Cool *New* Power BI Features on the Roadmap

Notable Power BI Features in the next 0-6 Month Public Roadmap

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Senior Cloud Architect

Rolf Tesmer | LinkedIn

Cool New Power BI Features on the Roadmap

Notable Power BI Features being released over the next 0-6 Month Public Roadmap

ABOUT NOW >> New and planned features for Power BI, 2022 - **release wave 1**

NEAR FUTURE >> New and planned features for Power BI, 2022 - **release wave 2**

Todays Agenda;

1. Datamarts, Datamarts, Datamarts!
2. Power BI in PowerPoint (*the Power couple!*)
3. Quick DAX Measures using Natural Language
4. "*Data in Space!*" – Power BI and Spatial Anchors
5. Metrics (aka "*Goals*")

Power BI *Data and Reporting* Features

6. Release Pipeline Enhancements
7. Managed Vnet Data Gateway Service (ie Data Access)
8. Private Link (ie User Access)

Power BI *Infrastructure and Administration* Features

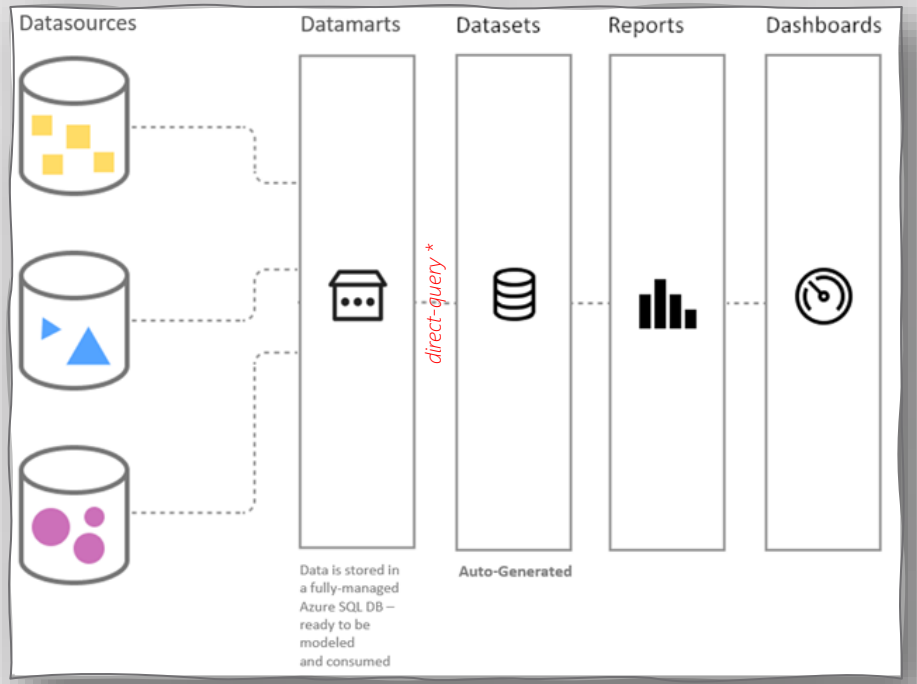
Power BI Roadmap

Data and Reporting Features

Power BI Datamarts (Public Preview) – on *1x Slide!*

https://docs.microsoft.com/en-us/power-bi/transform-model/datamarts/datamarts-overview
Add Data at Scale | Datamart in Power BI - YouTube

- **New self-service "Managed Datamart" capability included with Power BI Premium – enabled via PBI Admin Portal**
- Think of a Datamart as a "*mini data warehouse*" for a **department**. Supports workloads up to **100GB** (+ *future roadmap*)
- Combined **data prep** & **data model authoring** experience built-into Power BI Service. (not available in PBI Desktop)
- Brings data into an **automatically** managed/tuned **dedicated Azure SQL DB** that's hosted **behind the PBI Service**
- Ingest data from different sources using **Power Query** (*which builds a special dataflow*) into the **PBI hosted Azure SQL DB**
- The dataflows are setup to populate the Datamart and **refreshed on schedule** (**incremental refresh** supported)
- Can **create relationships/measures** using new model authoring experience, which are stored in the DataMart Dataset
- **Automatically** generates a **DirectQuery (DQ)* dataset** (*points to Datamart*) which is accessed for creating Power BI reports. Dataset is **Read-Only**
- Also provides **T-SQL Endpoint** so users can **query** the underlying **SQL DB hosted inside Power BI** using SQL tools (SQL SSMS, Azure Data Studio, etc)
- **SQL DML** (ie update data) & **SQL DDL** (ie update schema) is **not supported***
- **$$$ Pricing –** Preview is ~Free, GA pricing is TBC. BUT *likely** in **2 parts**;
  (#1) **DataMart "SQL DB"** = Storage, CPU Usage, #Queries executed
  (#2) **Datamart "Dataset"** = uses PBI Premium SKU capacity (CPU, Memory)
- **MS Docs** here **compares** PBI **Datamarts** *vs* **Dataflows** *vs* **Datasets** and when which is best used and for which process/workload



Datamart in Power BI

Democratize data for every level of your organization

Ingest & Prep

An intuitive low code experience to create a datamart in Power BI with full web authoring

Unified semantic models

An autogenerated self-tuning dataset and an interface that enables defining BI measures, relationships and security rules kept in sync with the database

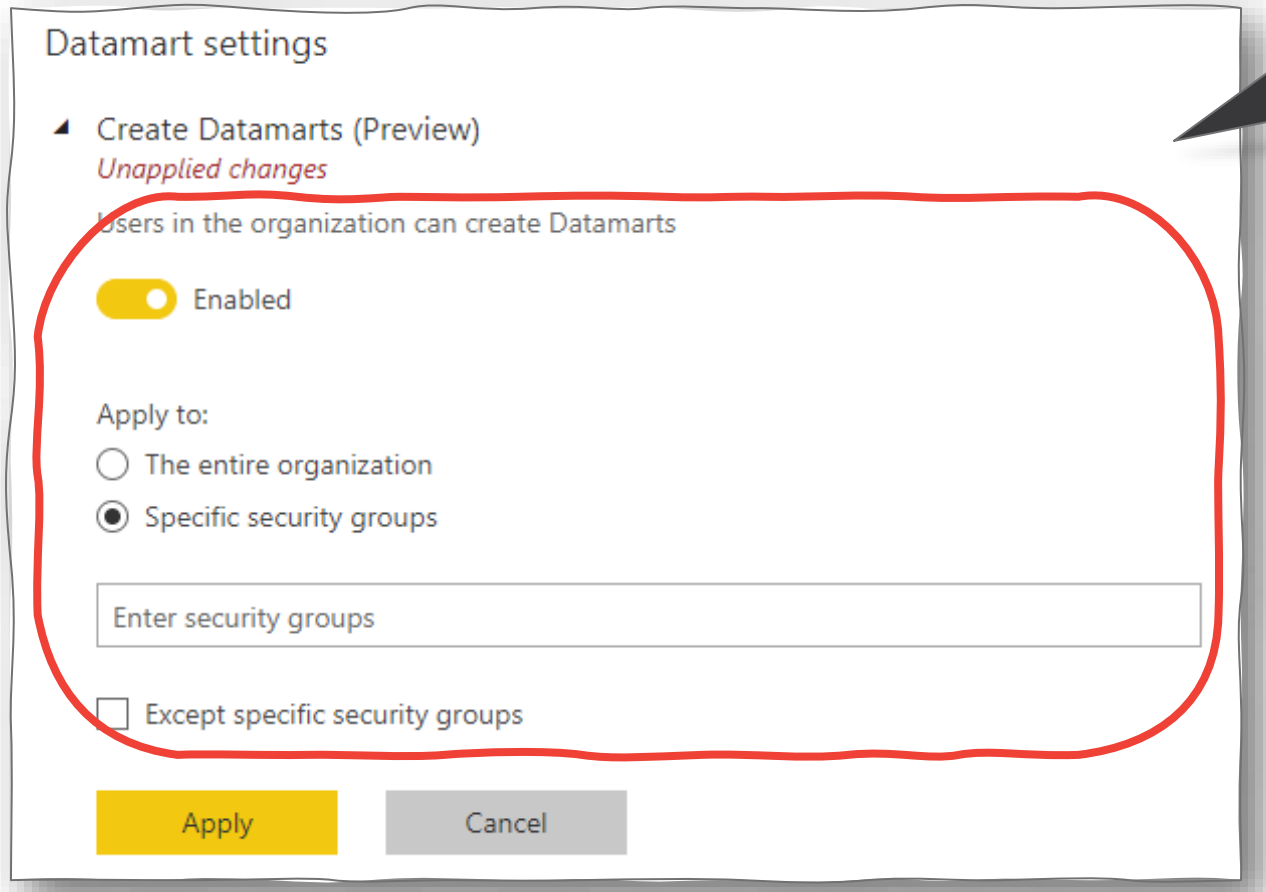
Integrated governance

Microsoft Purview Information Protection, sensitivity labels, lineage, endorsement, deployment pipelines and end to end monitoring built in

