

Power BI's Hottest Upgrade - Developer Mode with TMDL



Dhyan Rathore

20 FEB 2026

▼

📅

Date

>

📁

1. Year

>

📁

2. Quarter

>

📁

3. Month

>

📁

4. Week

▼

📁

5. Weekday / Workday

▼

📁

Measures

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📁

Workdays

>

📁

Weekday

>

📁

Workdays

>

📁

6. Calendar Date

>

📁

7. Boolean Fields

▼

📅

Date Hierarchy

Calendar Year (ie 2021)

Calendar Quarter (ie Q1)

Calendar Month (ie Jan)

Calendar Week EU (ie WK25)

Weekday Short (i.e. Mon)

📅

Date

>

📁

Measures



Create from scratch



**Clean everything
else from the model**

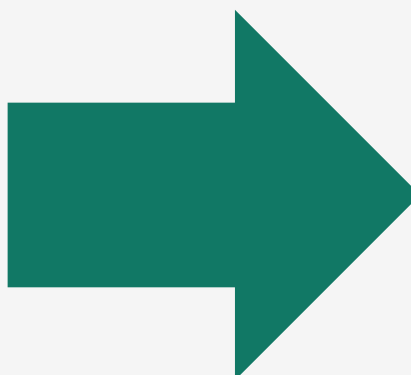


**External
tools**



TMDL

- ✓ 📅 Date
 - > 📁 1. Year
 - > 📁 2. Quarter
 - > 📁 3. Month
 - > 📁 4. Week
 - ✓ 📁 5. Weekday / Workday
 - ✓ 📁 Measures
 - > 📁 # Workdays
 - > 📁 Weekday
 - > 📁 Workdays
 - > 📁 6. Calendar Date
 - > 📁 7. Boolean Fields
- ✓ 🗂️ Date Hierarchy
 - Calendar Year (ie 2021)
 - Calendar Quarter (ie Q1)
 - Calendar Month (ie Jan)
 - Calendar Week EU (ie WK25)
 - Weekday Short (i.e. Mon)
- 📅 Date
- > 📁 Measures



Reuse options



40 minutes



Create from scratch



Clean everything else from the model



External tools



10 seconds



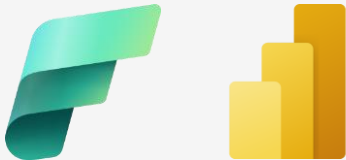
TMDL



Dhyan Rathore

Fabric Enablement Lead @ [Autoliv](#)

- ✓ **Stockholm, Sweden**
- ✓ **Blogger, Speaker & Hiker**
- ✓ **Automation & Optimization**



Agenda



TMDL: What, Why, When & How



Using TMDL with Local and Remote Models



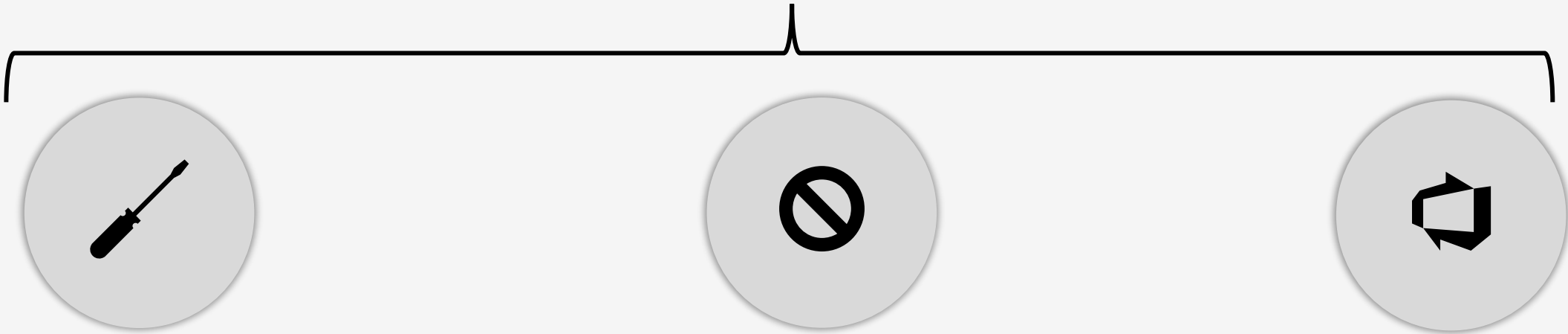
Tips & Warnings

TMDL...???

