

External (Virtual) Dataset Overview

Virtual Datasets are a way of working with external datasets, specifically optimized for Portal Page development.

The **ENABLE_EXTERNAL_DATASETS** System Variable enables the Tables tab in SQL Data Sources from which Tables can be published as Virtual Datasets. Once enabled, Databricks and Snowflake can be queried directly, without storing data within Metric Insights. Data from these Virtual Datasets can be obtained via `dataset_data` API and used in Portal Page development.

The following SQL Data Sources support creation of Virtual Datasets:

- Snowflake
- Databricks
- MySQL
- Microsoft SQL Server

This article provides an overview of how to configure and use External Datasets and uses Snowflake as an example.

PREREQUISITES:

- The **ENABLE_EXTERNAL_DATASETS** System Variable must be set to "Y"
 - This will enable new tabs in the SQL Data Source Editors (*Tables*)

1. Sync Tables with Metric Insights

Access **Admin > Data Sources > *Snowflake Data Source Name Link* > Tables Tab**

SQL Data Sources / Demo Snowflake/Tableau Data Source

Search

+ New ... Content Admin Yevgeniya

Info **Tables** Datasets Elements Associations

There are no Tables

1 Sync Tables Publish Tables Unpublish Tables

SQL Data Sources / Demo Snowflake/Tableau Data Source

Search

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Info **Tables** Datasets Elements Associations

Tables

Name	Schema	Workbooks Count	Published	Published by	Columns Count
<input type="checkbox"/> APPLICABLE_ROLES	INFORMATION_SCHEMA	0			
<input type="checkbox"/> A_TEST	METRIC_INSIGHTS	0			
<input type="checkbox"/> A_TEST_LIMIT	METRIC_INSIGHTS	0			
<input type="checkbox"/> A_TEST_LIMIT_JOIN	METRIC_INSIGHTS	0			
<input type="checkbox"/> COLUMNS	INFORMATION_SCHEMA	0			
<input type="checkbox"/> DATABASES	INFORMATION_SCHEMA	0			
<input type="checkbox"/> ENABLED_ROLES	INFORMATION_SCHEMA	0			
<input type="checkbox"/> EXTERNAL_TABLES	INFORMATION_SCHEMA	0			
<input type="checkbox"/> FILE_FORMATS	INFORMATION_SCHEMA	0			
<input type="checkbox"/> FUNCTIONS	INFORMATION_SCHEMA	0			
<input type="checkbox"/> INFORMATION_SCHEMA_CATA...	INFORMATION_SCHEMA	0			
<input type="checkbox"/> KMITABLE	METRIC_INSIGHTS	0			
<input type="checkbox"/> KMITEST	METRIC_INSIGHTS	0			
<input type="checkbox"/> KMITESTEMPTY	METRIC_INSIGHTS	0			
<input type="checkbox"/> LOAD_HISTORY	INFORMATION_SCHEMA	0			
<input type="checkbox"/> LOOKER	METRIC_INSIGHTS	0			
<input type="checkbox"/> MY	METRIC_INSIGHTS	0			
<input checked="" type="checkbox"/> MYTABLE	METRIC_INSIGHTS	0			
<input checked="" type="checkbox"/> RETAIL_ANALYTICS	METRIC_INSIGHTS	0			
<input type="checkbox"/> SCHEMATA	INFORMATION_SCHEMA	0			

