



Power BI Connector Setup Guide

PV820 SV101

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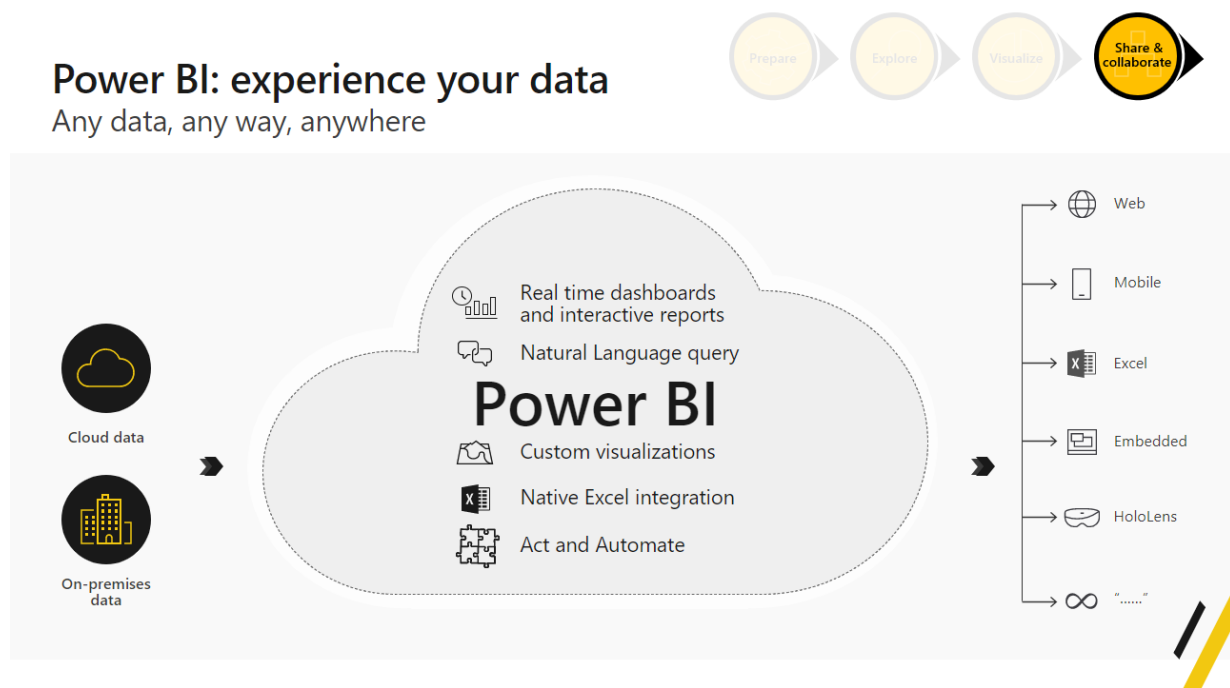
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Power BI Overview

Power BI is a collection of software services, applications, and connectors that work together to turn your unrelated sources of data into coherent, visually immersive, and interactive insights.

Your data may be an Excel spreadsheet, or a collection of cloud-based and on-premises hybrid data warehouses. Power BI enables you to connect to your data sources, visualize, and discover what's important, and share that with anyone.







See source: [What is Power BI?](#)



Access all your DATA

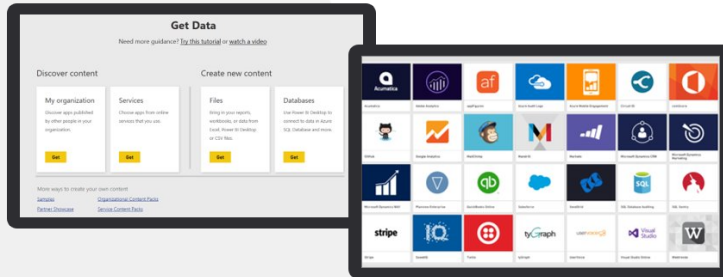


Data sources

- 
SaaS solutions
e.g. Marketo, Salesforce, GitHub, Google Analytics
- 
Organizational
Corporate data sources or external data services
- 
On-premises Data
- 
Azure services
Azure SQL, Stream Analytics...
- 
Excel files
- 
Power BI Desktop files
Data from files, databases, Azure, and other sources