Why do we need TMDL



PBIX









**Power BI Desktop or
external tools only**

**Unsupported model
changes with external tools**

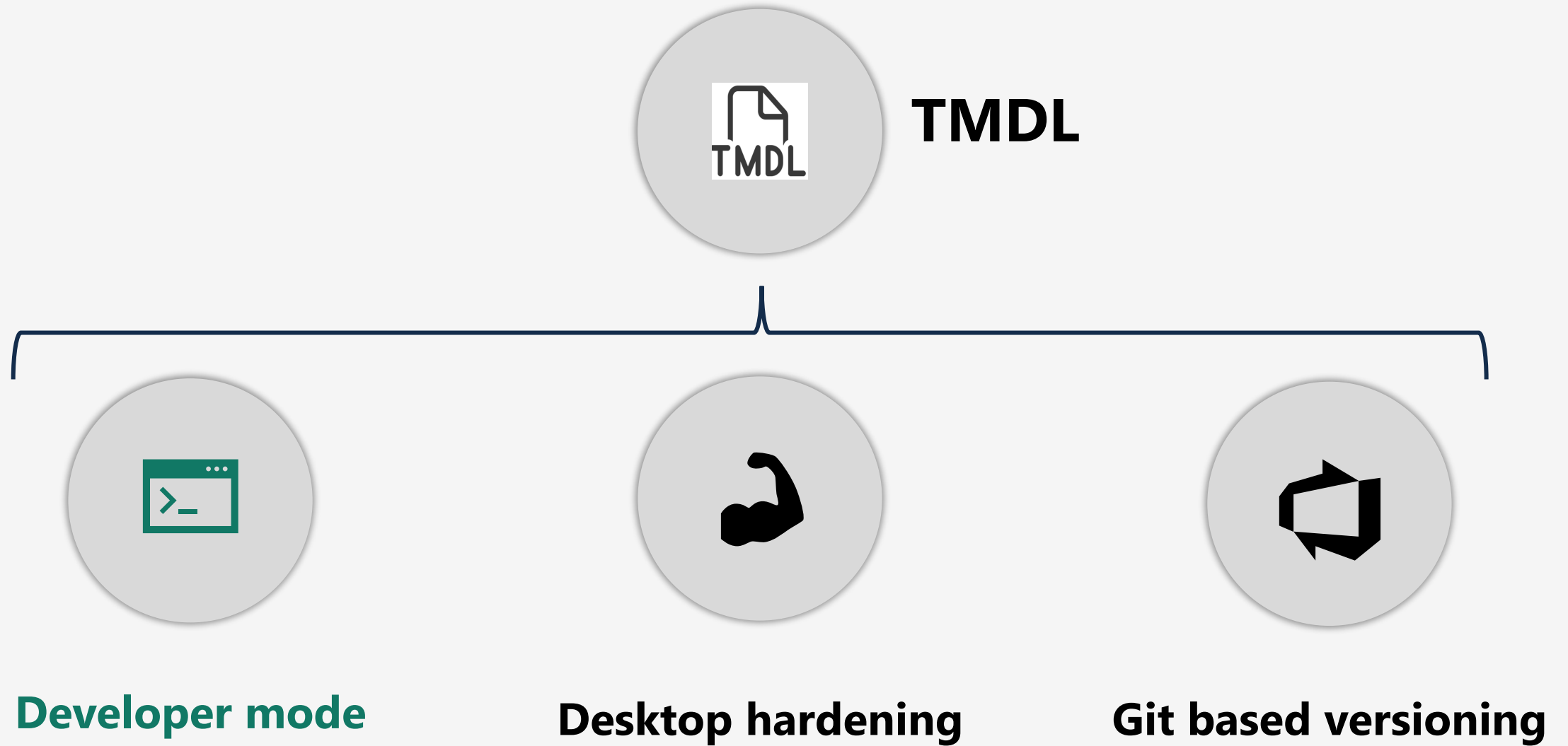
**Lack of Git based
Version Control**

Version Control

Name
 Sales Hub 147
 Sales Hub 147_final
 Sales Hub 147_final_final
 Sales Hub 147_final_final_v2
 Sales Hub 148
 Sales Hub

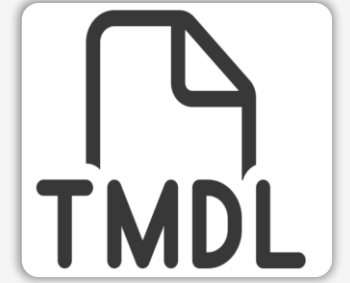


Why do we need TMDL



What is TMDL

Tabular **M**odel **D**efinition **L**anguage



Serialized metadata of a semantic model