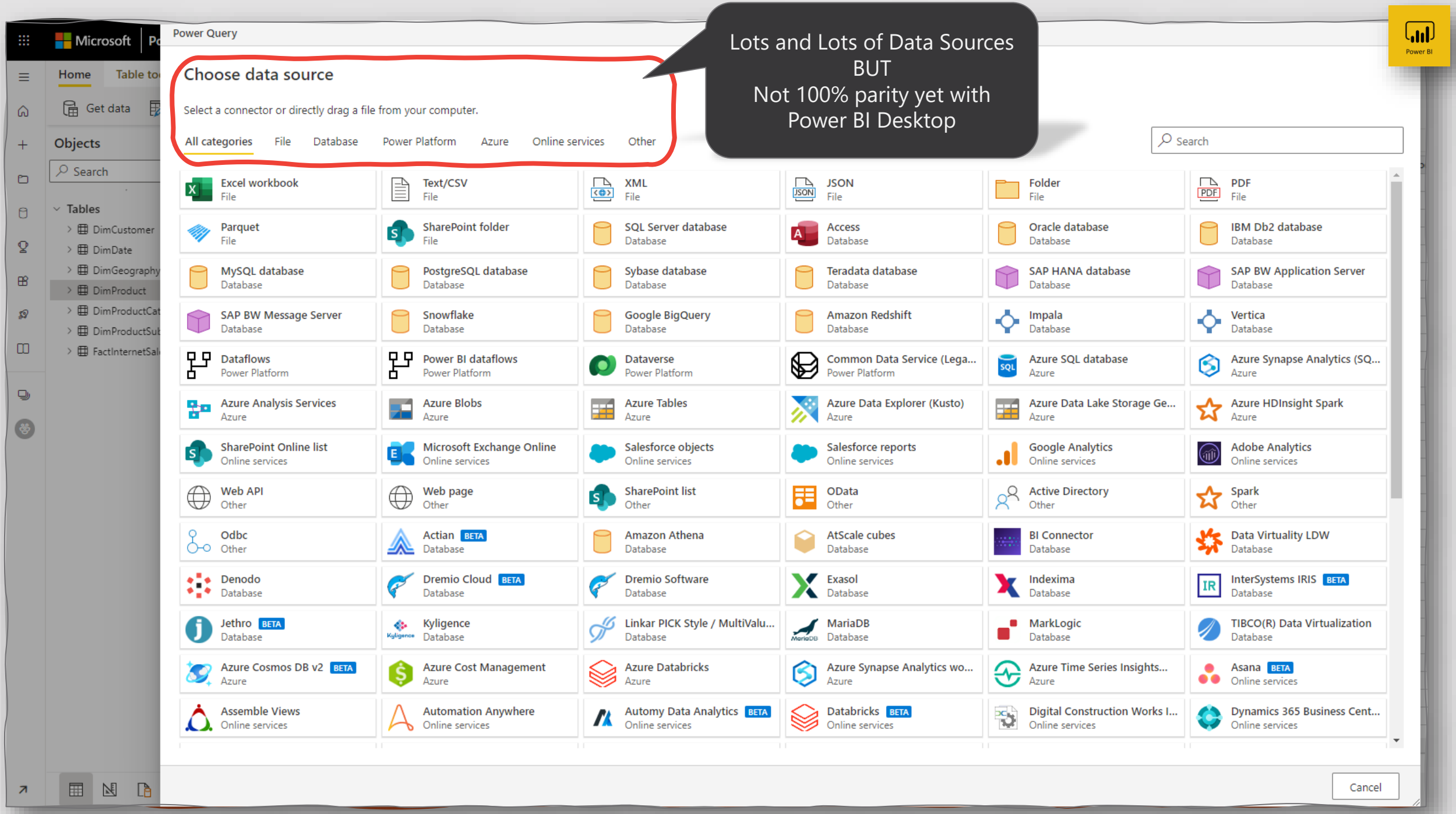
Ease of use

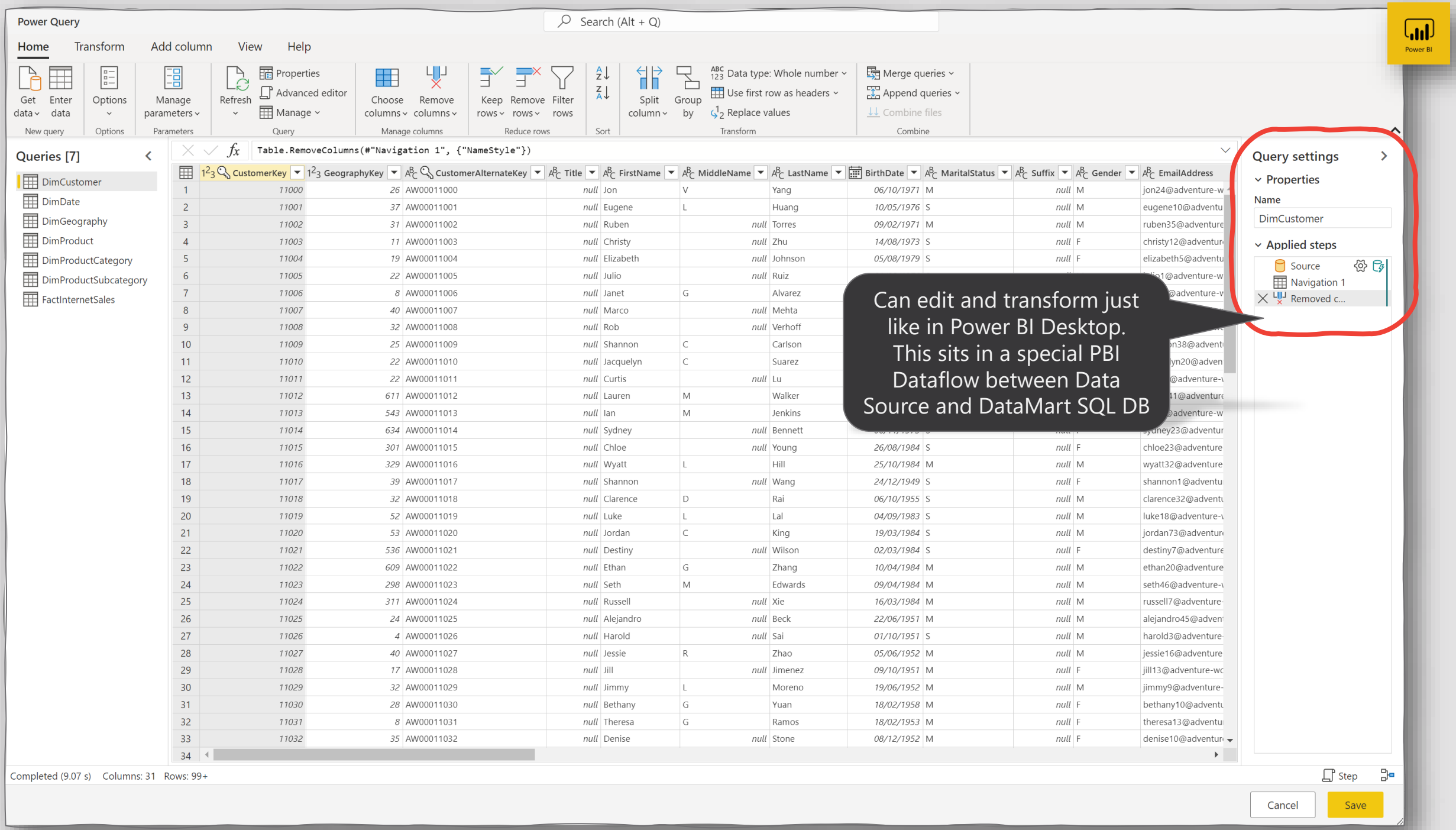
Includes full sharing, ready to build Power BI reports and is discoverable where users work – Data Hub, Excel, Teams