Connect to 115+ data sources, both on-premises and cloud

- Data from Applications
 - SaaS services that you already use
- Data from your organization
 - Content published by others in your org (Datasets and Dataflows)
- Big data and more
 - Azure data services, e.g. SQL DW, ADLS.
 - On-premises data sources
- Data from files
 - Import data from Text, CSV, Excel and Power BI Desktop files

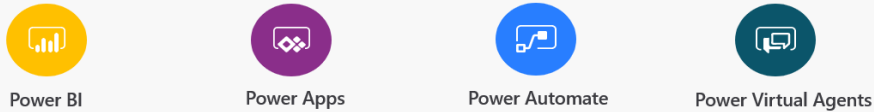


Power Platform

One connected platform that empowers everyone to innovate

- 
Analyze
 Make sense of your data through interactive, real-time dashboards and unlock the insights needed to drive your business forward
- 
Act
 Build apps in hours—not months—that easily connect to data, use Excel-like expressions to add logic, and run on the web, iOS, and Android devices
- 
Automate
 Include powerful workflow automation directly in your apps with a no-code approach that connects to hundreds of popular apps and services
- 
Connect
 Add a Virtual Agent to your organization, automate communication with virtual agents

Microsoft Power Platform

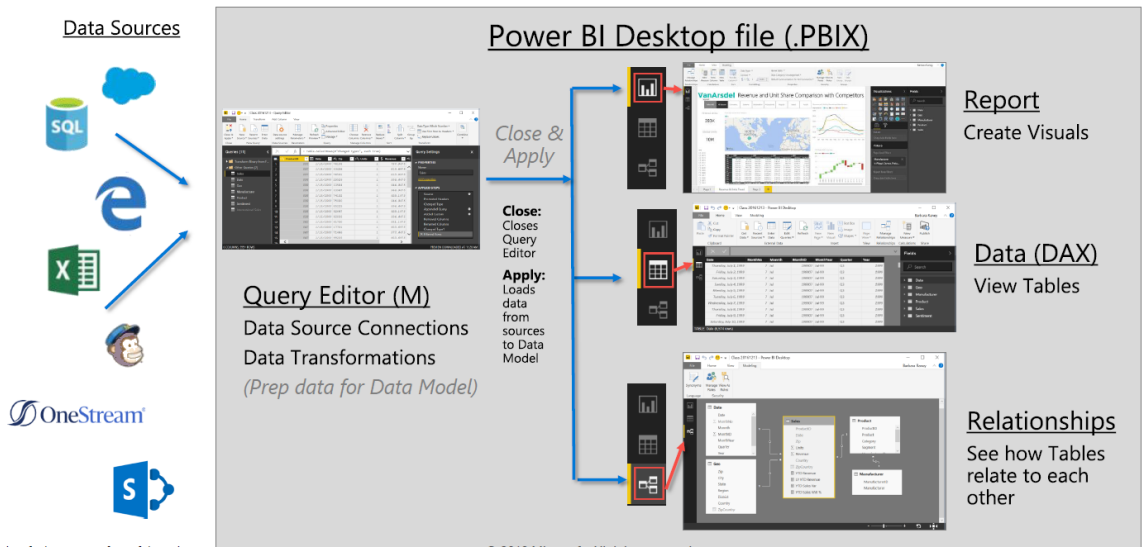


Power BI Desktop

Power BI Desktop is a application you install on your local computer that lets you connect to, transform, and visualize your data. With Power BI Desktop, you can connect to multiple sources of data and combine them, often called modeling, into a data model. This data model lets you build visuals, collections of visuals, and you can share as reports with other people inside your organization. Users working on business intelligence projects use Power BI Desktop to create reports and then use the Power BI service to share their reports with others.

