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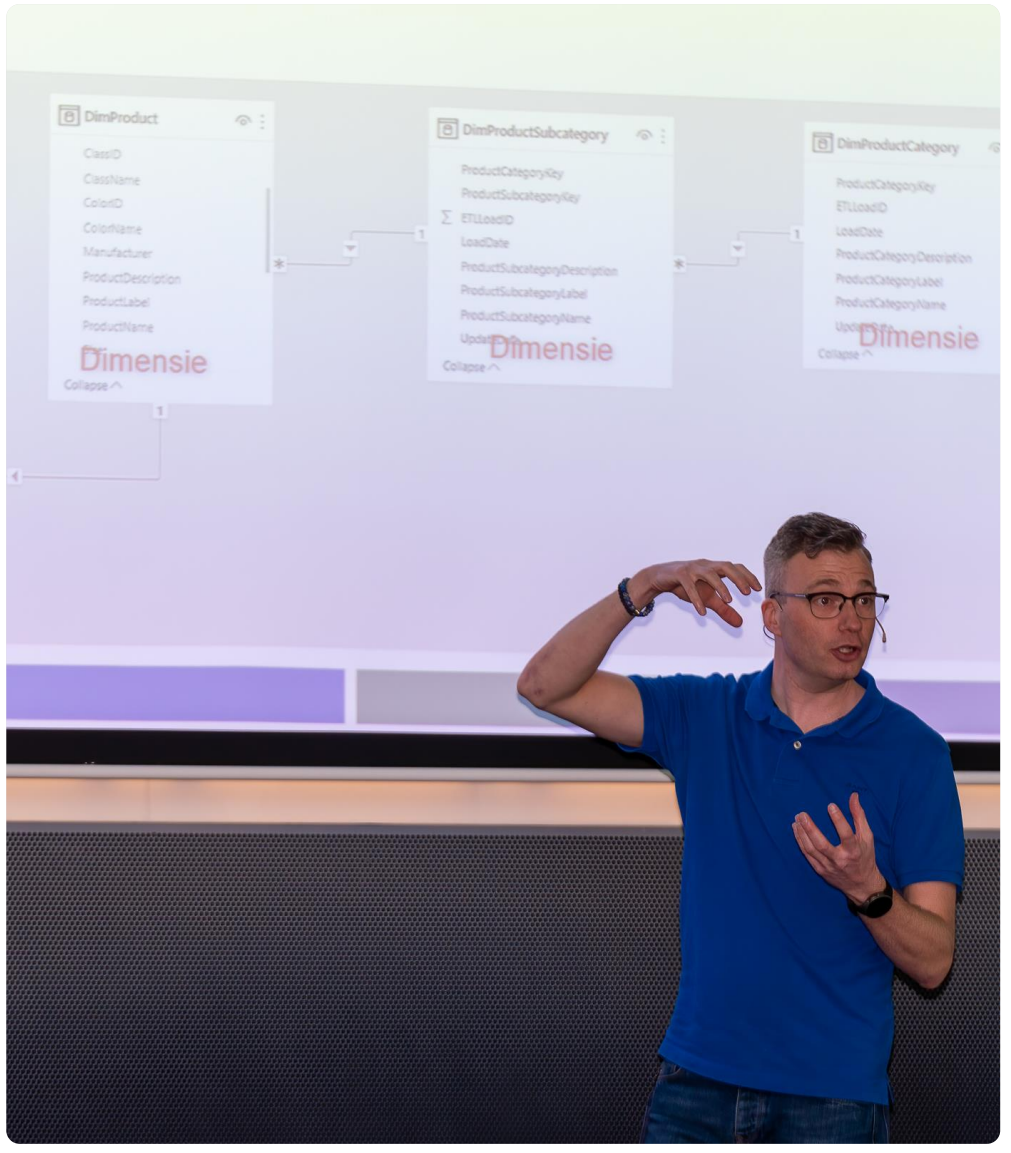
Incremental refresh Power BI

19-12-2024

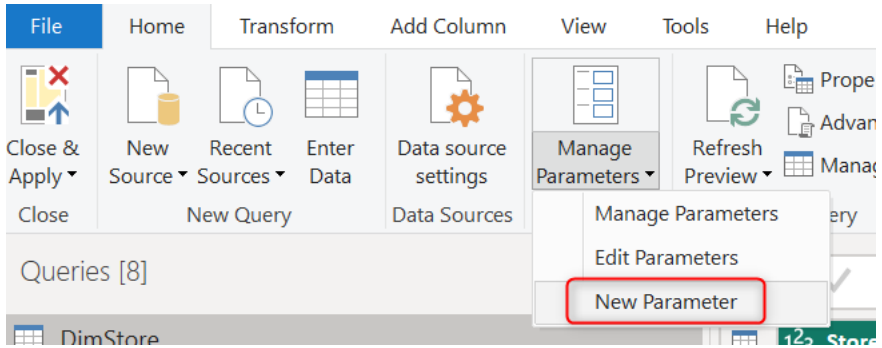


Incremental refresh Power BI

Incremental refresh

Instead of loading all the data each time you refresh, you can use incremental refresh.

Start by adding two parameters in Power Query.