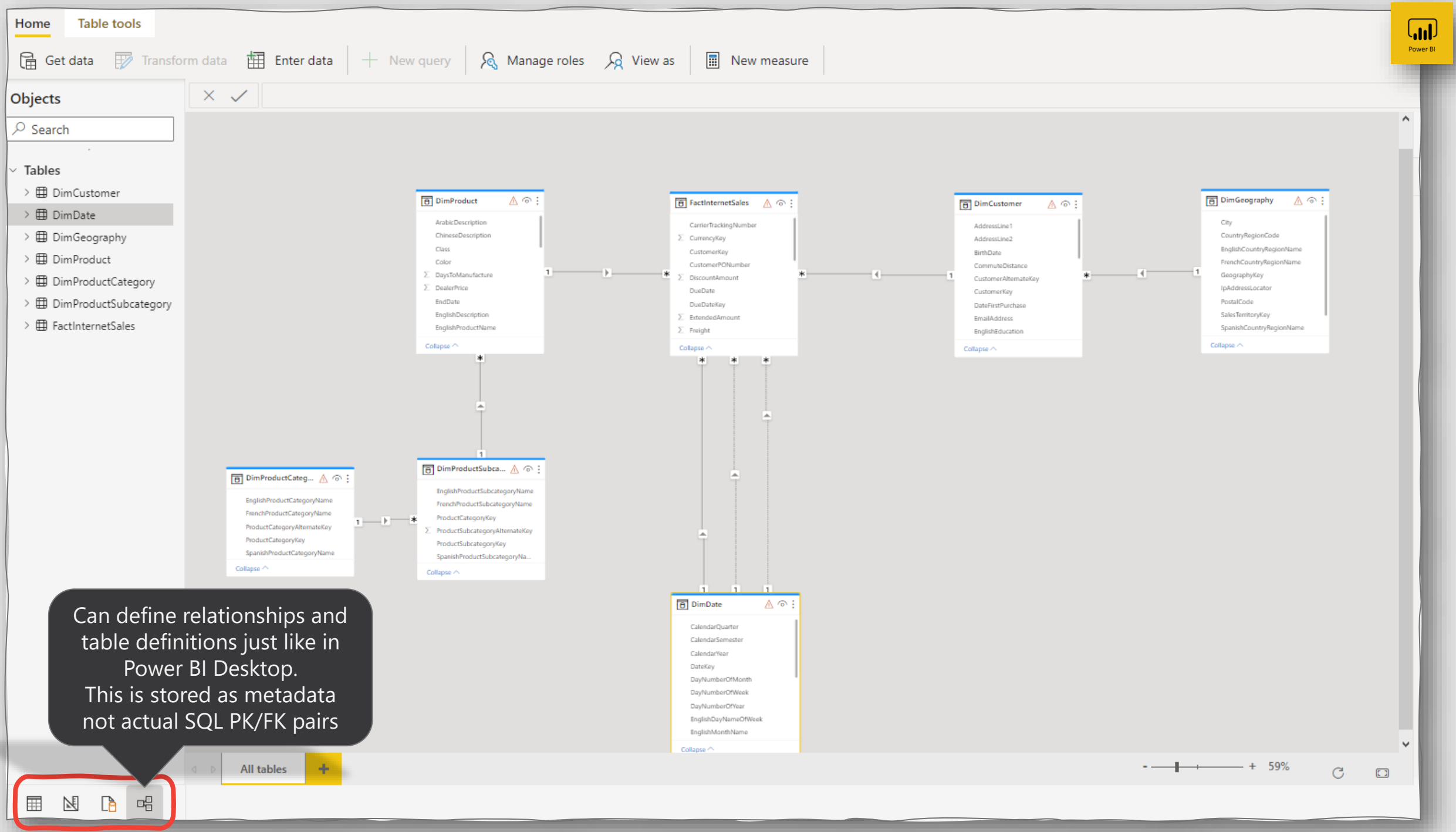
Data sources

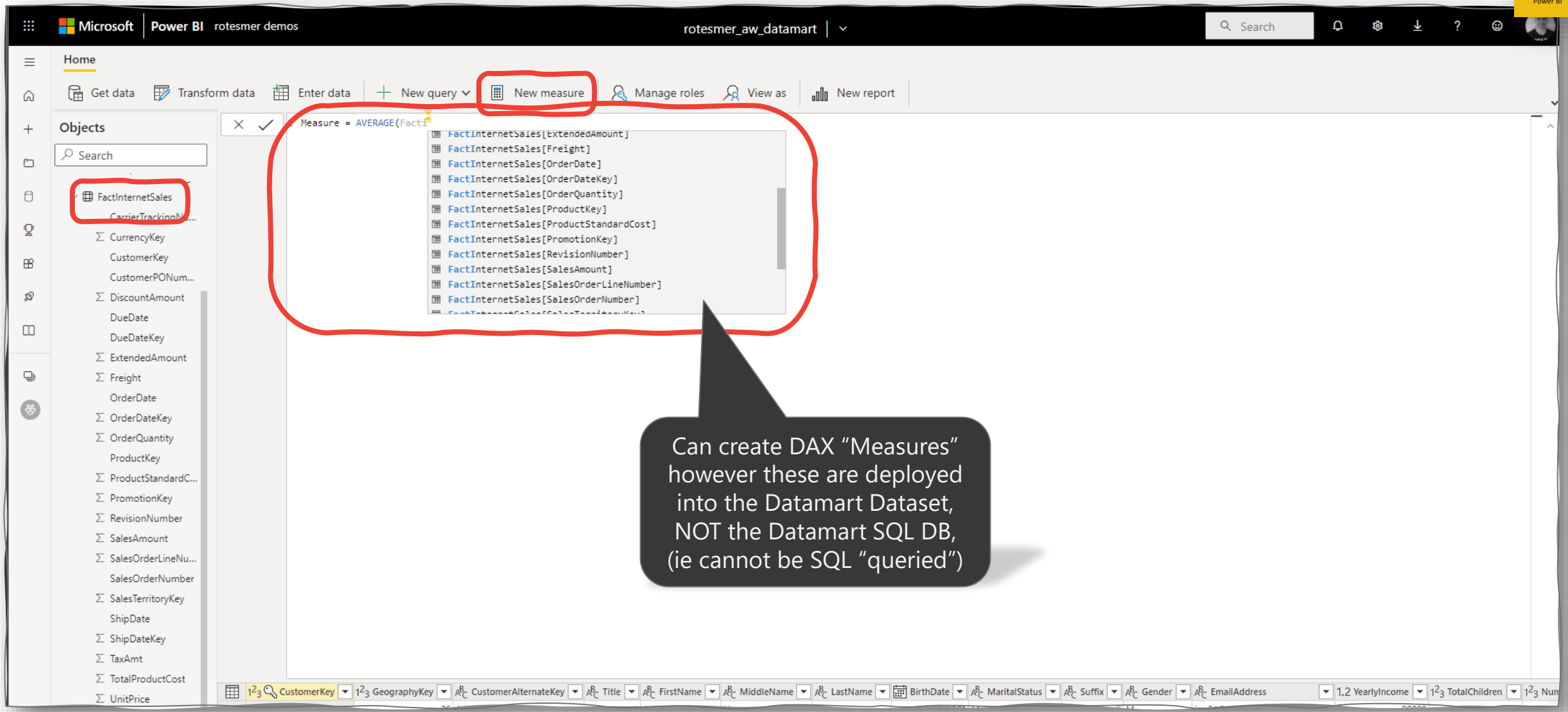


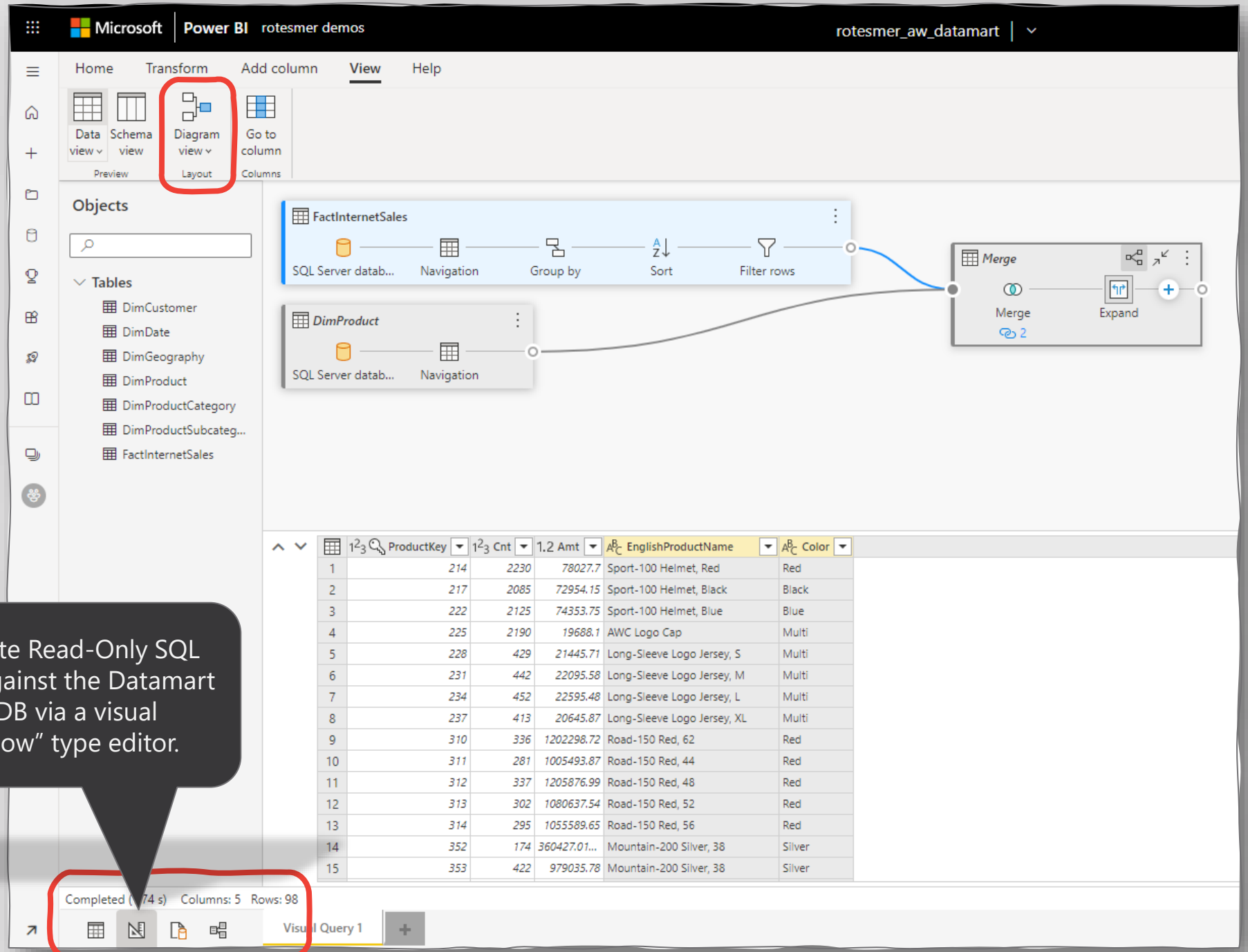
Enabled in Power BI Tenancy Admin Settings
Enabled for the entire tenancy, or isolated by group

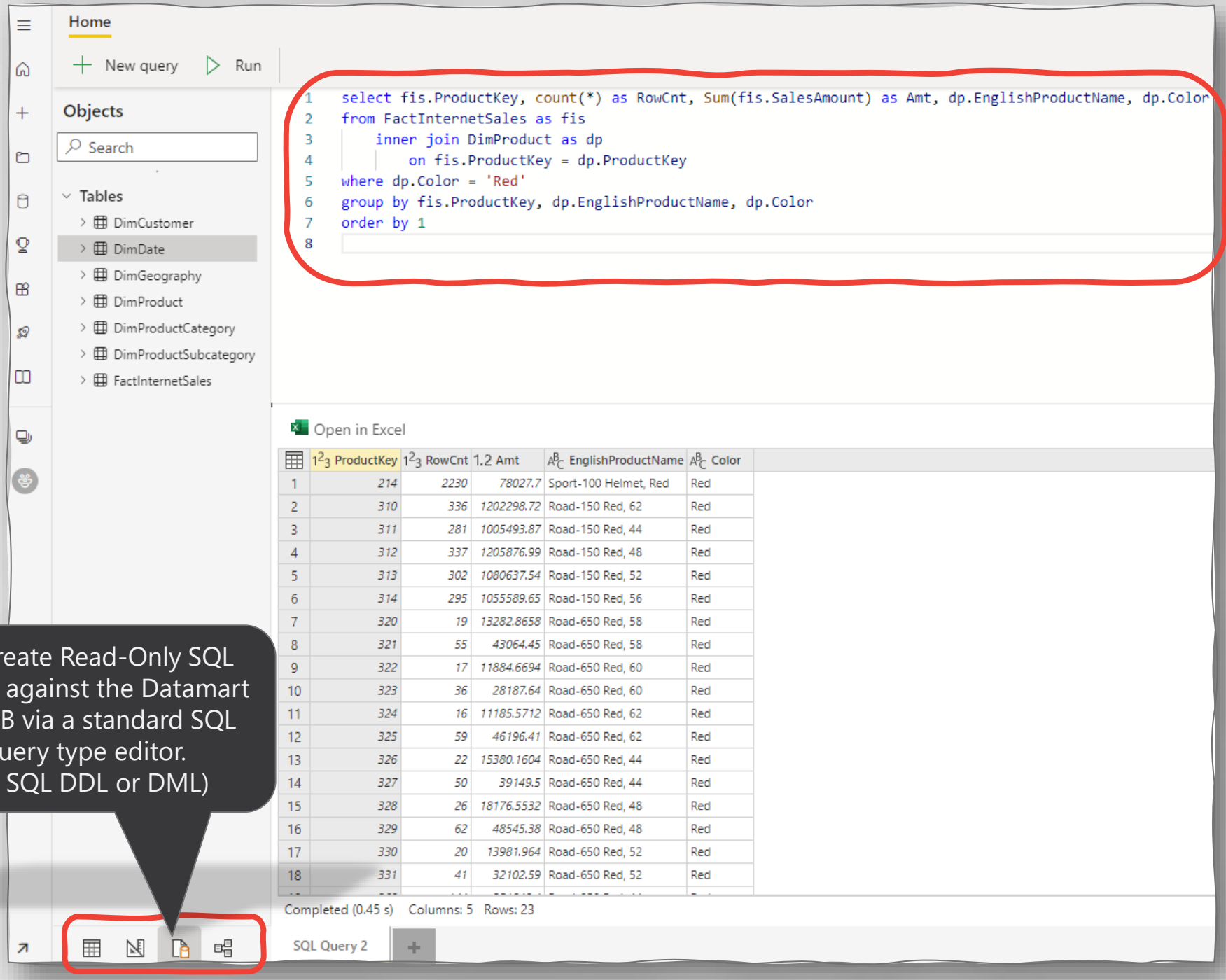

Power Query
Choose data source
Select a connector or directly drag a file from your computer.
All categories
File
Database
Power Platform
Azure
Online services
Other
Search
Excel workbook File
Text/CSV File
XML File
JSON File
Folder File
PDF File
Parquet File
SharePoint folder File
SQL Server database Database
Access Database
Oracle database Database
IBM Db2 database Database
MySQL database Database
PostgreSQL database Database
Sybase database Database
Teradata database Database
SAP HANA database Database
SAP BW Application Server Database
SAP BW Message Server Database
Snowflake Database
Google BigQuery Database
Amazon Redshift Database
Impala Database
Vertica Database
Dataflows Power Platform
Power BI dataflows Power Platform
Dataverse Power Platform
Common Data Service (Lega... Power Platform
Azure SQL database Azure
Azure Synapse Analytics (SQ... Azure
Azure Analysis Services Azure
Azure Blobs Azure
Azure Tables Azure
Azure Data Explorer (Kusto) Azure
Azure Data Lake Storage Ge... Azure
Azure HDInsight Spark Azure
SharePoint Online list Online services
Microsoft Exchange Online Online services
Salesforce objects Online services
Salesforce reports Online services
Google Analytics Online services
Adobe Analytics Online services
Web API Other
Web page Other
SharePoint list Other
OData Other
Active Directory Other
Spark Other
Odbc Other
Actian BETA Database
Amazon Athena Database
AtScale cubes Database
BI Connector Database
Data Virtuality LDW Database
Denodo Database
Dremio Cloud BETA Database
Dremio Software Database
Exasol Database
Indexima Database
InterSystems IRIS BETA Database
Jethro BETA Database
Kyligence Database
Linkar PICK Style / MultiValu... Database
MariaDB Database
MarkLogic Database
TIBCO(R) Data Virtualization Database
Azure Cosmos DB v2 BETA Azure
Azure Cost Management Azure
Azure Databricks Azure
Azure Synapse Analytics wo... Azure
Azure Time Series Insights... Azure
Asana BETA Online services
Assemble Views Online services
Automation Anywhere Online services
Automy Data Analytics BETA Online services
Databricks BETA Online services
Digital Construction Works I... Online services
Dynamics 365 Business Cent... Online services
Cancel
Lots and Lots of Data Sources
BUT
Not 100% parity yet with
Power BI Desktop
Power BI
Microsoft
Home
Table to
Get data
Objects
Search
Tables
DimCustomer
DimDate
DimGeography
DimProduct
DimProductCat
DimProductSub
FactInternetSal