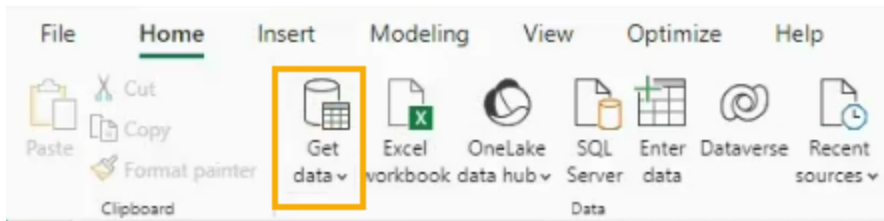
See source: [What is Power BI Desktop?](#)

Power BI Desktop Data Flow

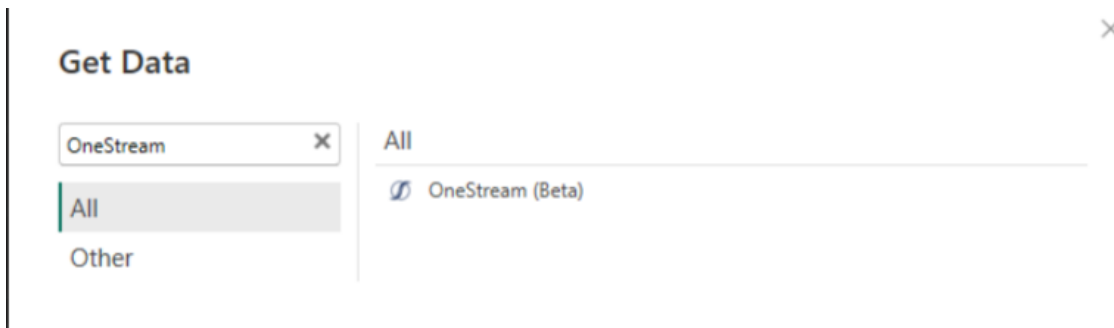


OneStream Authentication

1. Open Power BI Desktop and select **Get data**.

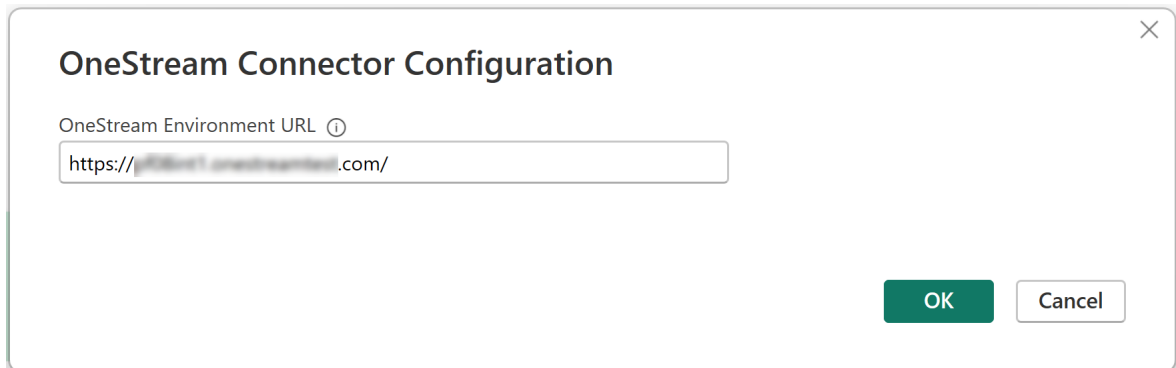


2. In the search box, type **OneStream** to locate the certified OneStream Connector.
3. Select **OneStream (Beta)**, and click the **Connect** button.

