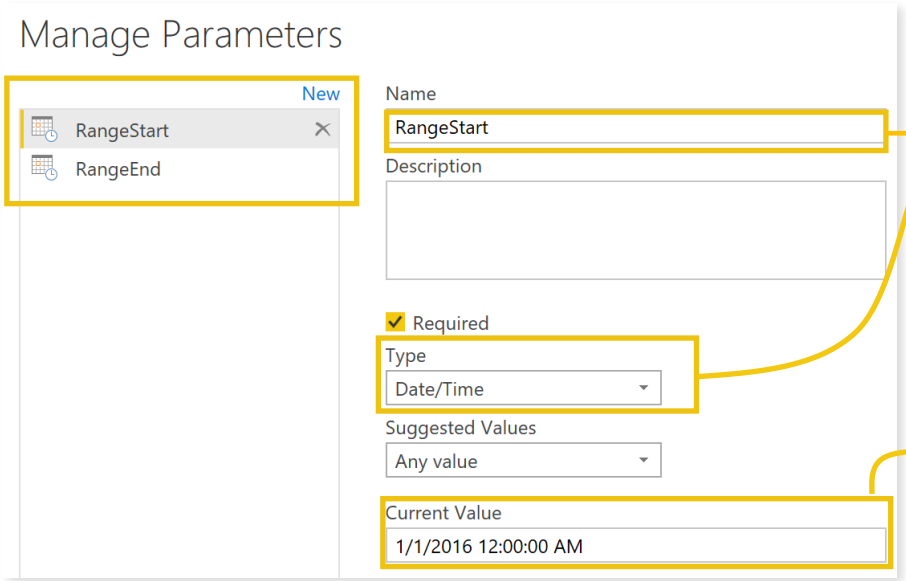
INCREMENTAL REFRESH

Incremental Refresh is the process of reloading only the part of a semantic model that may change over time and adding it to the rest of the model that no longer changes

- **Faster Refresh Times** - Typically used with large semantic models to decrease processing time
- **More Reliable** - Decreases the time connections are made to external sources
- **Reduced Resource Usage** - Easier on the internal resources of your computer (i.e., memory)

CONFIGURING INCREMENTAL REFRESH

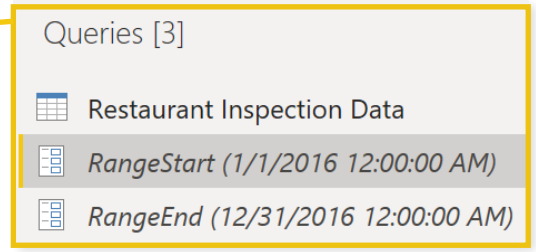
1 Set **RangeStart** & **RangeEnd** parameters from the Query Editor in Power BI Desktop



IMPORTANT: *The Name & Type **must** reflect what's shown here; these parameters are case sensitive and are reserved by Power BI specifically for incremental refresh*

Current Value should be a date/time value within your date/time range; this will be overwritten when you later define Incremental refresh

***RangeStart** & **RangeEnd** parameters are added to the list of Query Editor queries*



HEY THIS IS IMPORTANT!

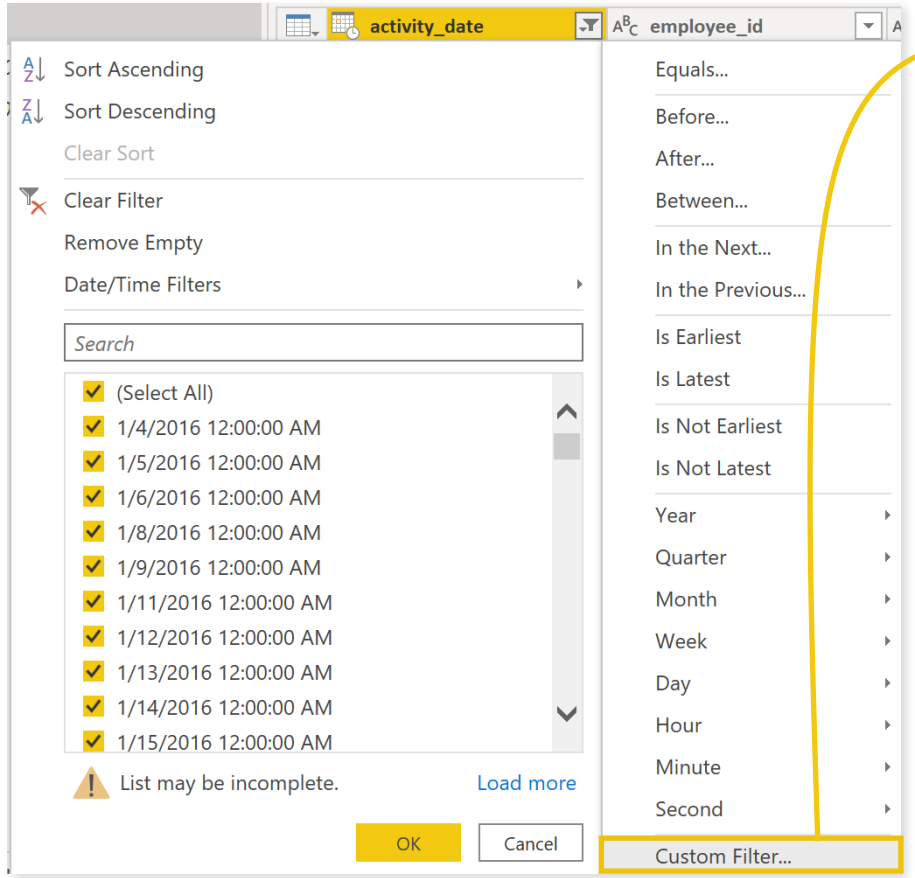
Current Value data type must be set to **Date/Time**