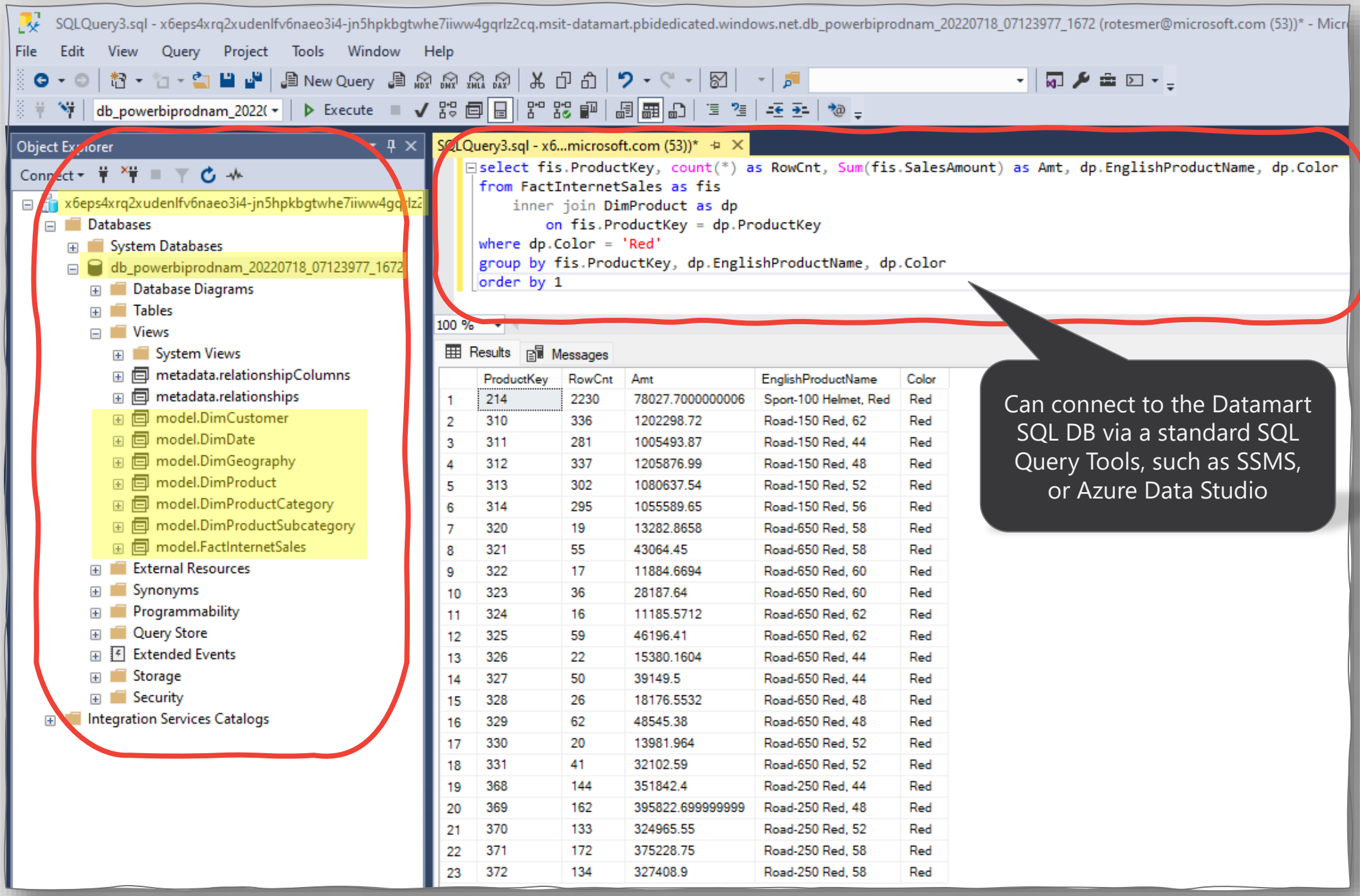

Power Query
Search (Alt + Q)
Power BI
Home
Transform
Add column
View
Help
Get data
Enter data
Options
Manage parameters
Refresh
Properties
Advanced editor
Manage
Choose columns
Remove columns
Keep rows
Remove rows
Filter rows
Split column
Group by
Data type: Whole number
Use first row as headers
Replace values
Merge queries
Append queries
Combine files
New query
Options
Parameters
Query
Manage columns
Reduce rows
Sort
Transform
Combine
Queries [7]
DimCustomer
DimDate
DimGeography
DimProduct
DimProductCategory
DimProductSubcategory
FactInternetSales
Table.RemoveColumns(#"Navigation 1", {"NameStyle"})
CustomerKey
GeographyKey
CustomerAlternateKey
Title
FirstName
MiddleName
LastName
BirthDate
MaritalStatus
Suffix
Gender
EmailAddress
11000 26 AW00011000 null Jon V Yang 06/10/1971 M null M jon24@adventure-w
11001 37 AW00011001 null Eugene L Huang 10/05/1976 S null M eugene10@adventu
11002 31 AW00011002 null Ruben null Torres 09/02/1971 M null M ruben35@adventure
11003 11 AW00011003 null Christy null Zhu 14/08/1973 S null F christy12@adventur
11004 19 AW00011004 null Elizabeth null Johnson 05/08/1979 S null F elizabeth5@adventu
11005 22 AW00011005 null Julio null Ruiz
11006 8 AW00011006 null Janet G Alvarez
11007 40 AW00011007 null Marco null Mehta
11008 32 AW00011008 null Rob null Verhoff
11009 25 AW00011009 null Shannon C Carlson
11010 22 AW00011010 null Jacquelyn C Suarez
11011 22 AW00011011 null Curtis null Lu
11012 611 AW00011012 null Lauren M Walker
11013 543 AW00011013 null Ian M Jenkins
11014 634 AW00011014 null Sydney null Bennett
11015 301 AW00011015 null Chloe null Young 26/08/1984 S null F chloe23@adventure
11016 329 AW00011016 null Wyatt L Hill 25/10/1984 M null M wyatt32@adventure
11017 39 AW00011017 null Shannon null Wang 24/12/1949 S null F shannon1@adventu
11018 32 AW00011018 null Clarence D Rai 06/10/1955 S null M clarence32@adventu
11019 52 AW00011019 null Luke L Lal 04/09/1983 S null M luke18@adventure-
11020 53 AW00011020 null Jordan C King 19/03/1984 S null M jordan73@adventur
11021 536 AW00011021 null Destiny null Wilson 02/03/1984 S null F destiny7@adventure
11022 609 AW00011022 null Ethan G Zhang 10/04/1984 M null M ethan20@adventure
11023 298 AW00011023 null Seth M Edwards 09/04/1984 M null M seth46@adventure-
11024 311 AW00011024 null Russell null Xie 16/03/1984 M null M russell7@adventure-
11025 24 AW00011025 null Alejandro null Beck 22/06/1951 M null M alejandro45@adven
11026 4 AW00011026 null Harold null Sai 01/10/1951 S null M harold3@adventure-
11027 40 AW00011027 null Jessie R Zhao 05/06/1952 M null M jessie16@adventure
11028 17 AW00011028 null Jill null Jimenez 09/10/1951 M null F jill13@adventure-wc
11029 32 AW00011029 null Jimmy L Moreno 19/06/1952 M null M jimmy9@adventure-
11030 28 AW00011030 null Bethany G Yuan 18/02/1958 M null F bethany10@adventu
11031 8 AW00011031 null Theresa G Ramos 18/02/1953 M null F theresa13@adventu
11032 35 AW00011032 null Denise null Stone 08/12/1952 M null F denise10@adventur
Can edit and transform just like in Power BI Desktop. This sits in a special PBI Dataflow between Data Source and DataMart SQL DB
Query settings
Properties
Name
DimCustomer
Applied steps
Source
Navigation 1
Removed c...
Completed (9.07 s) Columns: 31 Rows: 99+
Step
Cancel
Save


Home
Table tools
Get data
Transform data
Enter data
New query
Manage roles
View as
New measure
Power BI
Objects
Search
Tables
DimCustomer
DimDate
DimGeography
DimProduct
DimProductCategory
DimProductSubcategory
FactInternetSales
DimProduct
ArabicDescription
ChineseDescription
Class
Color
DaysToManufacture
DealerPrice
EndDate
EnglishDescription
EnglishProductName
Collapse
FactInternetSales
CarrierTrackingNumber
CurrencyKey
CustomerKey
CustomerPONumber
DiscountAmount
DueDate
DueDateKey
ExtendedAmount
Freight
Collapse
DimCustomer
AddressLine1
AddressLine2
BirthDate
CommuteDistance
CustomerAlternateKey
CustomerKey
DateFirstPurchase
EmailAddress
EnglishEducation
Collapse
DimGeography
City
CountryRegionCode
EnglishCountryRegionName
FrenchCountryRegionName
GeographyKey
IpAddressLocator
PostalCode
SalesTerritoryKey
SpanishCountryRegionName
Collapse
DimProductCateg...
EnglishProductCategoryName
FrenchProductCategoryName
ProductCategoryAlternateKey
ProductCategoryKey
SpanishProductCategoryName
Collapse
DimProductSubca...
EnglishProductSubcategoryName
FrenchProductSubcategoryName
ProductCategoryKey
ProductSubcategoryAlternateKey
ProductSubcategoryKey
SpanishProductSubcategoryNa...
Collapse
DimDate
CalendarQuarter
CalendarSemester
CalendarYear
DateKey
DayNumberOfMonth
DayNumberOfWeek
DayNumberOfYear
EnglishDayNameOfWeek
EnglishMonthName
Collapse
Can define relationships and table definitions just like in Power BI Desktop.
This is stored as metadata not actual SQL PK/FK pairs
All tables
59%

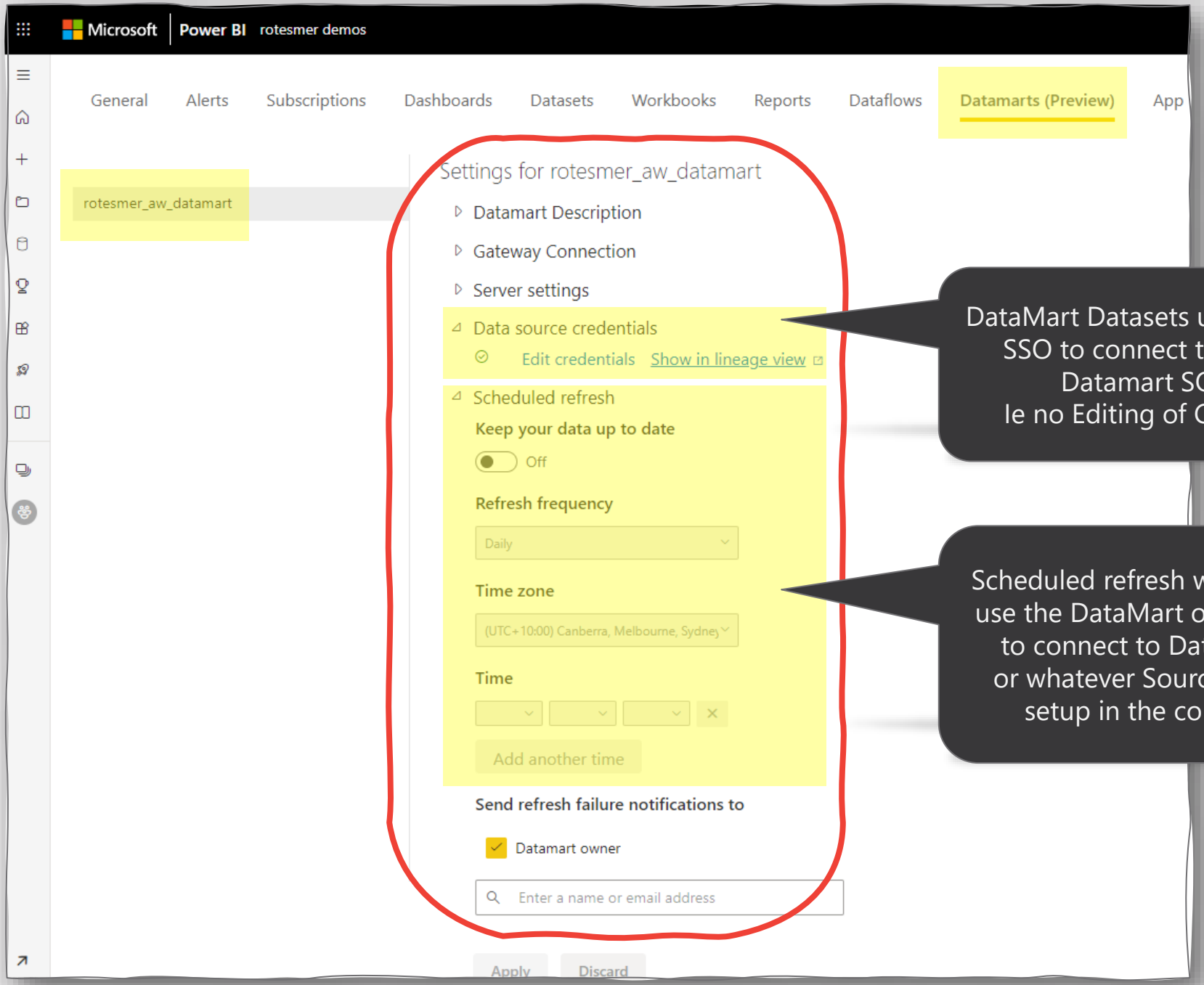

Microsoft | Power BI rotesmer demos
rotesmer_aw_datamart
Search
Home
Get data
Transform data
Enter data
New query
New measure
Manage roles
View as
New report
Objects
Search
FactInternetSales
CurrencyKey
CustomerKey
CustomerPONum...
DiscountAmount
DueDate
DueDateKey
ExtendedAmount
Freight
OrderDate
OrderDateKey
OrderQuantity
ProductKey
ProductStandardC...
PromotionKey
RevisionNumber
SalesAmount
SalesOrderLineNu...
SalesOrderNumber
SalesTerritoryKey
ShipDate
ShipDateKey
TaxAmt
TotalProductCost
UnitPrice
Measure = AVERAGE(Facti
FactInternetSales[ExtendedAmount]
FactInternetSales[Freight]
FactInternetSales[OrderDate]
FactInternetSales[OrderDateKey]
FactInternetSales[OrderQuantity]
FactInternetSales[ProductKey]
FactInternetSales[ProductStandardCost]
FactInternetSales[PromotionKey]
FactInternetSales[RevisionNumber]
FactInternetSales[SalesAmount]
FactInternetSales[SalesOrderLineNumber]
FactInternetSales[SalesOrderNumber]
Can create DAX “Measures” however these are deployed into the Datamart Dataset, NOT the Datamart SQL DB, (ie cannot be SQL “queried”)
CustomerKey
GeographyKey
CustomerAlternateKey
Title
FirstName
MiddleName
LastName
BirthDate
MaritalStatus
Suffix
Gender
EmailAddress
YearlyIncome
TotalChildren


Microsoft
Power BI
rotesmer demos
rotesmer_aw_datamart
Home
Transform
Add column
View
Help
Data view
Schema view
Diagram view
Go to column
Preview
Layout
Columns
Objects
Tables
DimCustomer
DimDate
DimGeography
DimProduct
DimProductCategory
DimProductSubcateg...
FactInternetSales
FactInternetSales
SQL Server datab...
Navigation
Group by
Sort
Filter rows
DimProduct
SQL Server datab...
Navigation
Merge
Merge
Expand
2
ProductKey
Cnt
Amt
EnglishProductName
Color
1 214 2230 78027.7 Sport-100 Helmet, Red Red
2 217 2085 72954.15 Sport-100 Helmet, Black Black
3 222 2125 74353.75 Sport-100 Helmet, Blue Blue
4 225 2190 19688.1 AWC Logo Cap Multi
5 228 429 21445.71 Long-Sleeve Logo Jersey, S Multi
6 231 442 22095.58 Long-Sleeve Logo Jersey, M Multi
7 234 452 22595.48 Long-Sleeve Logo Jersey, L Multi
8 237 413 20645.87 Long-Sleeve Logo Jersey, XL Multi
9 310 336 1202298.72 Road-150 Red, 62 Red
10 311 281 1005493.87 Road-150 Red, 44 Red
11 312 337 1205876.99 Road-150 Red, 48 Red
12 313 302 1080637.54 Road-150 Red, 52 Red
13 314 295 1055589.65 Road-150 Red, 56 Red
14 352 174 360427.01... Mountain-200 Silver, 38 Silver
15 353 422 979035.78 Mountain-200 Silver, 38 Silver
Completed (74 s) Columns: 5 Rows: 98
Visual Query 1
Can create Read-Only SQL queries against the Datamart SQL DB via a visual "data flow" type editor.


