:



You can toggle the formula bar to visible (or not) by ticking this box from the 'View' ribbon.

Alternatively, you can access the code for the entire Query, and manually edit it using the 'Advanced Editor' in the 'Home' ribbon:



The code will appear as follows, and can be manually edited as required:



Top Tip: you can copy and paste lines of this code from one Query to another, using the Advanced Editor, to save having to physically repeat the steps.

3) Intermediate Transformation Options

The ribbons at the top of the Power Query Editor can be used to transform the data, perform calculations and merge data, in numerous different ways.

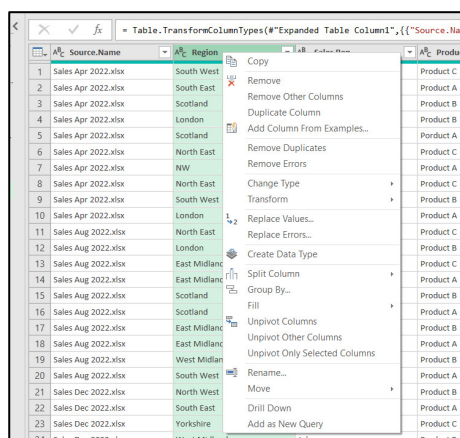
This documentation is not exhaustive of all options available, but more a general overview.

There are 5 Ribbons at the top of the PQ Editor:

- File** - This contains options for Load & Close and PQ Settings
- Home** - These options will amend the data in the existing columns
- Transform** - These are more advanced methods of transforming the data
- Add Column** - These options will create additional columns of data, and can also include formula

Most of the options in all of these Ribbons are as obvious as they sound, and the best way to understand them is to try them and see the impact on data (*don't forget you can just delete a Step if it the result is not what you need*).

A lot of the options can also be found by selecting a column, right clicking mouse and finding the function within that menu (the functionality will be identical to selecting the option from the ribbons):

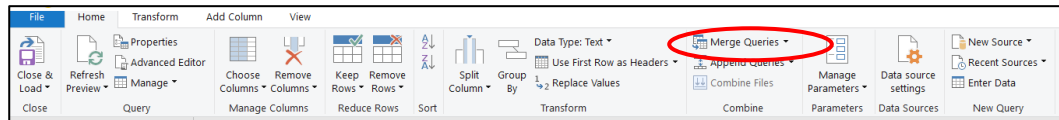


Some of the Super useful functions are:

- Uppercase / Proper etc
- Date (Year / Month)
- Rename Columns

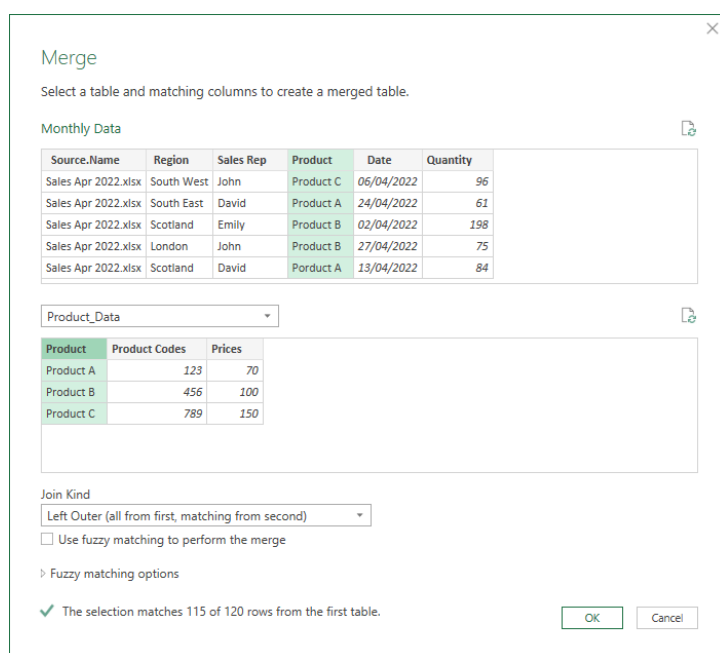
4) Merge Queries

This can be found in the 'Home' ribbon:

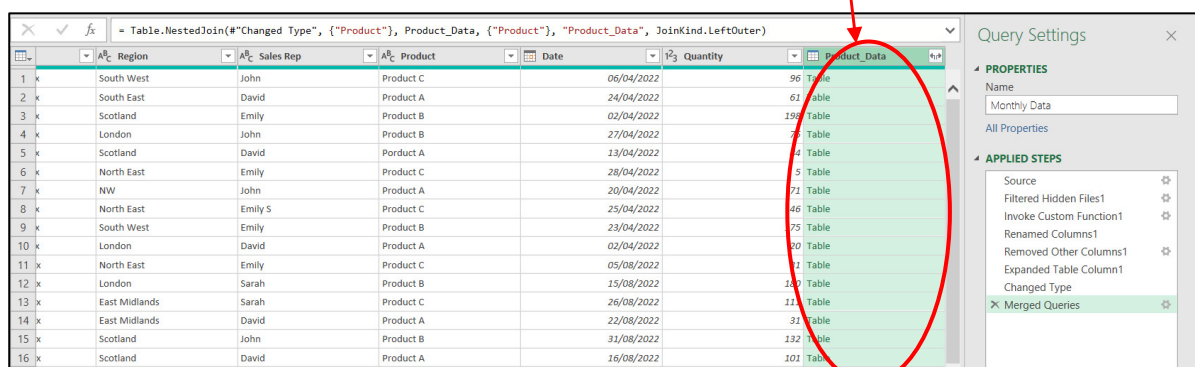


This function should be used to match data within two (or more) queries. It is the equivalent of using the Vlookup (or Xlookup or Match) formula in a normal spreadsheet.

You would select the tables to match, and select the columns where the matching data will be found. This would be the first step:



In the PQ, you'd then notice a new column at the end with the word 'Table' on every row:



There is an icon to the right of the header row of that column, containing 2 arrows. Click on that icon, and you will see the columns contained in that Table, and we can select which ones to bring into this table, where a match has been found:

Expand ☐ Aggregate

☒ (Select All Columns)

☒ Product

☒ Product Codes

☒ Prices

☒ Use original column name as prefix

OK Cancel

Select as many (or as few) columns as required:

Search Columns to Expand

Expand ☐ Aggregate

☒ (Select All Columns)

☐ Product

☐ Product Codes

☒ Prices

☐ Use original column name as prefix

OK Cancel

Click 'OK' and then you will see the selected columns appear in the Power Query Report:

	Region	Sales Rep	Product	Date	Quantity	Prices
1	South West	John	Product C	06/04/2022	96	150
2	South East	David	Product A	24/04/2022	61	70
3	Scotland	Emily	Product B	02/04/2022	198	100
4	London	John	Product B	27/04/2022	75	100
5	Scotland	David	Product A	13/04/2022	84	null
6	North East	Emily	Product C	28/04/2022	5	150
7	NW	John	Product A	20/04/2022	71	70
8	North East	Emily S	Product C	25/04/2022	46	null
9	South West	Emily	Product B	23/04/2022	175	100
10	London	David	Product A	02/04/2022	20	70
11	North East	Emily	Product C	05/08/2022	31	150
12	London	Sarah	Product B	15/08/2022	180	100
13	East Midlands	Sarah	Product C	26/08/2022	111	150
14	East Midlands	David	Product A	22/08/2022	31	70
15	Scotland	John	Product B	31/08/2022	132	100
16	Scotland	David	Product A	16/08/2022	101	70

PROPERTIES

Name

Monthly Data

All Properties

APPLIED STEPS

Source

Filtered Hidden Files1

Invoke Custom Function1

Renamed Columns1

Removed Other Columns1

Expanded Table Column1

Changed Type

Merged Queries

Expanded Product_Data