Additionally, your fact table **date column** data type must also be set to **Date/Time**

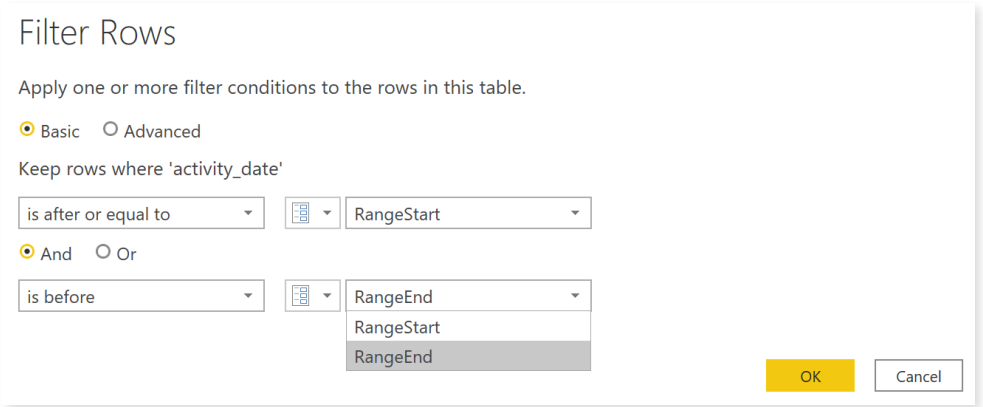
CONFIGURING INCREMENTAL REFRESH

2 Apply **RangeStart** & **RangeEnd** parameters to a date column using a *Custom Filter* from the filter options

Parameters are used to filter data imported into Power BI Desktop & dynamically partition the data into ranges



To avoid duplicated rows, only add an "=" sign on one side of the parameter; try using ">=" on StartRange and "<" on EndRange



HEY THIS IS IMPORTANT!

Since the date field is what determines the partial refresh of the underlying data source, incremental refresh only works with a **Date/Time** column

CONFIGURING INCREMENTAL REFRESH

3 Define the incremental refresh policy on the semantic model *(right-click dataset)*

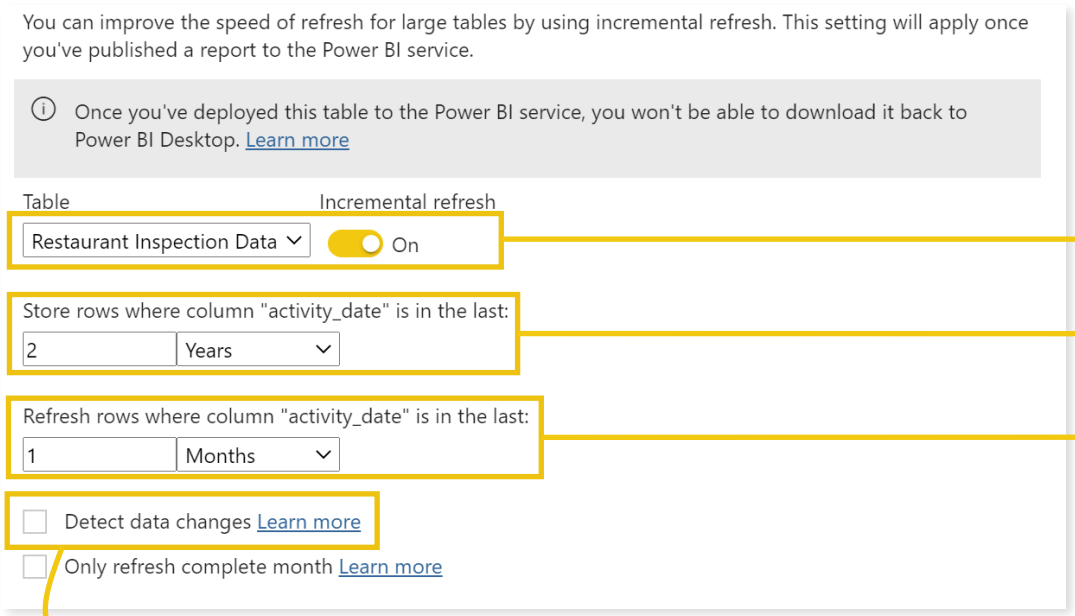


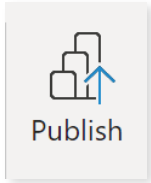
Table incremental refresh is applied to

*The number of rows you want to **store***
(think of this like "load only once and never load again")

*The number of rows you want to **refresh***
(think of this like "the rows I want to re-load each time")

*Detect data changes is an advanced setting that requires a separate "LastUpdateAt" column **(this isn't the same column used to partition the RangeStart & RangeEnd parameters)***

4 Publish to Service for the policy to take effect



HEY THIS IS IMPORTANT!

Once you publish and configure incremental refresh in Power BI Service, you will not be able to download the semantic model to Power BI Desktop