Home
New query
Run
Objects
Search
Tables
DimCustomer
DimDate
DimGeography
DimProduct
DimProductCategory
DimProductSubcategory
FactInternetSales
select fis.ProductKey, count(*) as RowCnt, Sum(fis.SalesAmount) as Amt, dp.EnglishProductName, dp.Color
from FactInternetSales as fis
inner join DimProduct as dp
on fis.ProductKey = dp.ProductKey
where dp.Color = 'Red'
group by fis.ProductKey, dp.EnglishProductName, dp.Color
order by 1
Open in Excel
ProductKey RowCnt Amt EnglishProductName Color
214 2230 78027.7 Sport-100 Helmet, Red Red
310 336 1202298.72 Road-150 Red, 62 Red
311 281 1005493.87 Road-150 Red, 44 Red
312 337 1205876.99 Road-150 Red, 48 Red
313 302 1080637.54 Road-150 Red, 52 Red
314 295 1055589.65 Road-150 Red, 56 Red
320 19 13282.8658 Road-650 Red, 58 Red
321 55 43064.45 Road-650 Red, 58 Red
322 17 11884.6694 Road-650 Red, 60 Red
323 36 28187.64 Road-650 Red, 60 Red
324 16 11185.5712 Road-650 Red, 62 Red
325 59 46196.41 Road-650 Red, 62 Red
326 22 15380.1604 Road-650 Red, 44 Red
327 50 39149.5 Road-650 Red, 44 Red
328 26 18176.5532 Road-650 Red, 48 Red
329 62 48545.38 Road-650 Red, 48 Red
330 20 13981.964 Road-650 Red, 52 Red
331 41 32102.59 Road-650 Red, 52 Red
Completed (0.45 s) Columns: 5 Rows: 23
SQL Query 2
Can create Read-Only SQL queries against the Datamart SQL DB via a standard SQL Query type editor.
(No SQL DDL or DML)



	ProductKey	RowCnt	Amt	EnglishProductName	Color
1	214	2230	78027.7000000006	Sport-100 Helmet, Red	Red
2	310	336	1202298.72	Road-150 Red, 62	Red
3	311	281	1005493.87	Road-150 Red, 44	Red
4	312	337	1205876.99	Road-150 Red, 48	Red
5	313	302	1080637.54	Road-150 Red, 52	Red
6	314	295	1055589.65	Road-150 Red, 56	Red
7	320	19	13282.8658	Road-650 Red, 58	Red
8	321	55	43064.45	Road-650 Red, 58	Red
9	322	17	11884.6694	Road-650 Red, 60	Red
10	323	36	28187.64	Road-650 Red, 60	Red
11	324	16	11185.5712	Road-650 Red, 62	Red
12	325	59	46196.41	Road-650 Red, 62	Red
13	326	22	15380.1604	Road-650 Red, 44	Red
14	327	50	39149.5	Road-650 Red, 44	Red
15	328	26	18176.5532	Road-650 Red, 48	Red
16	329	62	48545.38	Road-650 Red, 48	Red
17	330	20	13981.964	Road-650 Red, 52	Red
18	331	41	32102.59	Road-650 Red, 52	Red
19	368	144	351842.4	Road-250 Red, 44	Red
20	369	162	395822.699999999	Road-250 Red, 48	Red
21	370	133	324965.55	Road-250 Red, 52	Red
22	371	172	375228.75	Road-250 Red, 58	Red
23	372	134	327408.9	Road-250 Red, 58	Red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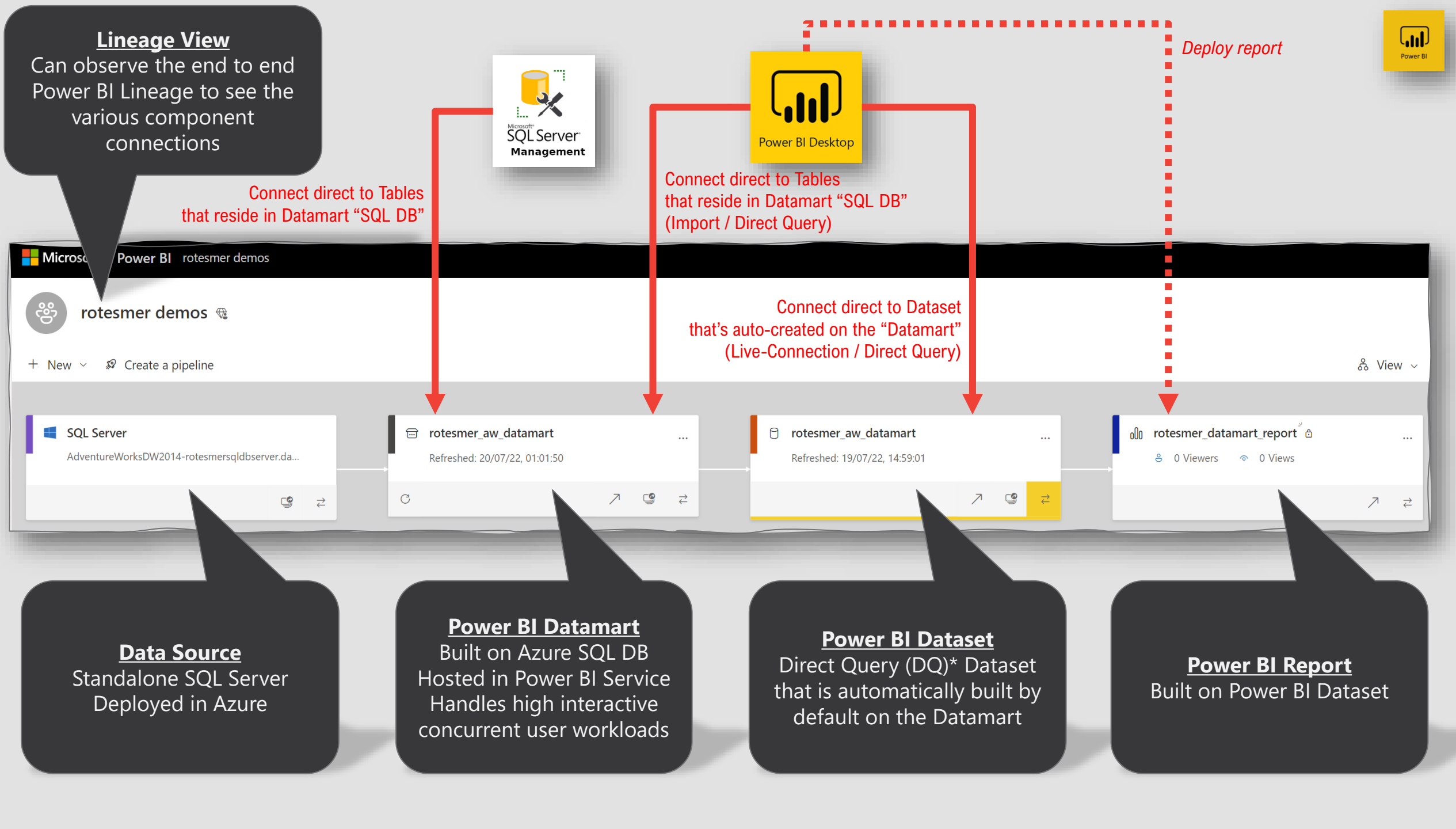
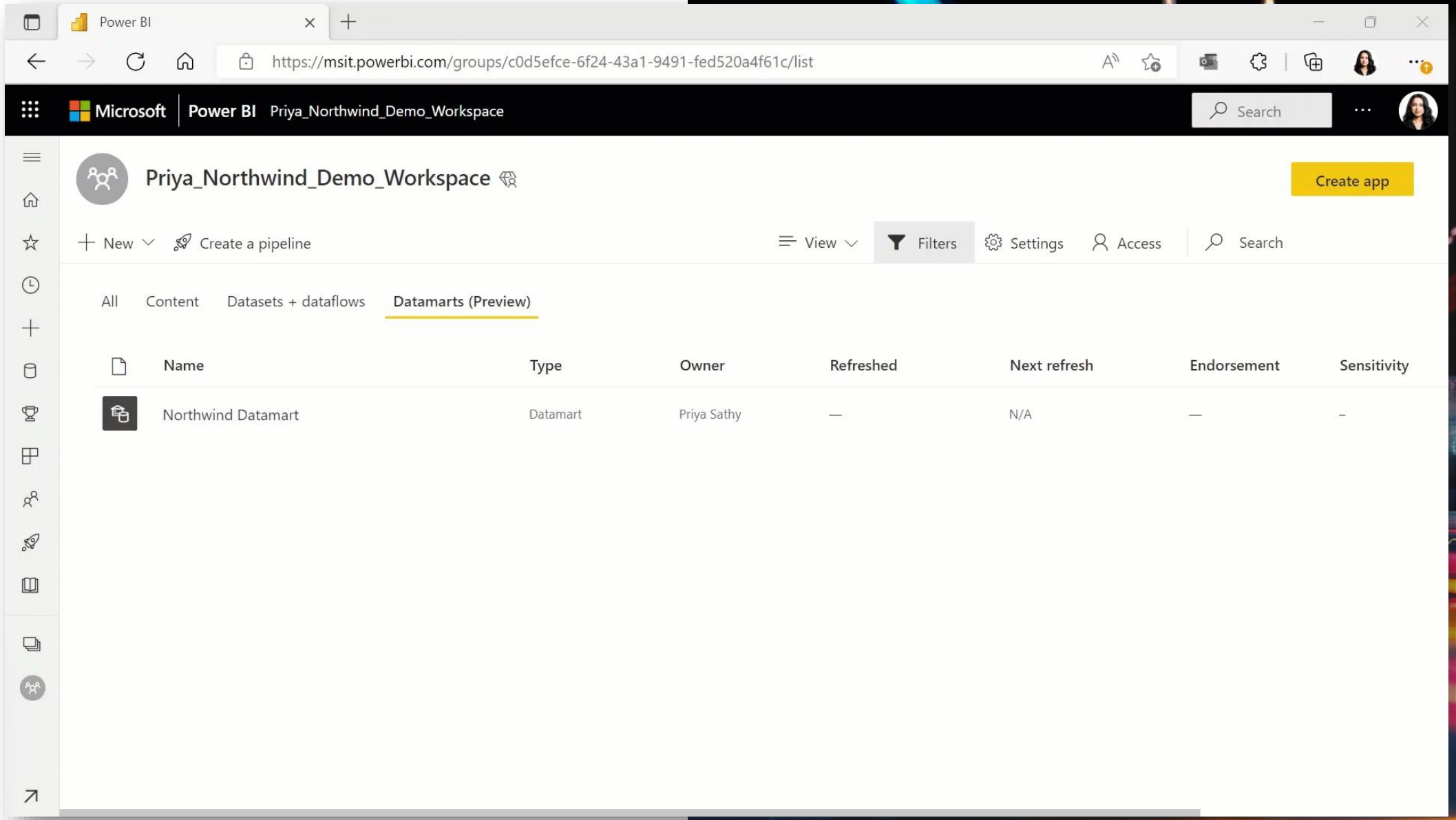
General
Alerts
Subscriptions
Dashboards
Datasets
Workbooks
Reports
Dataflows
Datamarts (Preview)
App
rotesmer_aw_datamart
Settings for rotesmer_aw_datamart
Datamart Description
Gateway Connection
Server settings
Data source credentials
Edit credentials
Show in lineage view
Scheduled refresh
Keep your data up to date
Off
Refresh frequency
Daily
Time zone
(UTC+10:00) Canberra, Melbourne, Sydney
Time
Add another time
Send refresh failure notifications to
Datamart owner
Enter a name or email address
Apply
Discard
DataMart Datasets use automatic SSO to connect to backend Datamart SQL DB
Ie no Editing of Credentials
Scheduled refresh will by default use the DataMart owner/author to connect to Data Sources, or whatever Source auth was setup in the connection


Lineage View
Can observe the end to end Power BI Lineage to see the various component connections
Connect direct to Tables that reside in Datamart "SQL DB"
Microsoft SQL Server Management
Power BI Desktop
Connect direct to Tables that reside in Datamart "SQL DB" (Import / Direct Query)
Deploy report
Power BI
Power BI rotesmer demos
rotesmer demos
New
Create a pipeline
View
Connect direct to Dataset that's auto-created on the "Datamart" (Live-Connection / Direct Query)
SQL Server
AdventureWorksDW2014-rotesmersqldbserver.da...
rotesmer_aw_datamart
Refreshed: 20/07/22, 01:01:50
rotesmer_aw_datamart
Refreshed: 19/07/22, 14:59:01
rotesmer_datamart_report
0 Viewers
0 Views
Data Source
Standalone SQL Server Deployed in Azure
Power BI Datamart
Built on Azure SQL DB
Hosted in Power BI Service
Handles high interactive concurrent user workloads
Power BI Dataset
Direct Query (DQ)* Dataset that is automatically built by default on the Datamart
Power BI Report
Built on Power BI Dataset