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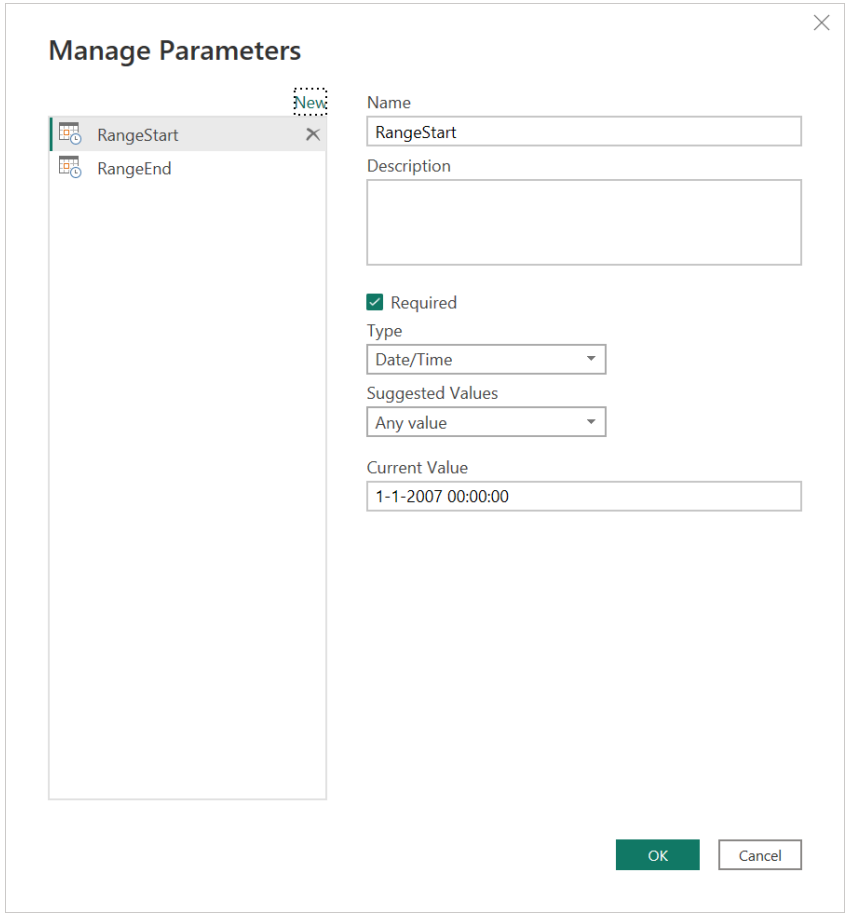
Parameters

Incremental refresh

The first one is called RangeStart and the second RangeEnd.

Note: Power Query is case-sensitive.

Select 'Type' and enter 'Date/Time'.



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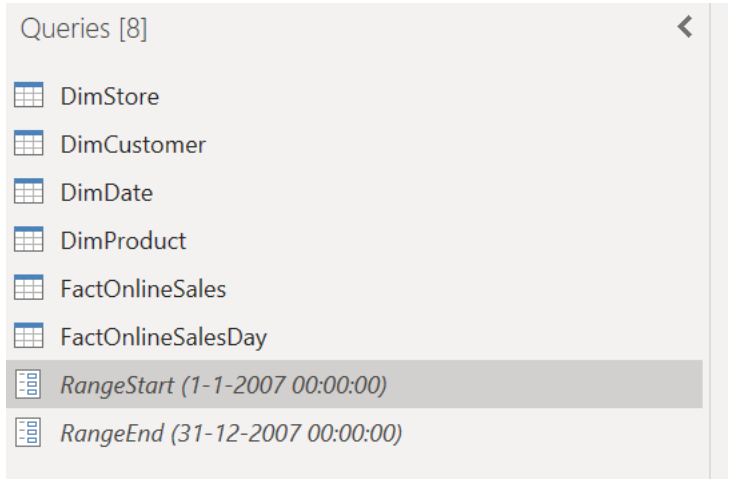
Queries window

Incremental refresh

The parameters are in the Queries window.



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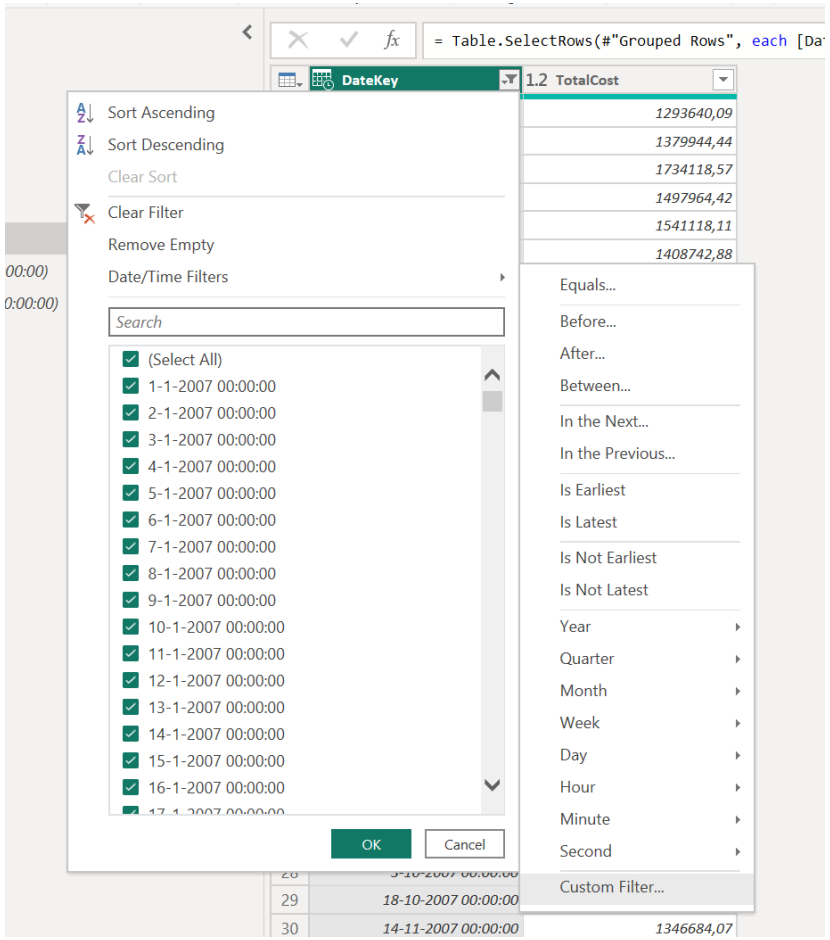
Customer filter

Incremental refresh

For the table where you will add incremental refresh, set a custom filter on the date/time column.