Each table, perspective, role, and culture stored as a separate **text** file

What can we do with TMDL



Create Objects



**Edit Objects &
Properties**



**Objects &
Properties
without a UI in
PBI Desktop**



Objects as Text

When to use TMDL



Viewing multiple objects at once



Making multiple changes at once



Work with objects & properties without an UI



Reuse objects across different models



View & edit Power Query transformations



Take a “one-page” backup of semantic model



Working with a code first experience

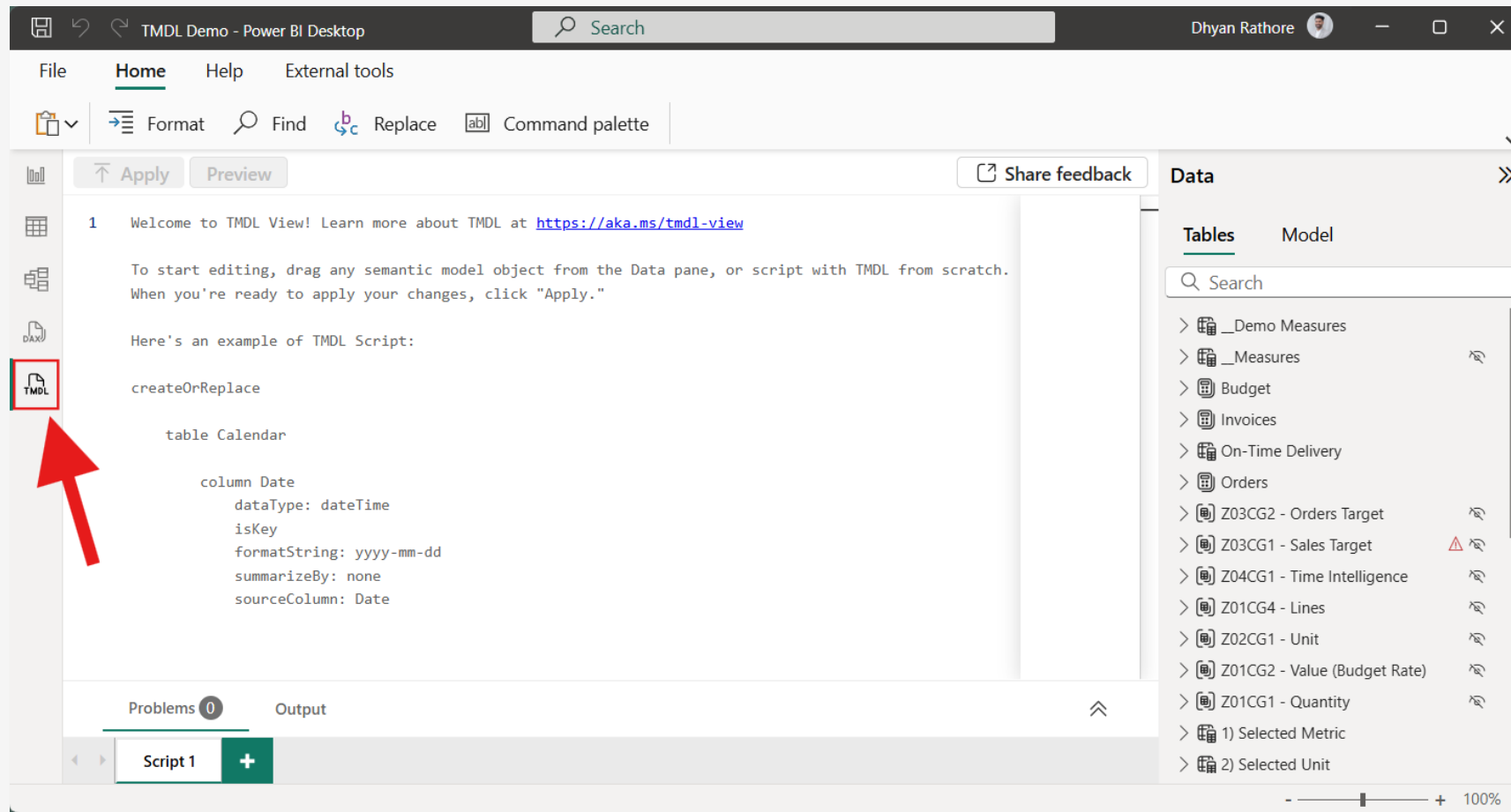
Let's see it in Action!