Power BI DataMarts

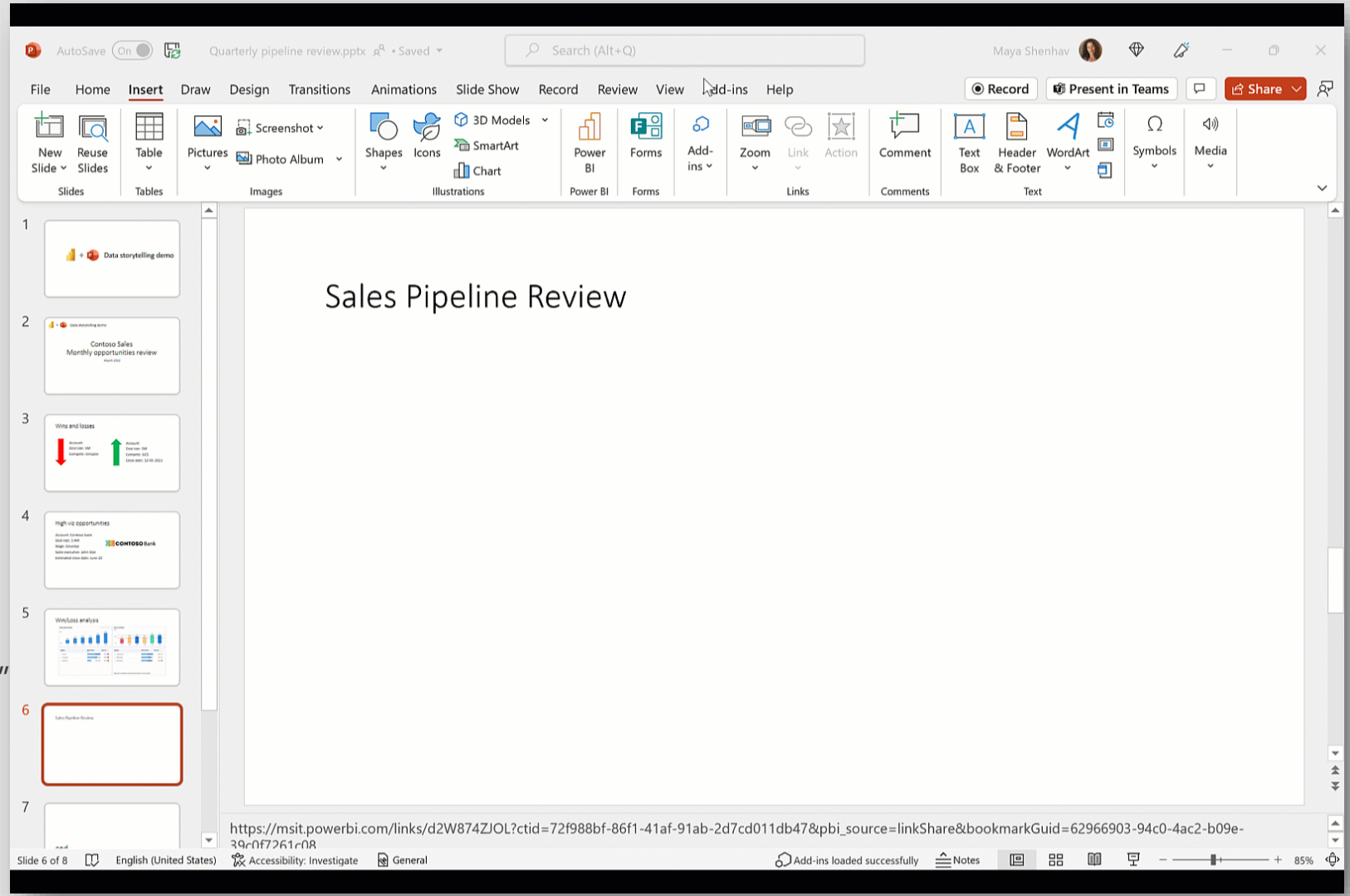
Demo



Power BI in Power Point (Public Preview)

https://powerbi.microsoft.com/en-au/blog/tell-a-story-with-your-data-announcing-the-all-new-power-bi-integration-for-powerpoint/

- **PowerPoint** makes use of static content and images vs **Power BI** which is all about interactive visualisations and data story telling
- ***Power BI & Powerpoint…***
  …like nuts & gum = together at last!
- New PowerPoint **Power BI Add-In**
- Report is **completely live**, inc filters
- Any set **PBI Filter selections** are saved in PP and kept on file reopen
- When you share the PP deck to others they **must have** PBI access & report access to view content.
- Can do this sharing via the *"Power BI : [Share > PowerPoint] option"*

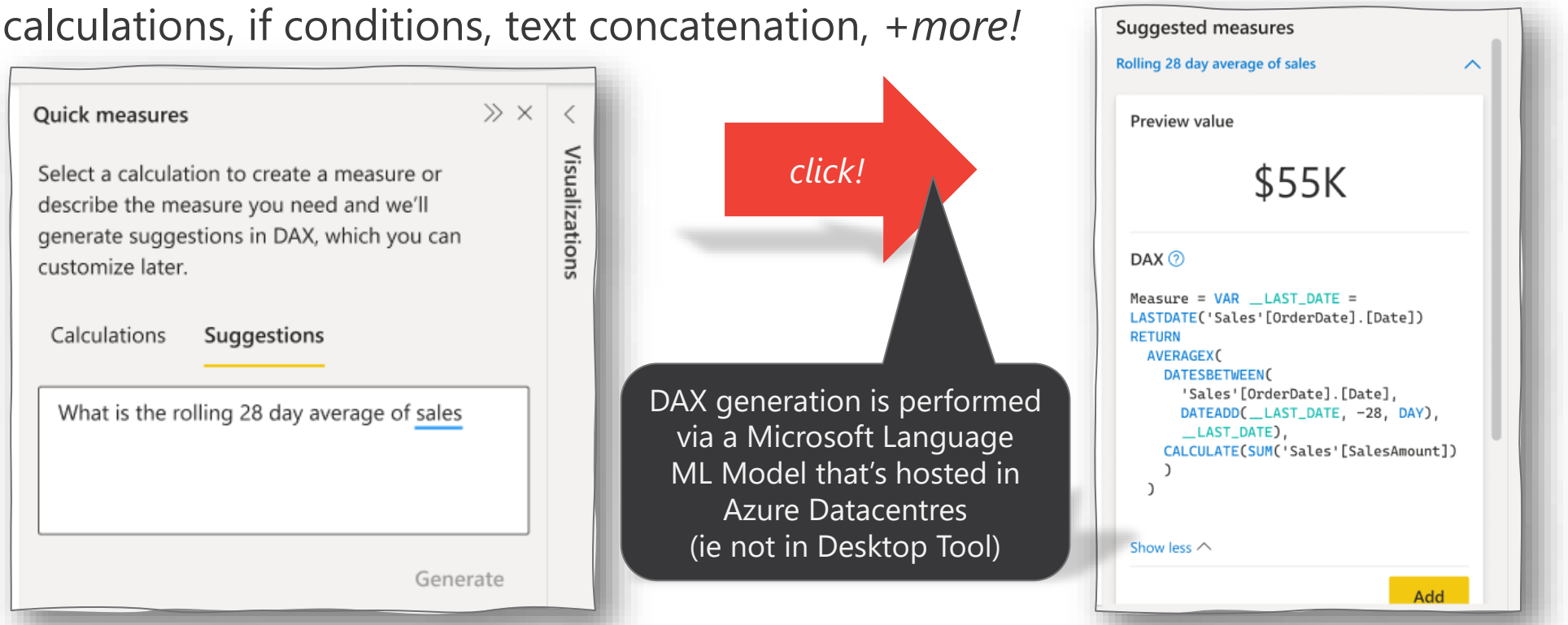


Power BI in PowerPoint – Connected To Datamart "Dataset"

Quick measures with natural language (Private Preview)

[Quick measures using natural language - Power Platform Release Plan | Microsoft Docs]

- Previously to **create measures** you had to know / write **DAX**. *This can be complicated!*
- Now you can use "*natural language*" statements to define **DAX** calculations (*PBI Desktop only*)
- Explain the calculation you need, and Power BI **creates several suggested DAX measures**
- English language statements can include; simple mathematical operations, time-based, Top-N, calculations, if conditions, text concatenation, *+more!*



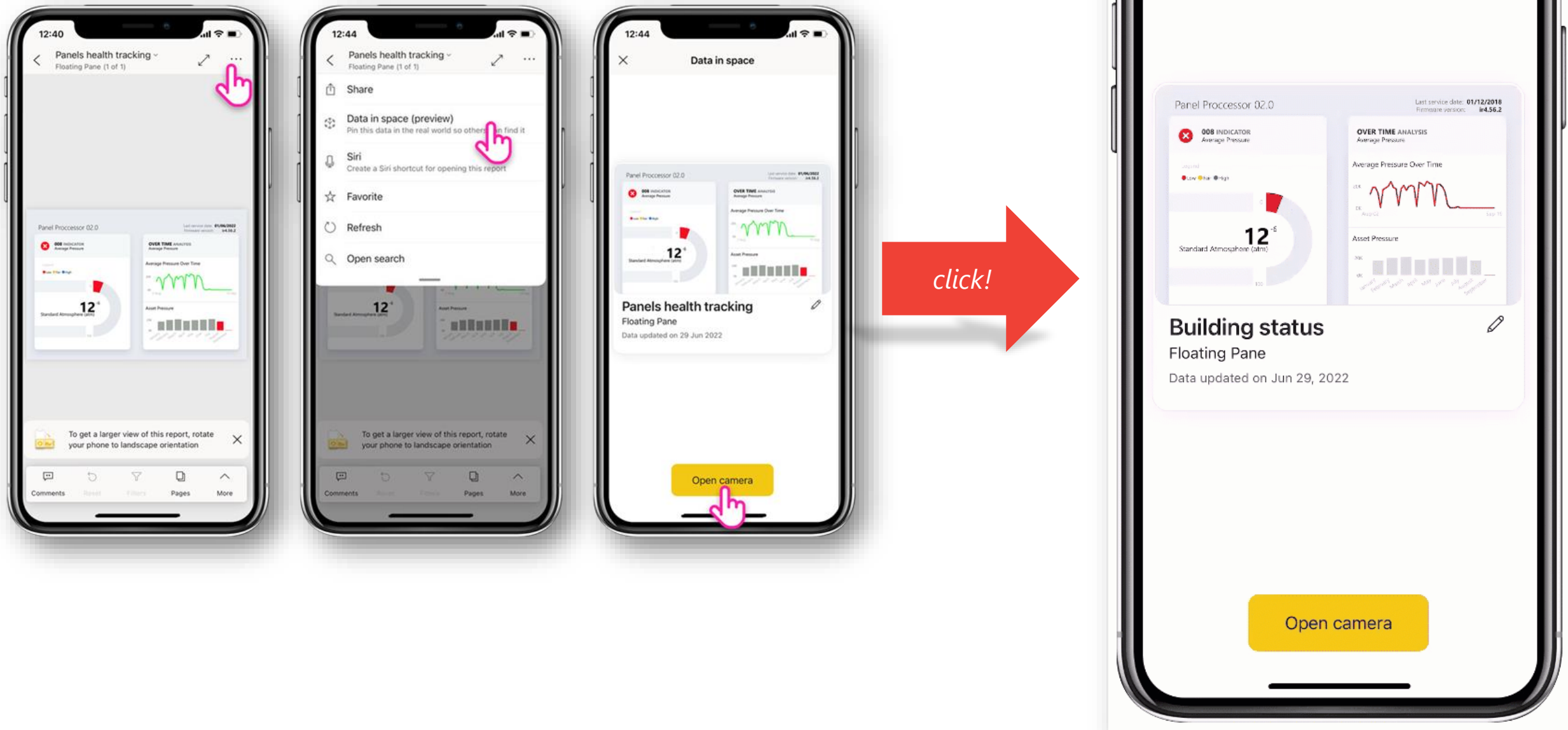
Power BI Spatial Anchoring (Public Preview)