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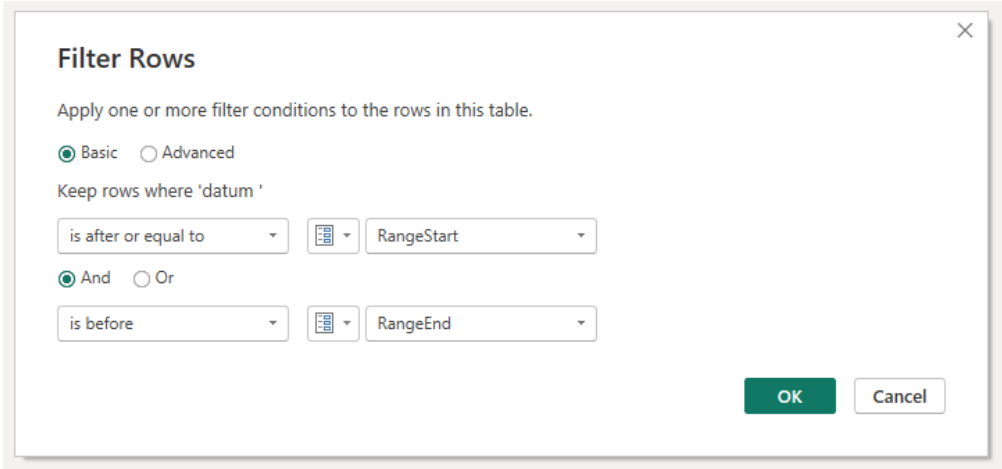
Customer filter

Incremental refresh

Select the parameters and use ‘is after or equal to’ for the start date and ‘is before’ for the end date.

The advantage is that if you have a large dataset, you can use the filter to select, for example, a single day. This allows you to perform operations on the dataset and keep the loading into Power BI Desktop small, making it easier to work with.



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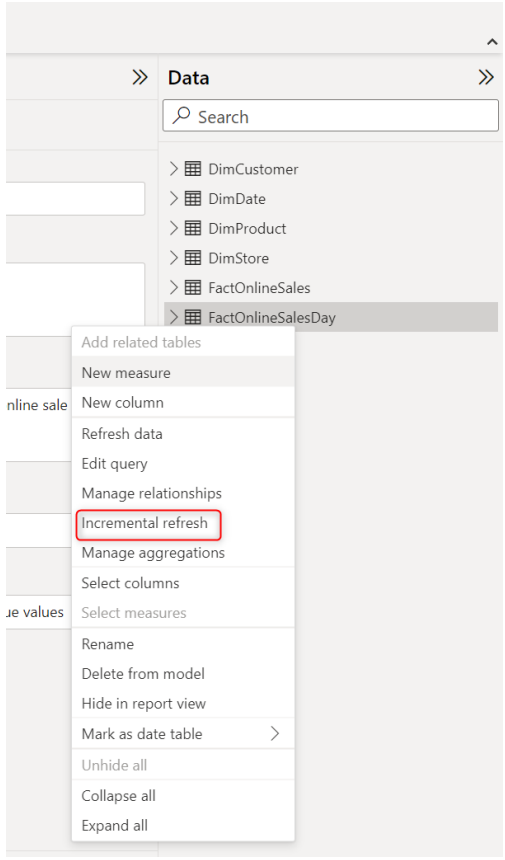
Incremental refresh

Incremental refresh

When you choose Close and Apply to prepare the dataset for Power BI, you can select Incremental Refresh for the desired table.



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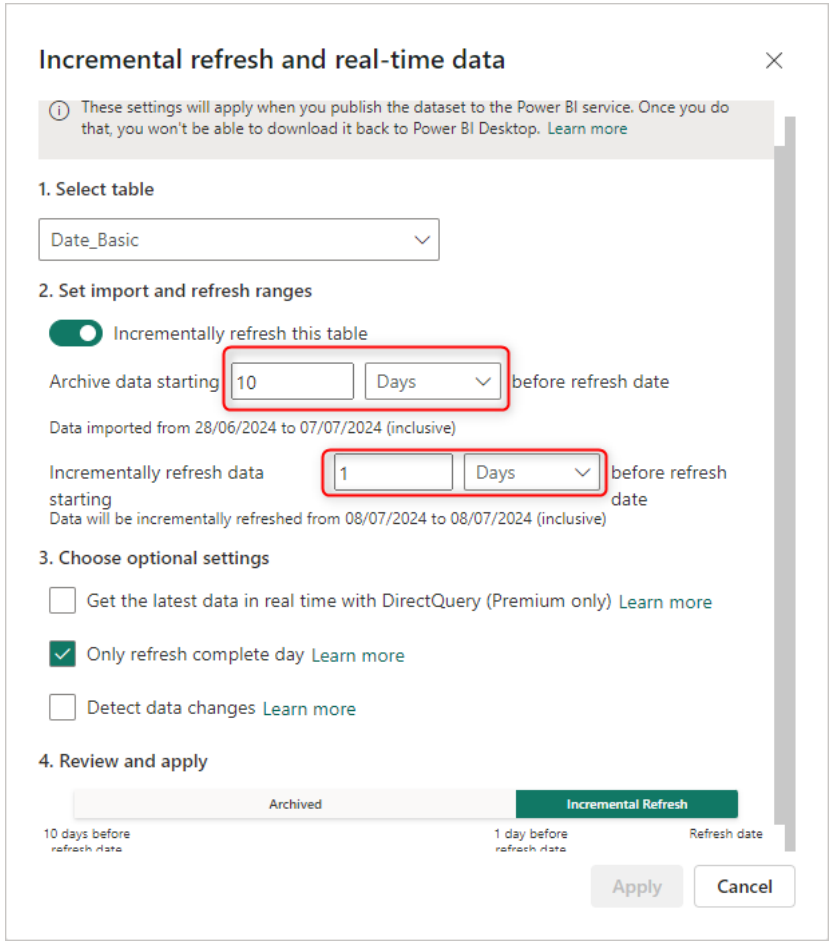
Incremental refresh

Incremental refresh

Select the period you want to include in your data model. Also, choose the archive period and refresh period for the data you want to update.