Different Types of TMDL

TMDL Scripts

TMDL View

- Power BI Desktop
- Power BI Web – Planned

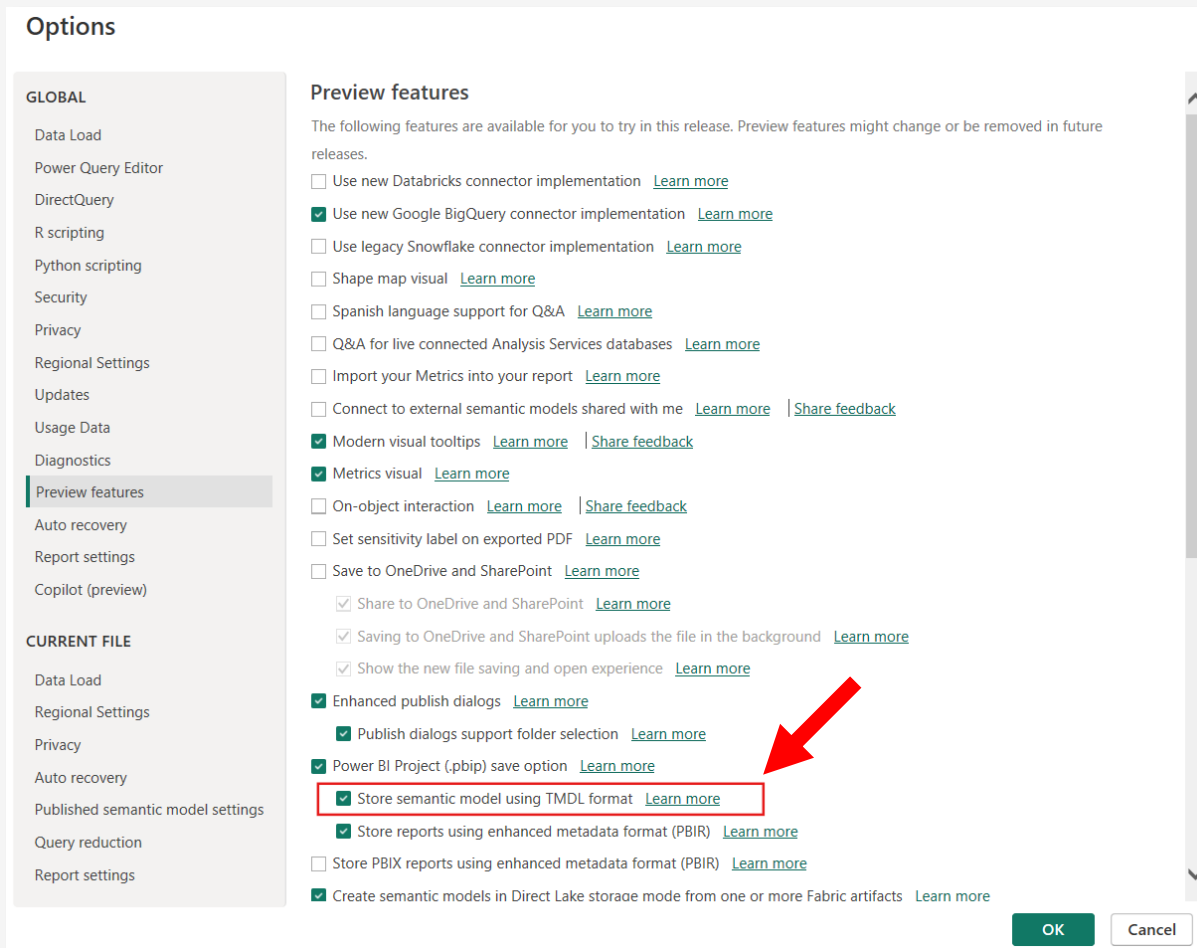