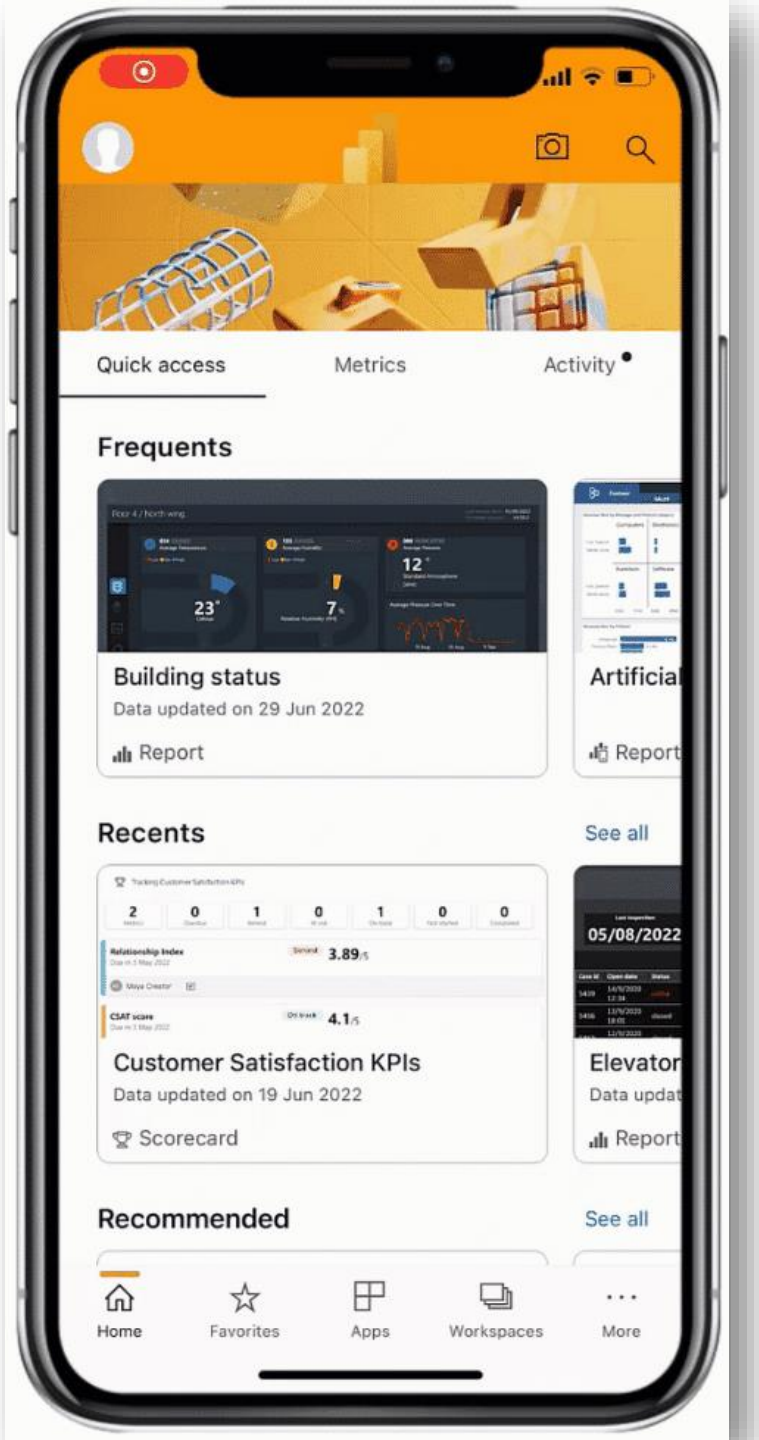
Power BI – Data in Space

In a digital world, data is produced in vast quantities by IoT sensors embedded in almost any environment

With Data in space the frontline worker will be able to augment Power BI reports in physical space, as close as possible to the objects who generate them

Reports add a data layer on top of the object, helping get a better understanding of the data in spatial context.


12:40
Panels health tracking
Floating Pane (1 of 1)
To get a larger view of this report, rotate your phone to landscape orientation
Comments
Pages
More
12:44
Panels health tracking
Floating Pane (1 of 1)
Share
Data in space (preview)
Pin this data in the real world so others can find it
Siri
Create a Siri shortcut for opening this report
Favorite
Refresh
Open search
12:44
Data in space
Panels health tracking
Floating Pane
Data updated on 29 Jun 2022
Open camera
click!
18:36
LTE
Data in space
Panel Proccessor 02.0
Building status
Floating Pane
Data updated on Jun 29, 2022
Open camera


Quick access
Metrics
Activity
Frequents
Building status
Data updated on 29 Jun 2022
Report
Recents
See all
Customer Satisfaction KPIs
Data updated on 19 Jun 2022
Scorecard
Recommended
See all
Home
Favorites
Apps
Workspaces
More

Power BI Metrics (aka "Goals") (GA + *more to come*)

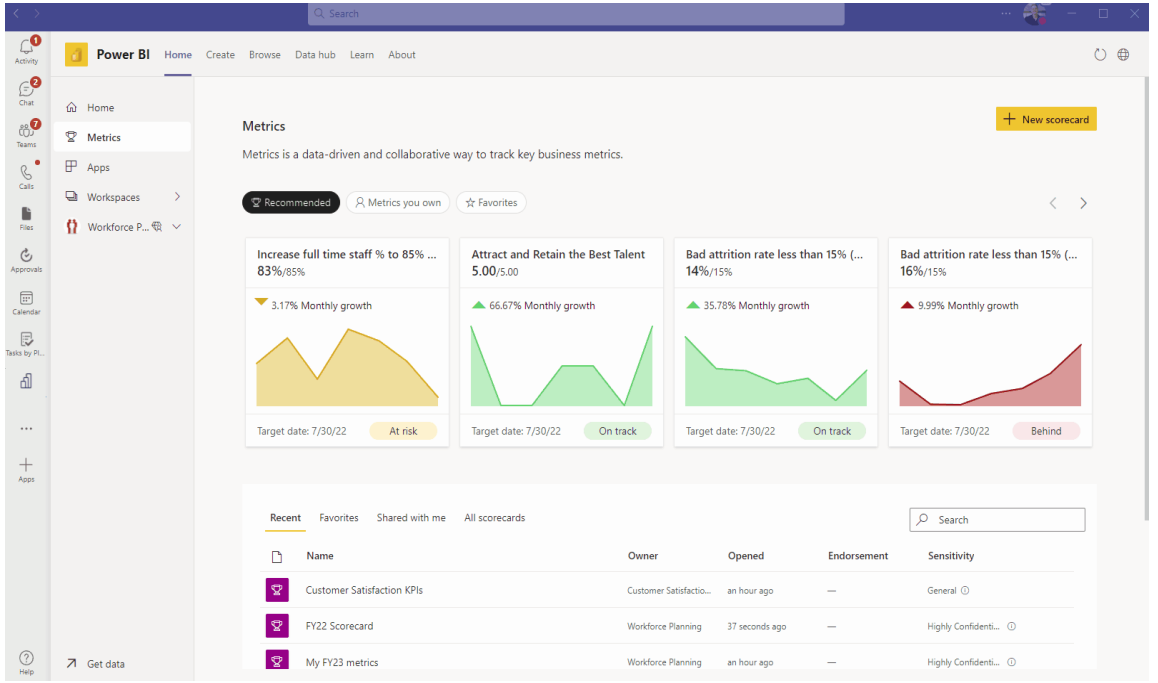
Create Power BI metrics to track your performance - Power Platform Release Plan | Microsoft Docs

Goals in Power BI is becoming 'metrics' and is moving to GA! | Microsoft Power BI Blog

- Define, curate, and track **business metrics** and **KPIs** to help drive better decision making.
- Metrics capabilities are **integrated into Power BI** – so measures can come from virtually any data source
- Viva Goals also offers "*objectives and key results*" (OKR) capabilities to help align teams to strategic priorities. There will be integration from Viva Goals into Power BI Metrics (ie PBI as the data source)

+ *more to come*... additional new Metrics features are still in preview!

- **Cascading Goals** - Cascading goals - Power BI Release Plan
- Ex. define a hierarchy based on the data model (ie geographical or product hierarchy) and automatically cascade goals across levels
- **Goal Rollups** - Goals rollups - Power BI Release Plan
- Ex. Provides flexibility to specify how data is aggregated (ie % complete, weighted avg, sum, etc) from child goals to parent goals
- **Linked Goals Across Scorecards**
- Ex. link a goal from one scorecard to appear on other scorecards. Provides flexibility for defining and aligning scorecards across the org



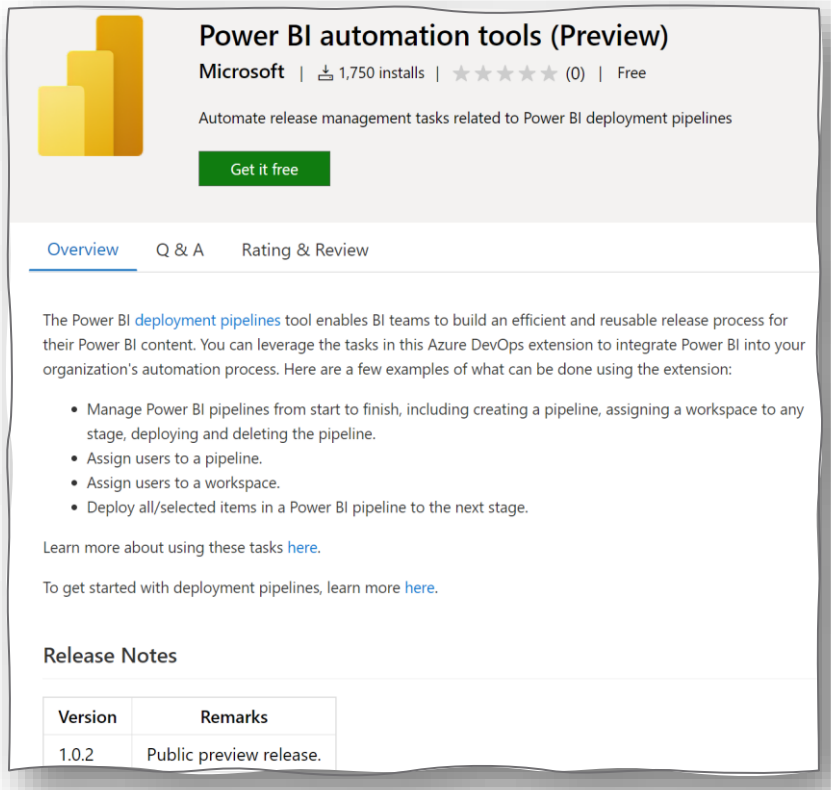
Power BI Roadmap

Administration and Development Features

Power BI Deployment Pipelines (Public Preview)

https://docs.microsoft.com/en-gb/power-platform-release-plan/2022wave1/power-bi/deployment-pipelines-azure-devops-extension

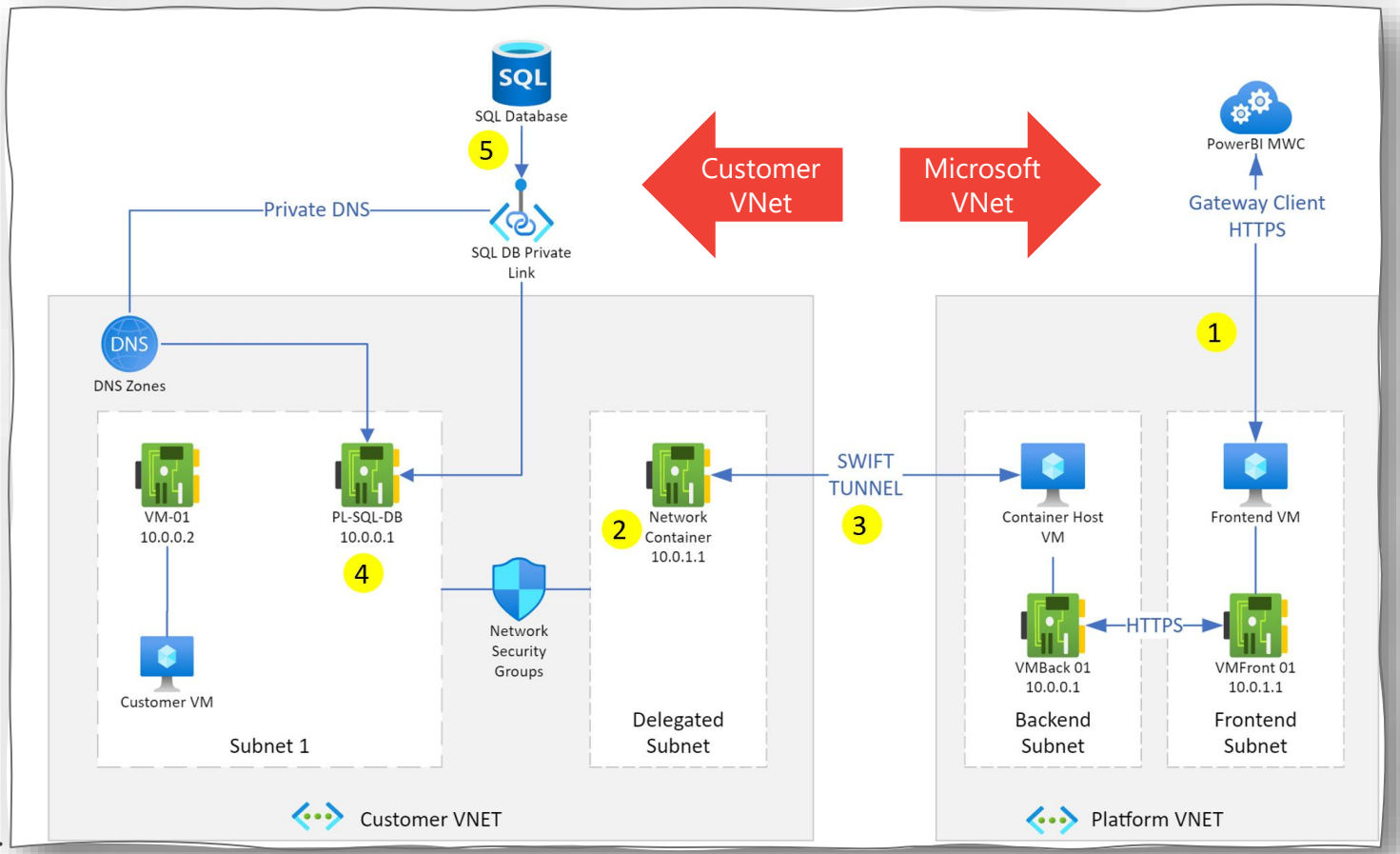
- Power BI provides an **Azure DevOps extension** that enables creators to integrate **deployment pipeline operations** into their Azure Pipelines
- Developers can **manage the lifecycle of their content** with tools used to manage other projects
- The **new Power BI Azure DevOps extension** allows a faster and easier integration between existing Azure Pipelines and Power BI deployment pipelines.
- This extension **supports pipeline features** such as;
    1. Create a new pipeline
    2. Assign a workspace to a pipeline stage
    3. Add a user to a deployment pipeline
    4. Add a user to a workspace
    5. Deploy content to a deployment pipeline
    6. Remove a workspace from a deployment pipeline
    7. Delete a pipeline
- Azure DevOps Marketplace – **Extension Download here**
- This new feature will go **GA in Sep 2022**