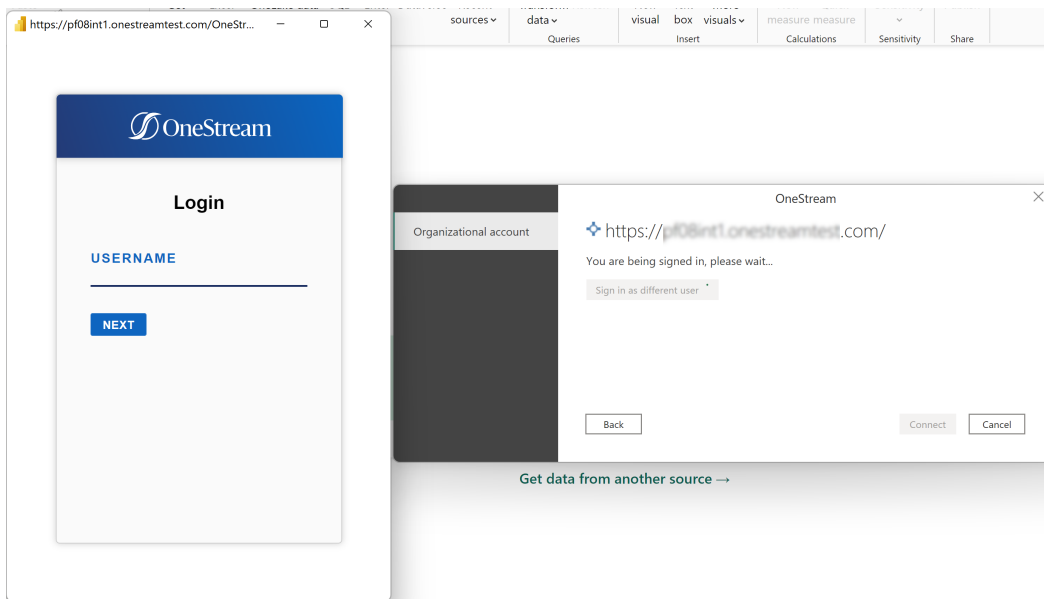


4. In the **OneStream Connector Configuration** dialog box, verify the that the **OneStream Environment URL** is entered with a leading **https://**, otherwise connection attempts will not work.

OneStream Authentication

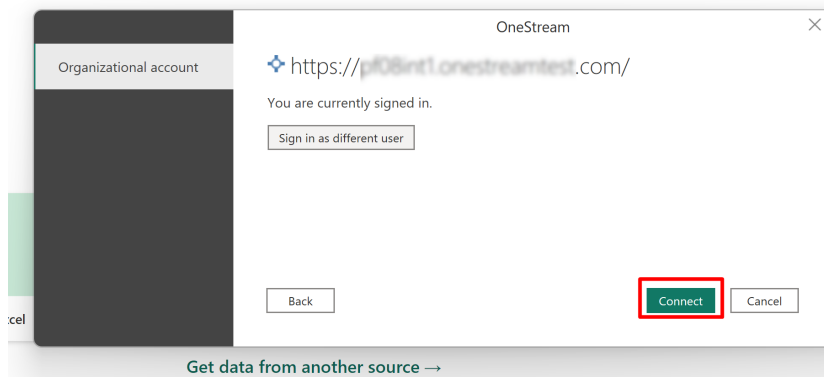


5. Click the **OK** button to connect to the OneStream environment. After, it will redirect and open the default browser for login.
6. Log in to the OneStream Account.



7. After logging in, click the **Connect** button.

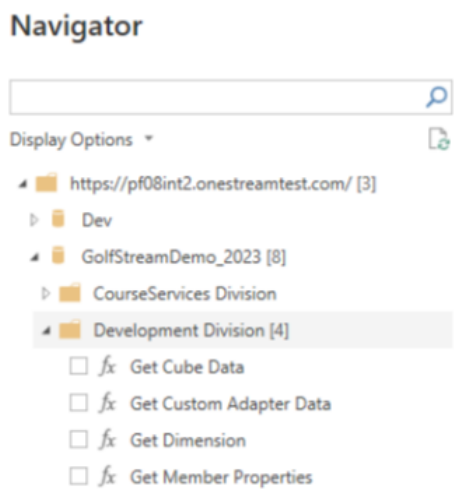
OneStream Authentication



OneStream Navigator

The OneStream Connector uses the Import method and offers you the following options to pull data and metadata:

- Get Cube Data
- Get Custom Adapter Data
- Get Dimension
- Get Member Properties



Each option has required and optional parameters that need to be provided. Optional parameters have a default value that might need to be changed, based on the design of your OneStream application.

Toggle the parameters to just the required ones or use all of them. If necessary, Power BI will display a preview of data for the table that would be returned.

After providing the parameters select one of the following buttons:

- **Load:** To load the table into the internal Power BI Desktop data model.
- **Transform data:** To make changes in the table before loading it into the internal Power BI Desktop data model. This option will launch Power Query Editor in a new window with a representative view of the table.

NOTE: If you see the Load button and the Transform Data button grayed, check the checkbox on the left-hand side.

Repeat the steps above for all additional tables.