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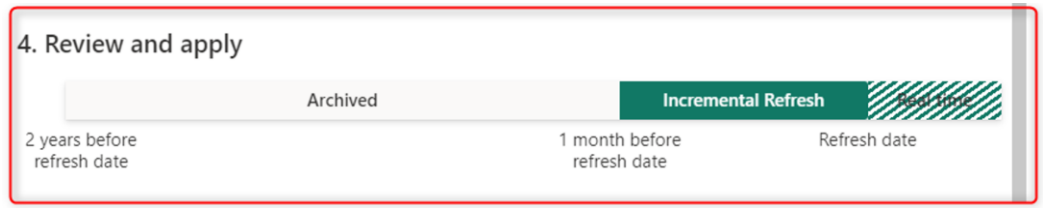
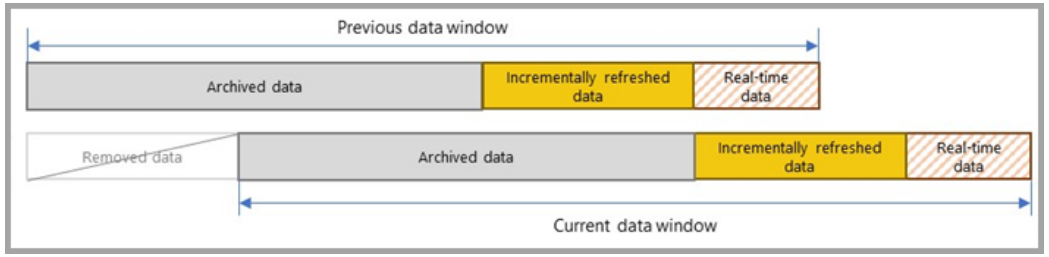
Setting up partitions.

Incremental refresh

The parties work with a sliding window.





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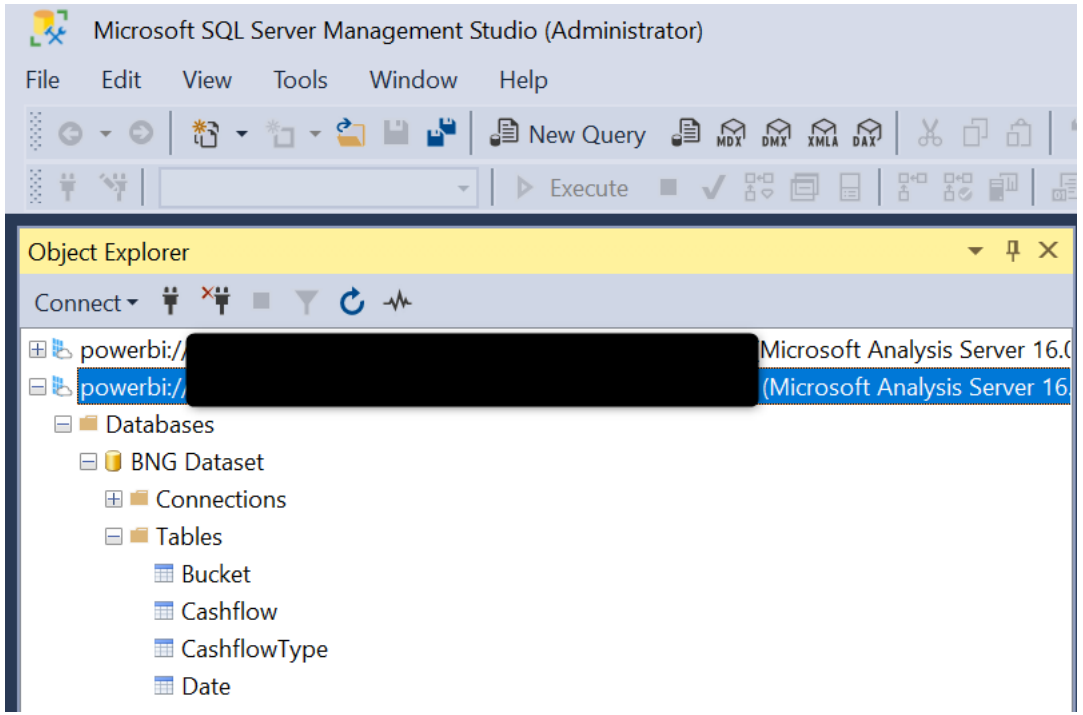
Refreshing partitions via SSMS

Incremental refresh

We connect to the semantic model via SQL Server Management Studio(SSMS).

Here, we see the tables that are in the semantic model.



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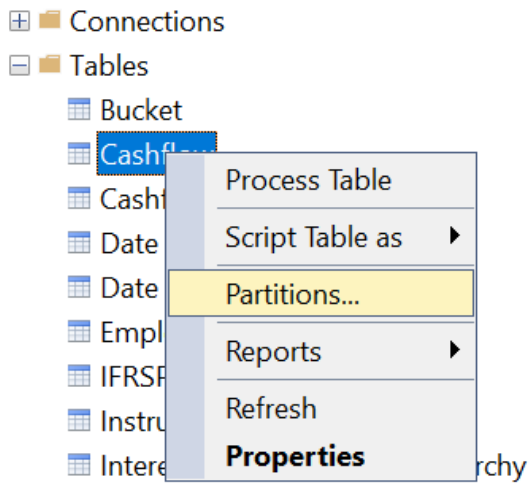
Refreshing partitions via SSMS

Incremental refresh

If we right-click on a table, we see the option 'Partitions'.