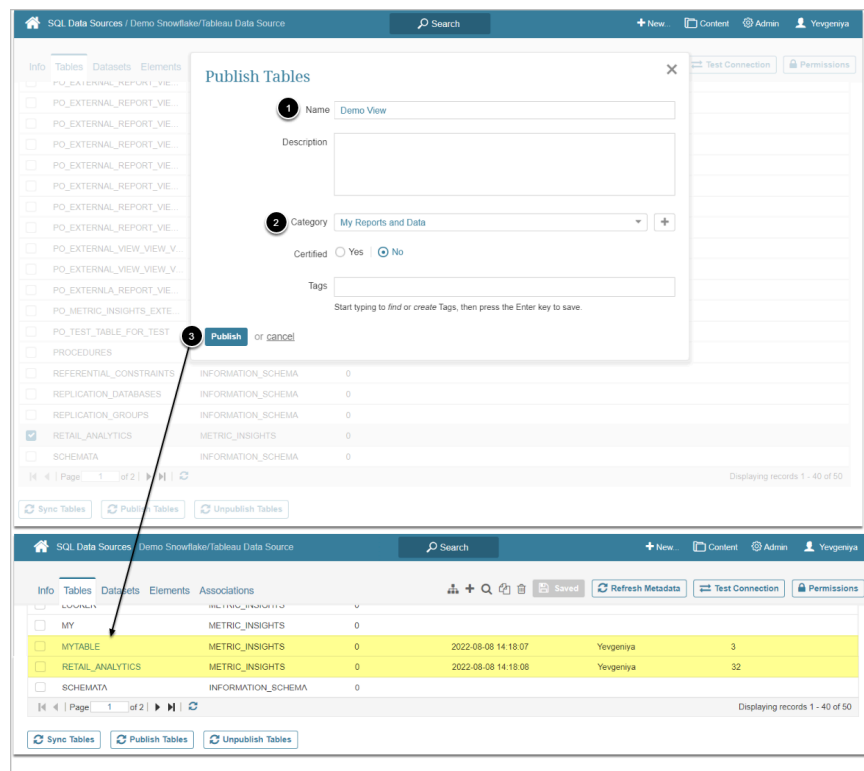
2

3

Sync Tables Publish Tables Unpublish Tables

1. **[Sync Tables]** to see the list of available Tables
2. Check Tables for which you need to track details
3. **[Publish]**
 - This will open the Publish Tables popup

2. Publish Tables



1. Input a descriptive phrase that will start the External Dataset name
2. Choose **Category**
3. **[Publish]**
 - Published Tables will appear as links with additional details shown on the grid
 - Published Tables can be found as Virtual Datasets under **Content > Datasets > Virtual Datasets**

3. Explore Details

Access **Content > Datasets > Virtual Datasets**

Virtual Datasets

Search

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Views

Datasets

User Maps

Virtual Datasets

Tag

Glossary Term

Category

Measurement Interval

Trigger

Data Source

Created by

Type

All

All

All

Virtual Datasets

Name	ID	Data Source	Certified?	Last Modified
Demo View MYTABLE	18257	Demo Snowflake/Tableau Data Source	N	2022-08-08 14:18:04
Demo View RETAIL_ANALYTICS (certified)	18258	Demo Snowflake/Tableau Data Source	Y	2022-08-08 14:18:07
METRIC_INSIGHTS.KMTABLE	18303	Demo Snowflake Data Source	N	2023-09-11 10:14:20
MYTABLE	18186	Demo Snowflake Data Source	N	2021-10-12 13:00:40
RETAIL_ANALYTICS	18187	Demo Snowflake Data Source	N	2021-10-12 13:02:05
Snowflake TEST	18195	Demo Snowflake Data Source	N	2021-12-09 13:39:07
TESTTABLE	18190	Demo Snowflake Data Source	N	2021-10-12 13:04:14

Demo Snowflake/Tableau Data Source / RETAIL_ANALYTICS

Search

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Demo View RETAIL_ANALYTICS

Category: My Reports and Data

Business Owner: Yevgeniya

Technical Owner: Yevgeniya

This table used in

Demo Project (YG) / Demo Workbook

Demo Project (YG) / Demo Workbook from Snowflake (YG)

Columns (32)

AVERAGE_UNIT_PRICE	NUMBER(8,2)
AVERAGE_UNIT_PRICE_LAST_YEAR	NUMBER(8,2)
AVG_\$_PER_UNIT_LY	NUMBER(8,2)
AVG_\$_PER_UNIT_TY	NUMBER(8,2)
BUYER_FIRST_NAME	VARCHAR(20)
BUYER_LAST_NAME	VARCHAR(20)
CATEGORY	VARCHAR(30)
DATE_DAY	NUMBER(38,0)
DATE_MONTH	VARCHAR(10)
DATE_QUARTER	VARCHAR(5)
DATE_YEAR	NUMBER(38,0)
DISTRICT	VARCHAR(20)
DISTRICT_MANAGER	VARCHAR(40)