After data loads to Power BI Desktop data model, you can create relationships between tables as well as create reports.

Details on OneStream Certified Connector

OneStream Connector fetches data from OneStream instance using Representational State Transfer (REST) APIs. For More information on REST APIs, see [OneStream Documentation](#).

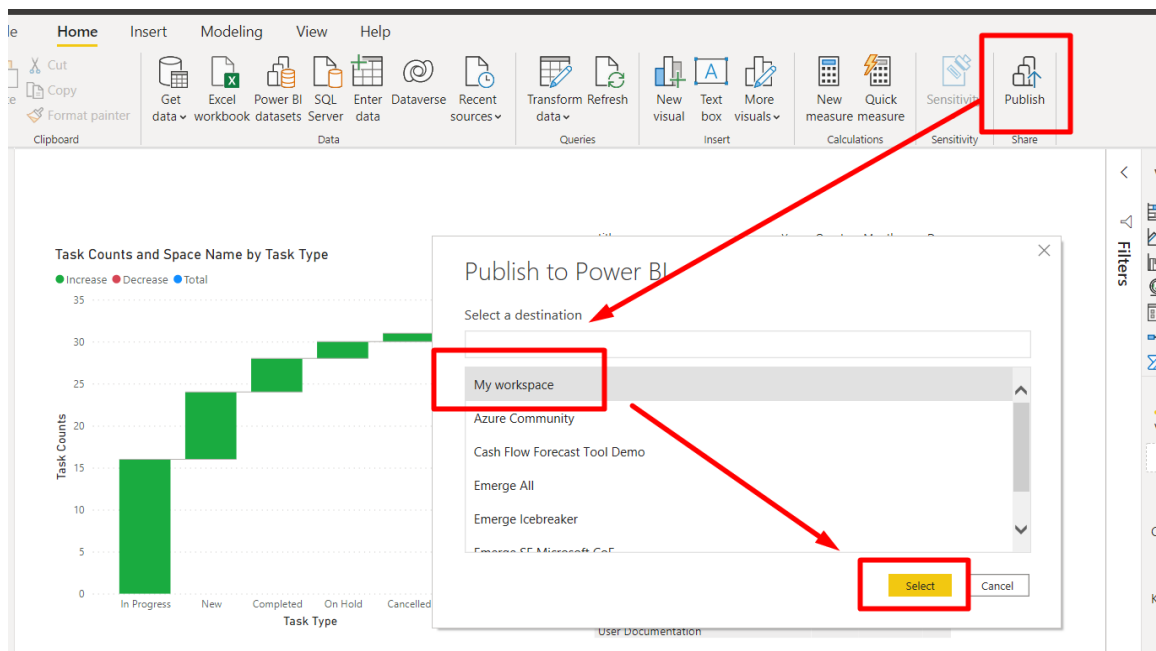
OneStream Connector performs all APIs calls under the permission boundary of the current, logged-in user. The Connector only uses READ scopes on behalf of Power BI report user to perform all operations. The following scopes are used: **'onestream.powerbi, offline_access'**.

OneStream Connector can only read data from OneStream, not write it.

Publish Power BI Reports to Power BI Service

Publish data, reports, and data models to the cloud-based Power BI Service by following these steps:

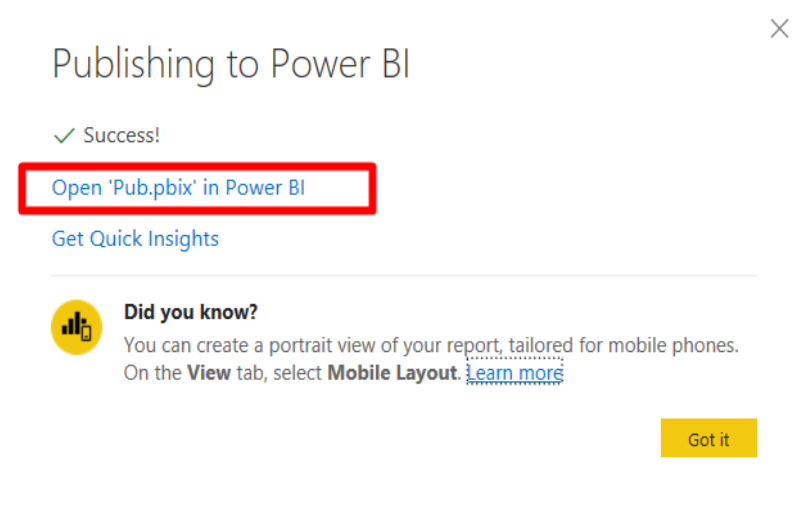
1. Click the **Publish** button.
2. In the **Publish to Power BI** dialog box, choose the appropriate Power BI workspace.