We select this option.



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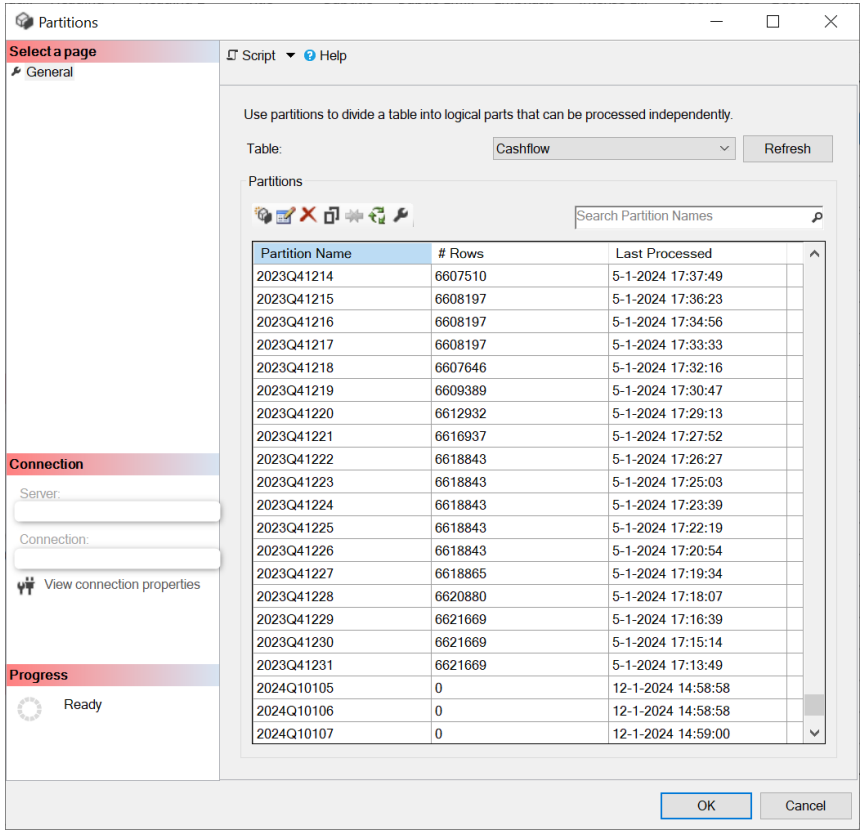
Refreshing partitions via SSMS

Incremental refresh

Now we see an overview of the existing partitions, including the number of rows and the date of the last refresh.



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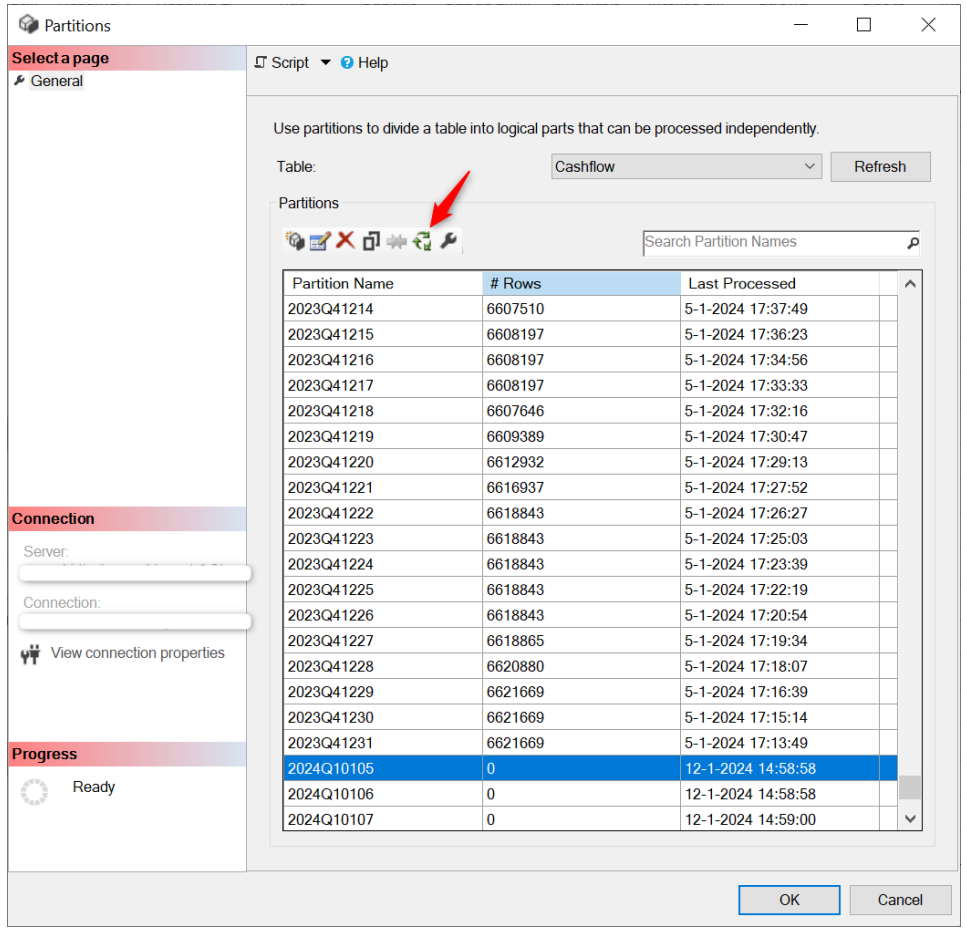
Refreshing partitions via SSMS

Incremental refresh

We can refresh partitions by clicking on the refresh icon.