Power BI Managed Vnet Gateway (Public Preview)

https://docs.microsoft.com/en-us/data-integration/vnet/overview

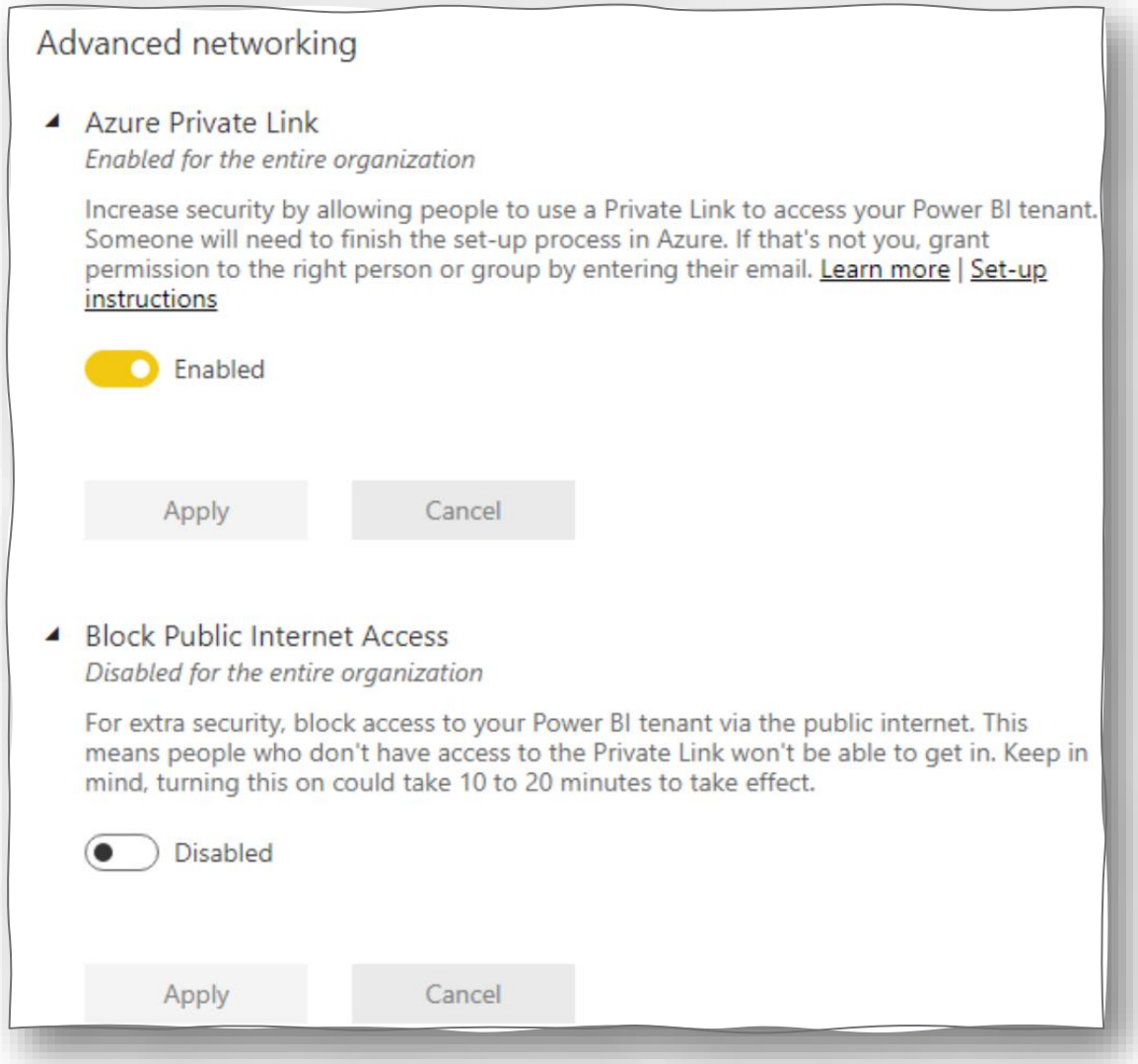
- **Managed VNet data gateway** connects Microsoft Cloud to Azure data sources in a VNet **without needing an on-premises data gateway**.
- **Customer provides a Vnet** into which the managed vnet data gateway will be deployed
- **Requires 5-7 IPs** available in the Vnet – and you can add more VNet gateways later to the same Vnet
- **Premium-only feature** (Premium and PPU)
- **Not all data sources are supported** – see list here
- The data gateway is **physically in the same region** as your Azure Vnet – (sits in a delegated subnet)
- Every VNet data gateway = **1 CPU core + 6 GB RAM**.
- Vnet data gateways also **support HA** – see here
- Cross tenant connectivity **is not supported** (ie vnet in tenant-A >> powerbi in tenant-B)
- All traffic uses **Azure backbone**, including Swift tunnel.



Power BI Private Endpoint / Private Link (GA)

https://docs.microsoft.com/en-us/power-bi/enterprise/service-security-private-links

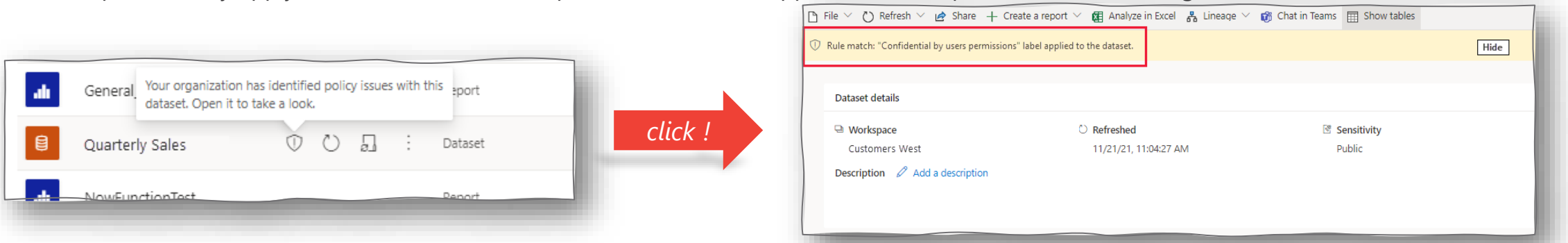
- Private endpoints ensure Power BI **user connections** transit via Microsoft private network backbone when they access resources in the Power BI service.
- Data travels the **Microsoft private network backbone** instead of going across the **Internet**.
- This means that your **users** must route from your **internal vnet** to the Power BI Service (powerbi.com)
- Private endpoints **do not guarantee** that traffic from Power BI to your **data sources** is routed privately *
- There are several **considerations** and **limitations** – see here for details



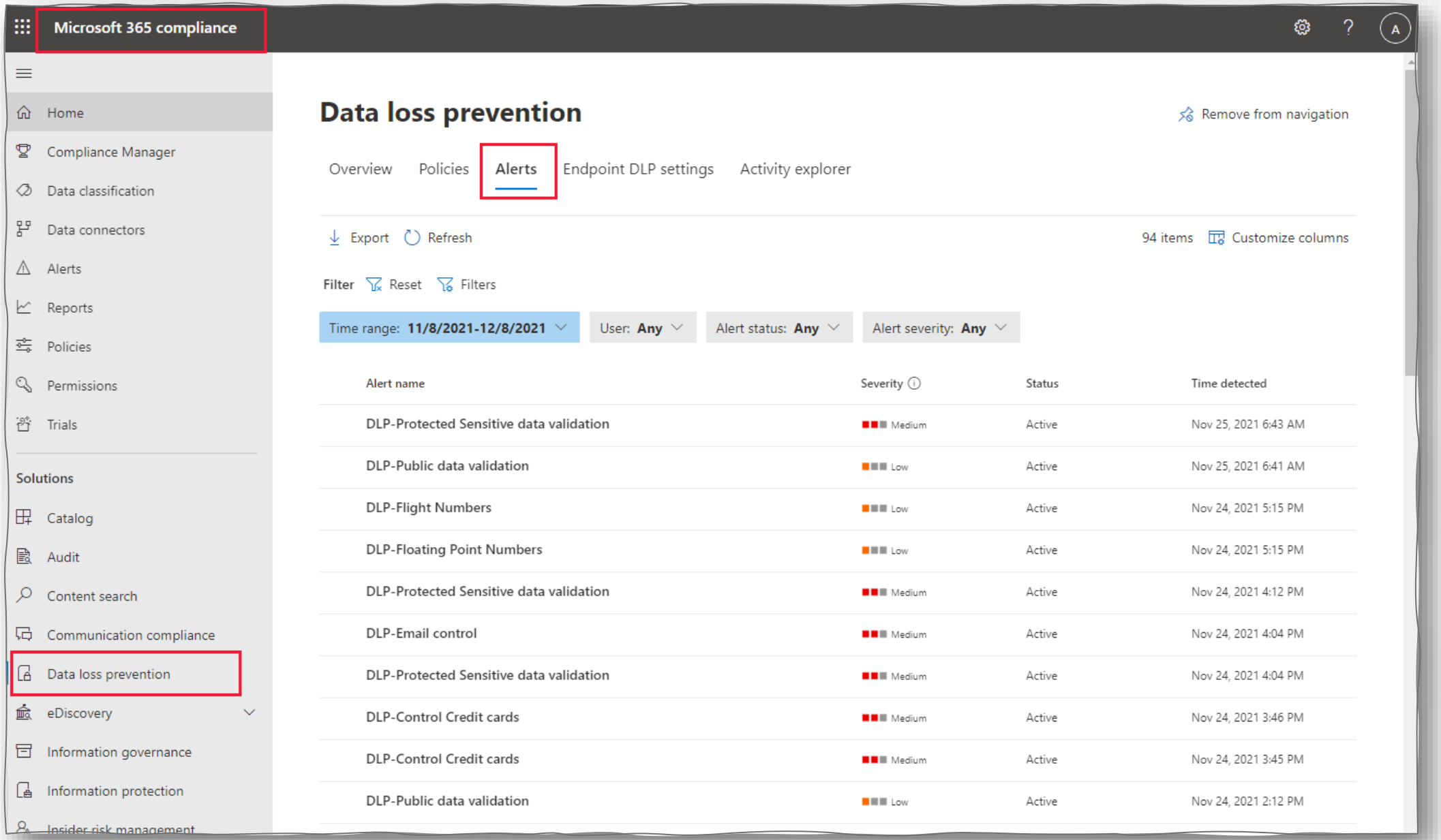
Power BI Data Loss Prevention (DLP) (Preview)

https://docs.microsoft.com/en-us/power-platform-release-plan/2022wave1/power-bi/data-protection-enhancements--highlighting-centralized-power-bi-dlp-policies

- DLP in Power BI already supports many features, and also integration into MS Data Protection
  - Sensitivity Labels -- Enforce governance policies even when Power BI content is exported to Excel, PowerPoint, PDF
  - Defender for Cloud Apps -- protect your Power BI reports, data, and services from unintended leaks or breaches
  - Central Security Team -- use Microsoft 365 data loss prevention policies to enforce the organization's DLP policies on Power BI
- **Today**: Control/protect sensitive data by leveraging Microsoft's information & threat protection
  - When a PowerBI data set matches the criteria in a DLP policy, an alert that explains the nature of the sensitive content can be triggered.
  - This alert is also registered in the data loss prevention Alerts tab in the Microsoft compliance portal for monitoring
  - Email alerts can also be sent to administrators and specified users.
- **Future**: This feature expands DLP capabilities for Power BI – and adds additional conditions / actions
  - Support auto-classification of data - makes it possible to define conditions (ie classified as sensitive)
  - Define a DLP policy in the data loss prevention section of the Microsoft Purview compliance portal -- specify;
    (a) sensitivity labels / info types to detect, and
    (b) actions that will happen when the policy detects a dataset that contains sensitive data
  - DLP policies only apply to Premium Gen2 workspaces, and are not supported for sample datasets, streaming datasets, or DQ datasets



If alerts are enabled in the policy, an alert will be recorded on the data loss prevention **Alerts** tab in the compliance center, and (if configured) an email will be sent to administrators and/or specified users.




end of session