3. Click the **Select** button. After a successful publication, a message with a link to navigate to the Power BI Service will load.
4. Click on the **Open** link to view all reports from the Power BI Desktop in the Power BI

Publish Power BI Reports to Power BI Service

Service, as well as create dashboards in the Power BI Service.



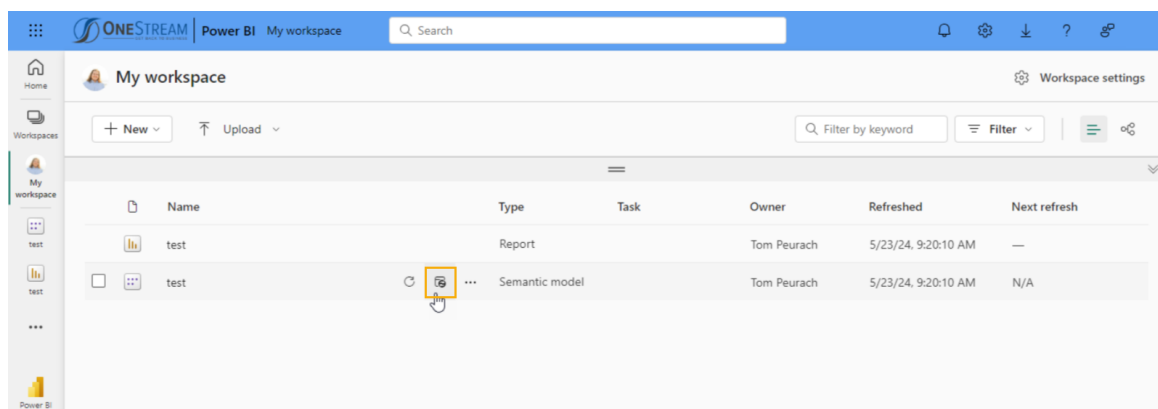
Create a Scheduled Refresh from Power BI Service

Save time by using the Schedule Refresh feature in the Power BI Service to have your data automatically update without having to manually authenticate and retrieve the updated data.

NOTE: The first time a scheduled refresh occurs, you must enter login credentials.

To schedule a refresh, follow the below steps:

1. Navigate to the workspace in Power BI Service holding the report you want to schedule a refresh.
2. Hover over the Semantic model for the report and click the **Schedule refresh** icon.



3. Expand the **Refresh** drop-down on the **Semantic Models** page.
4. Turn on **Configure a refresh schedule** and specify the following settings:

Create a Scheduled Refresh from Power BI Service

Refresh

Configure a refresh schedule

Define a data refresh schedule to import data from the data source into the semantic model. [Learn more](#)

On

Refresh frequency

Weekly

Time zone

(UTC-05:00) Eastern Time (US and Ca)

Sunday

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Time

8 00 AM

[Add another time](#)

Send refresh failure notifications to

Semantic model owner

These contacts:

Enter email addresses

Apply Discard

- Refresh frequency:** Set the refresh frequency to either **Weekly** or **Daily**. Selecting **Weekly** enables you to select your preferred days.
- Time Zone:** Select your preferred refresh time zone.
- Time:** Set the time of the refresh. Click **Add another time** to have the report refresh more than once.

Create a Scheduled Refresh from Power BI Service

- d. **Send refresh failure notifications to:** Choose to send failure notifications to the Semantic model owner, custom contacts, or both. Leave both fields blank if notifications are not required.
5. Click the **Apply** button to save your settings.

Best Practices and Functions Help

Keep in the mind the following best practices to make the most of the OneStream Connector:

- Load only the necessary grain of data. Meaning, if you only need aggregated data at the month level, don't load data at the daily level. While Power BI can handle hundreds of millions of rows, if not more, the smaller the model, the more performant it will be.
- Limit the number of transformations you make. The more complicated the query, the higher chance there is for the query to fail.
- Leverage OneStream's financial logic, Cube Views, and Data Adapters to create the tables that will then be loaded into Power BI.