We have now selected partition 2024Q10105



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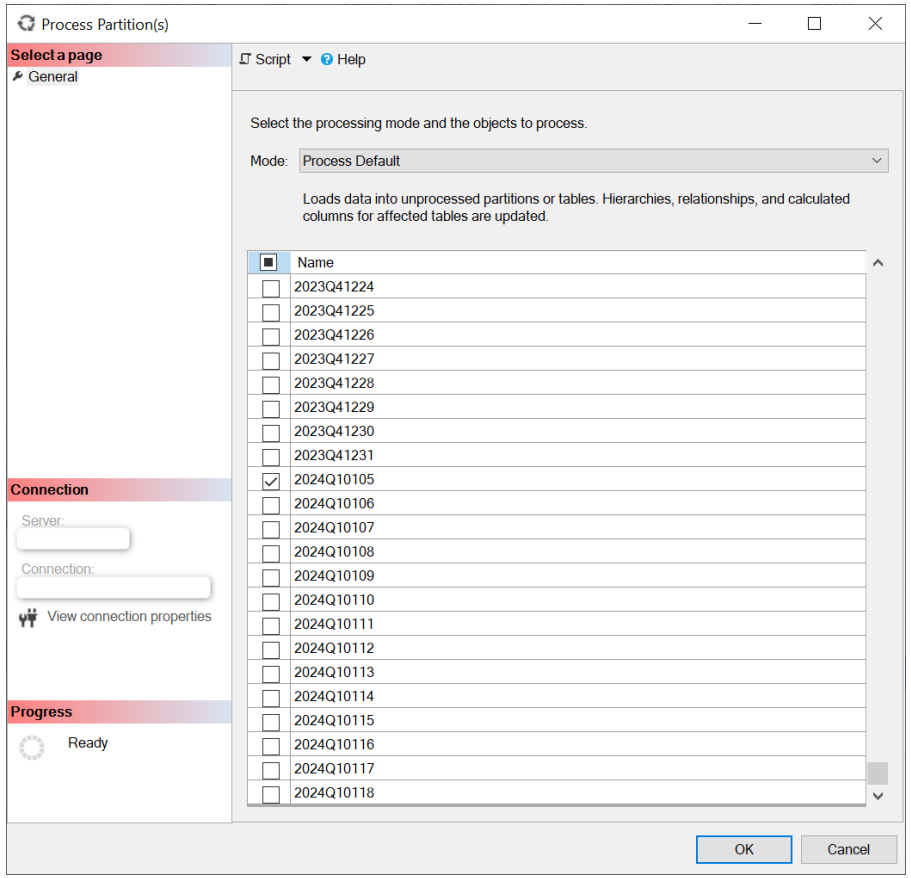
Refreshing partitions via SSMS

Incremental refresh

Because we had selected partition 2024Q10105, it is now also selected.

We are free to select multiple partitions.



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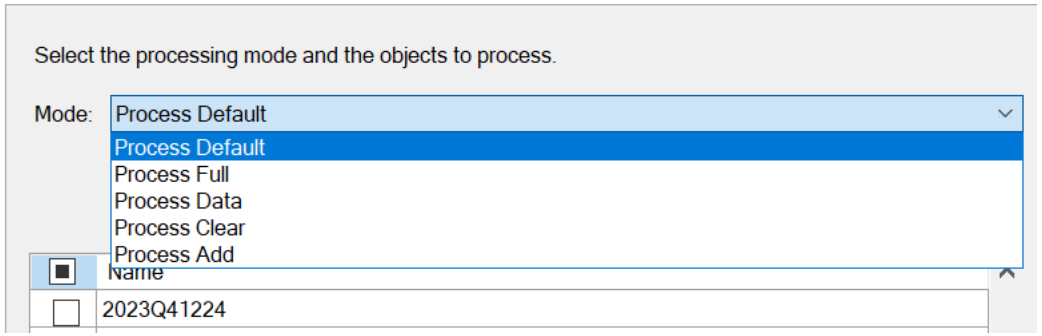
Refreshing partitions via SSMS

Incremental refresh



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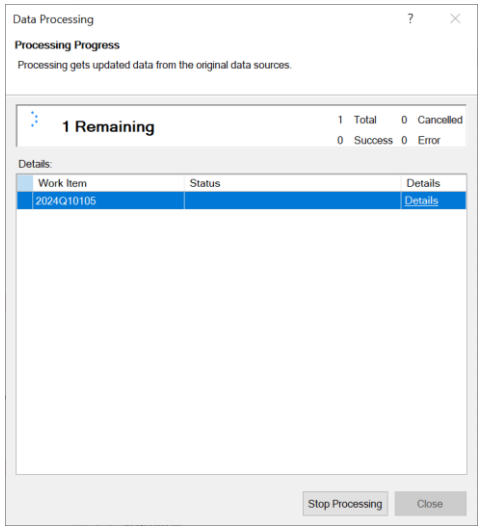
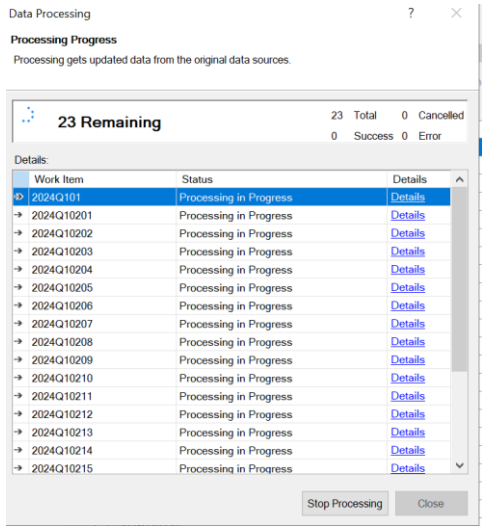
Refreshing partitions via SSMS

Incremental refresh

At the moment we initiate the refresh, we see the following screen.