TMDL File Format

Enable TMDL File Format

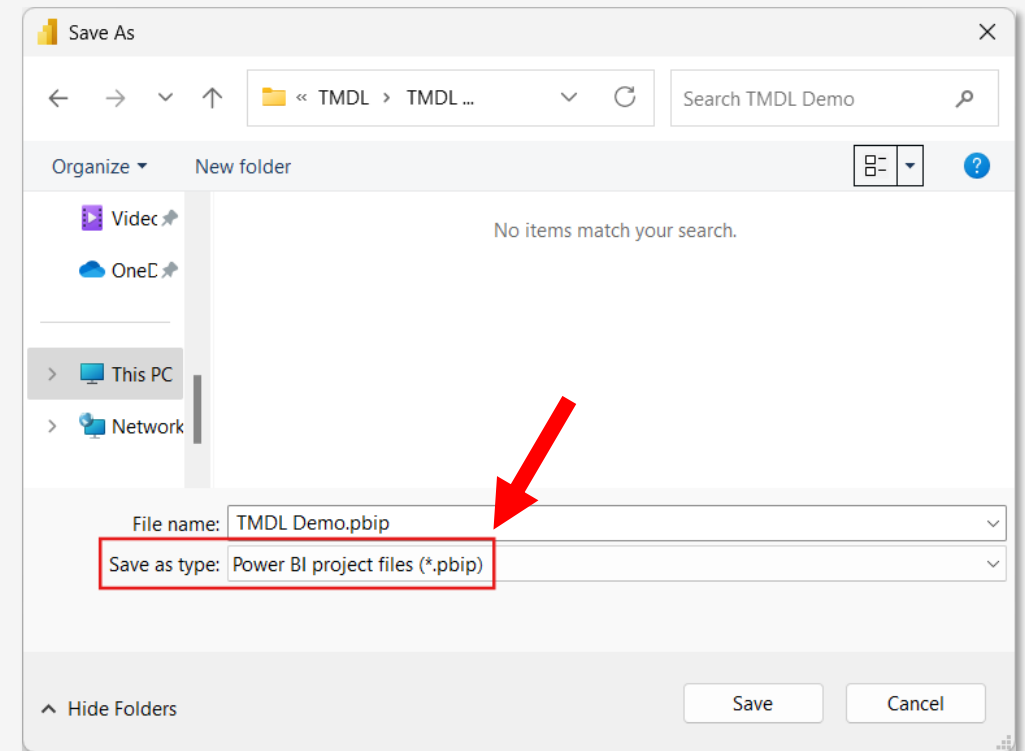
[Preview in Desktop](#)