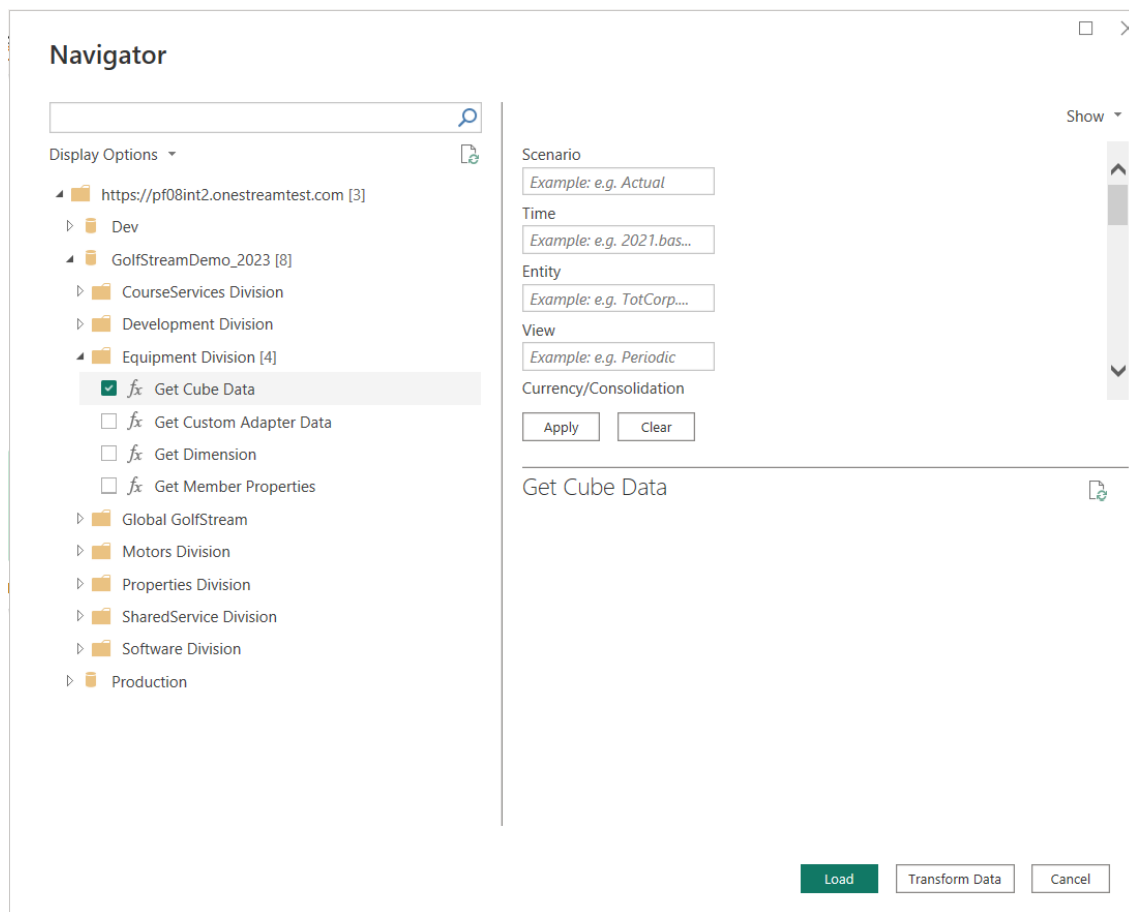
Example: Consolidations involve the parent entity only taking 40% of one of the child entities' values. Ensure that this logic is done in OneStream, and you load the data adapter in Power BI which already has the values populated. Replicating the logic in Power BI is inefficient and would be better performed in the source system.

- When providing All for ScenarioType, the results will return the ScenarioType of default that has been configured in OneStream.

Get Cube

This function retrieves data from a OneStream Cube.