We won't see any changes here until the partitions have been refreshed.

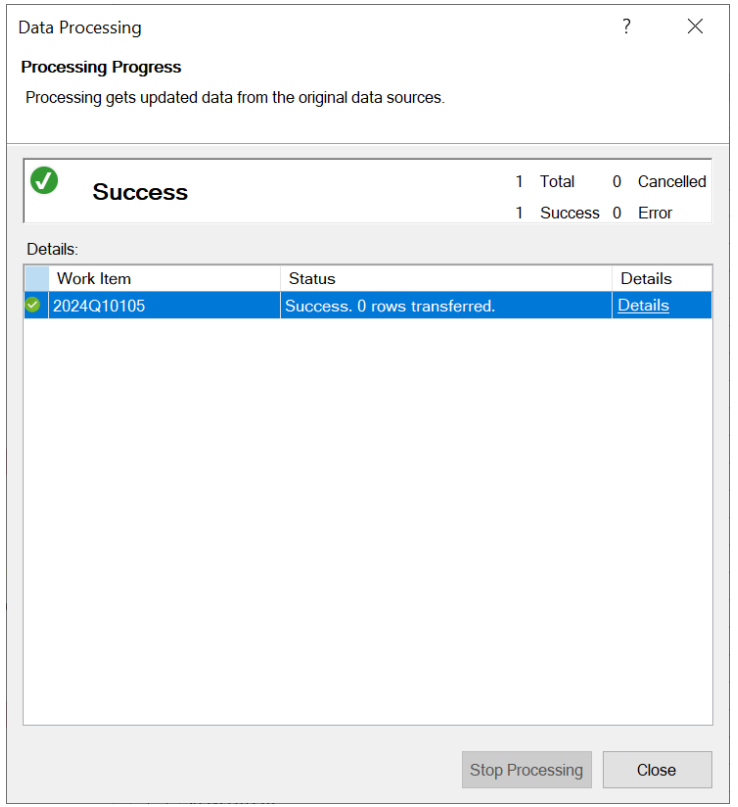




Refreshing partitions via SSMS

Incremental refresh

The refresh is complete.



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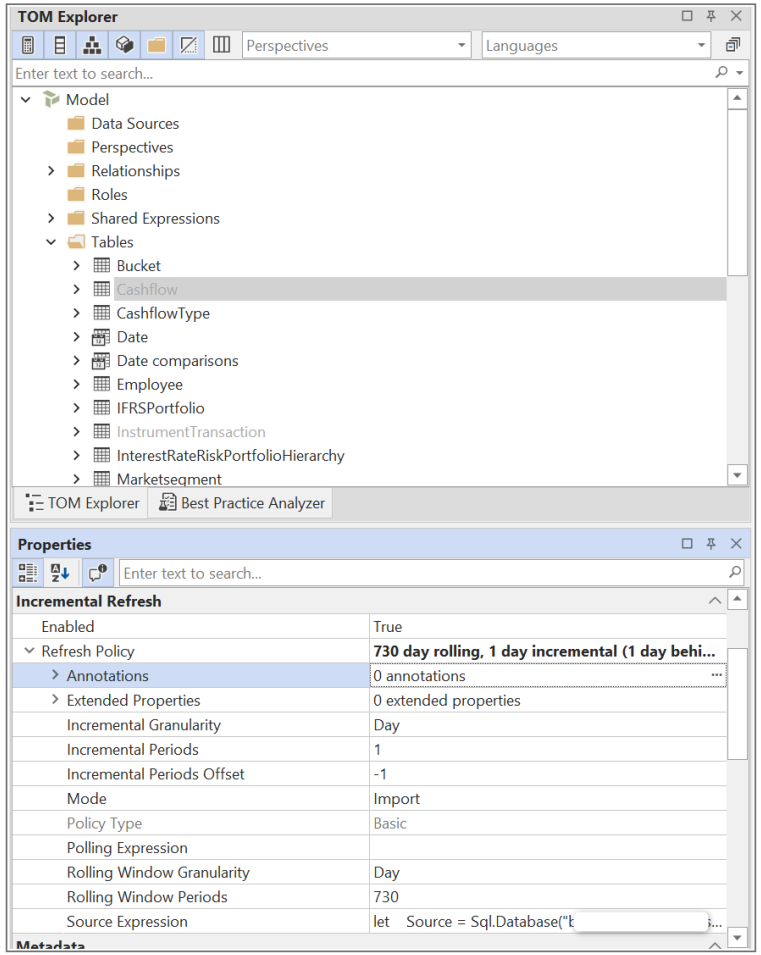
Refreshing partitions via Tabular Editor 3

Incremental refresh

We can use Tabular Editor 3 for refreshing, but we can also manage the model with it, including controlling and adjusting the Incremental refresh where necessary.

When we select a table, we can view how the incremental refresh is configured in the properties.