File > Options and settings > Options > Preview features (only with pbip)



Save pbix as .pbip

File > Save as



In Power BI Service, TMDL is the default storage mode for semantic models

Summary

TMDL Scripts GA

Script containing the object metadata as text that Power BI **Desktop** can use to make changes to the model.

Keywords: *createOrReplace*, *ref*

```
1 createOrReplace
2
3 table Date
4     lineageTag: 0bb45e29-3908-422d-ade4-4100434bdfa4
5     dataCategory: Time
6
7     measure '# Workdays MTD' =
8         CALCULATE(
9             MAX( 'Date'[Workdays MTD] ),
10            'Date'[IsDateInScope] = TRUE
11        )
12     formatString: #,##0
13     displayFolder: 5. Weekday / Workday\Measures\# Workdays
14     lineageTag: 4b0555ab-6912-4d3c-b613-0d2d542a6965
```

TMDL Files Preview in Desktop

Files storing object metadata as text that Power BI can use to render a model.

File extension: *tmdl*

```
1 table Date
2     lineageTag: 0bb45e29-3908-422d-ade4-4100434bdfa4
3     dataCategory: Time
4
5     measure '# Workdays MTD' =
6         CALCULATE(
7             MAX( 'Date'[Workdays MTD] ),
8             'Date'[IsDateInScope] = TRUE
9         )
10     formatString: #,##0
11     displayFolder: 5. Weekday / Workday\Measures\# Workdays
12     lineageTag: 4b0555ab-6912-4d3c-b613-0d2d542a6965
```

One can be used without using the other

**Can we use TMDL files to do things
that we did with TMDL scripts?**

Using TMDL Files with *Local Models*

Local Model: Working with TMDL Files

Tool Up

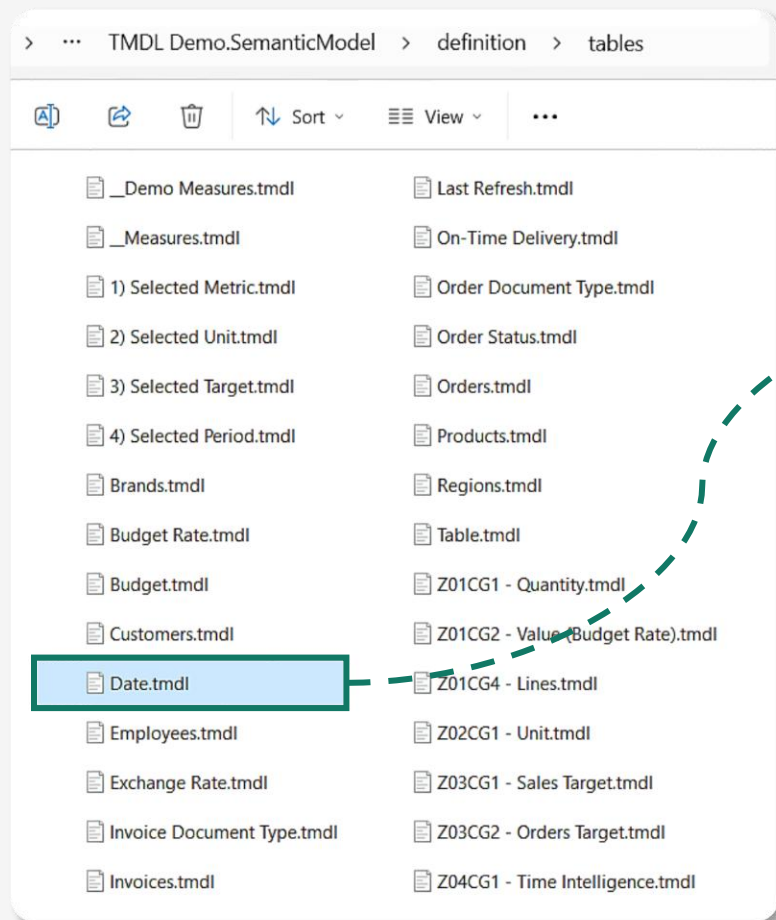


Visual Studio Code (VS Code)