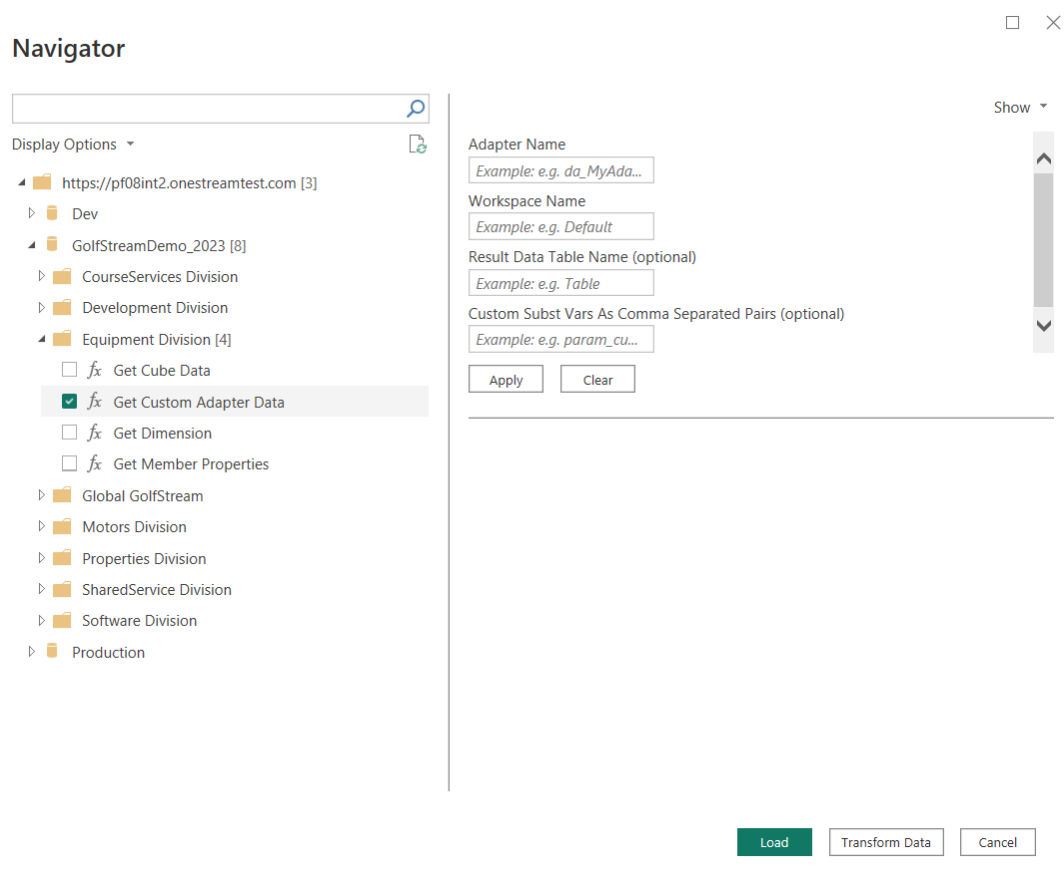
- All the parameters can be specified with OneStream Member Script, for example 2023. Base for time, except View and Currency/Consolidation which require a single member.



Get Custom Adapter

- Specify mandatory parameters including Workspace and Adapter Name.
- Table Name and Parameters are optional.
- Refer to a configured dashboard adapter inside OneStream to ensure you are inserting the

correct values.



Get Dimension and Get Member Properties

- Specify the OneStream Dimension Type you want to retrieve.
- Specify the Scenario Type. Use Default or All to use the selected cube default dimensions and retrieve the default properties.

- Include Descriptions can be set to True or False.

The screenshot displays the Power BI Navigator interface. On the left, a tree view shows a folder structure under 'https://pf08int2.onestreamtest.com [3]'. The 'Equipment Division [4]' folder is expanded, and the 'Get Dimension' function is selected and highlighted. On the right, a configuration panel for the selected function is visible. It includes a search bar, a 'Display Options' dropdown, and three input fields: 'Dimension Type' (with example 'e.g. Entity'), 'Include Descriptions' (with example 'e.g. True'), and 'Scenario Type' (with example 'e.g. All'). Below these fields are 'Apply' and 'Clear' buttons. At the bottom right of the interface, there are three buttons: 'Load', 'Transform Data', and 'Cancel'.