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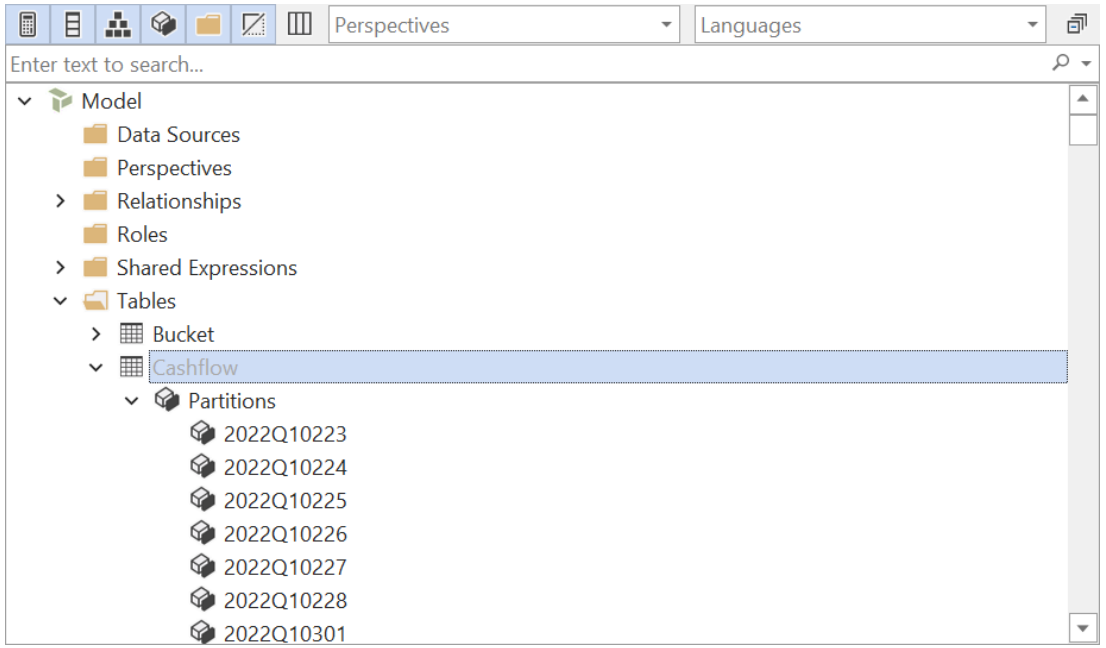
Refreshing partitions via Tabular Editor 3

Incremental refresh

When we open the Partitions for the table, we can see the partitions listed.



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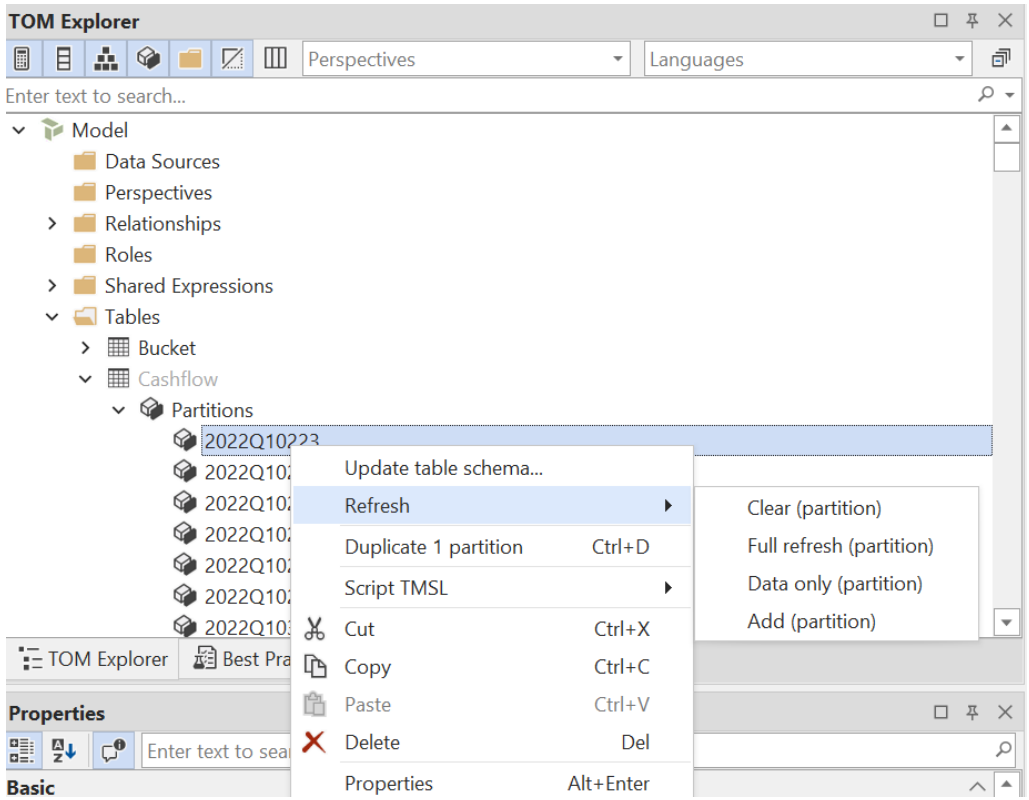
Refreshing partitions via Tabular Editor 3

Incremental refresh

By right-clicking, we see the option 'Refresh', where we can again choose how we want to refresh.



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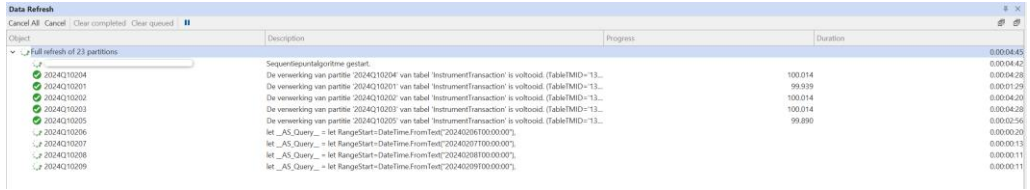
Refreshing partitions via Tabular Editor 3

Incremental refresh

The advantage compared to SSMS is that you can see what happens during the refresh. You can observe for each partition that rows are being loaded, and once it's done, it shows completion.



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If you have questions, please contact me.

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