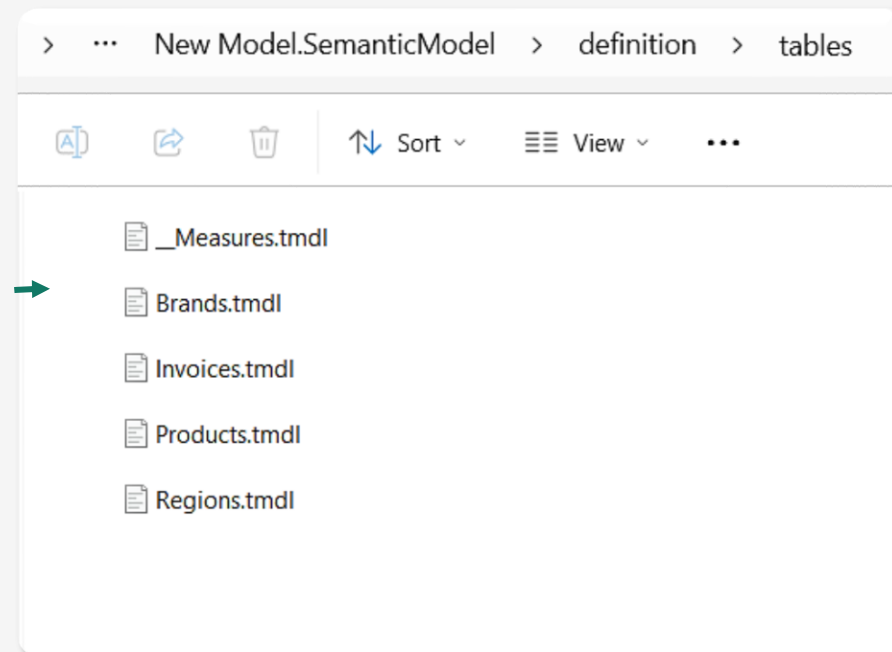


TMDL Extension for VS Code

Local Model: Reuse Objects with TMDL Files



Source Model: TMDL Files



Target Model: TMDL Files

1. Move the object TMDL files from source to target model TMDL files
2. Relaunch Power BI Desktop
3. Refresh the object (if required)

Power BI Desktop auto-detect changes: Planned

Updating *Remote Models* with TMDL

Remote Model: Update with TMDL Files

Tool Up



Visual Studio Code (VS Code)



TMDL Extension for VS Code



Fabric Studio Extension for
VS Code

TMDL Magic with Fabric Studio!



TMDL: The Smart Way

When **NOT** to use TMDL



Editing DAX or Power Query



When the user interface is simpler



Changing unknown properties



Creating Perspectives for the first time

Tips



Default values of properties are not shown



A closed TMDL script tab can't be recovered



Preview before applying changes



No undo for data modeling changes

Some Warnings



Careful with Find & Replace as you can make unintended changes



Dependencies are not cross highlighted



TMDL only changes the model metadata and does not update the visuals

Recap



**What, Why,
When & How**



**TMDL Scripts
with local
models**



**TMDL files with
local & remote
models**



**Tips & warning
to unlock full
potential**



Questions?

Get the slides...



https://github.com/DhyanRathore/Presentations/tree/main/2026/20260220_GlobalPowerPlatformBootcamp

Thank You!!

Dhyan Rathore

 **dhyans**

