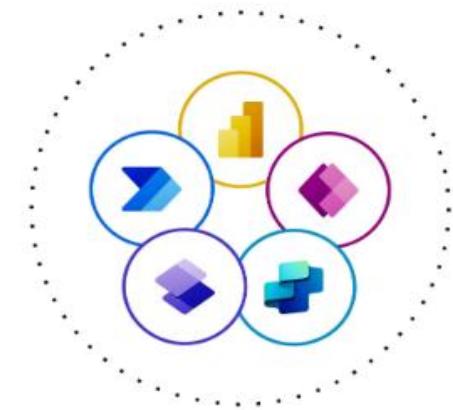


# Power BI's Hottest Upgrade - Developer Mode with TMDL



Dhyan Rathore

20 FEB 2026



- ✓ Date
  - > 1. Year
  - > 2. Quarter
  - > 3. Month
  - > 4. Week
  - ✓ 5. Weekday / Workday

- ✓ Measures
    - > # Workdays

- > Weekday
  - > Workdays

- > 6. Calendar Date

- > 7. Boolean Fields

- ✓ Date Hierarchy

- Calendar Year (ie 2021)

- Calendar Quarter (ie Q1)

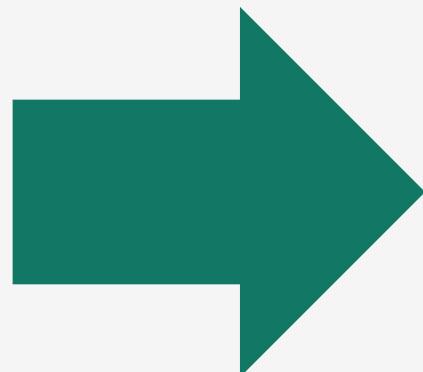
- Calendar Month (ie Jan)

- Calendar Week EU (ie WK25)

- Weekday Short (i.e. Mon)

- Date

- > Measures



## Reuse options



### Create from scratch



### Clean everything else from the model



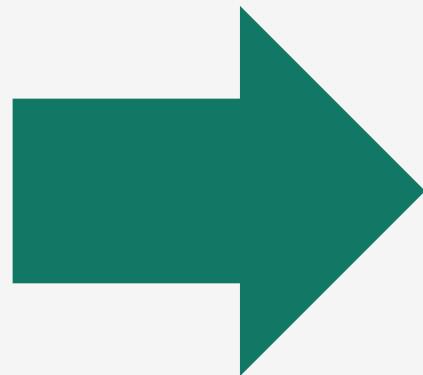
### External tools



### 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**



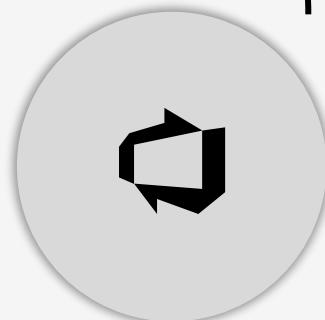
**Tips & Warnings**

**TMDL...???**

# Why do we need TMDL



**PBIX**

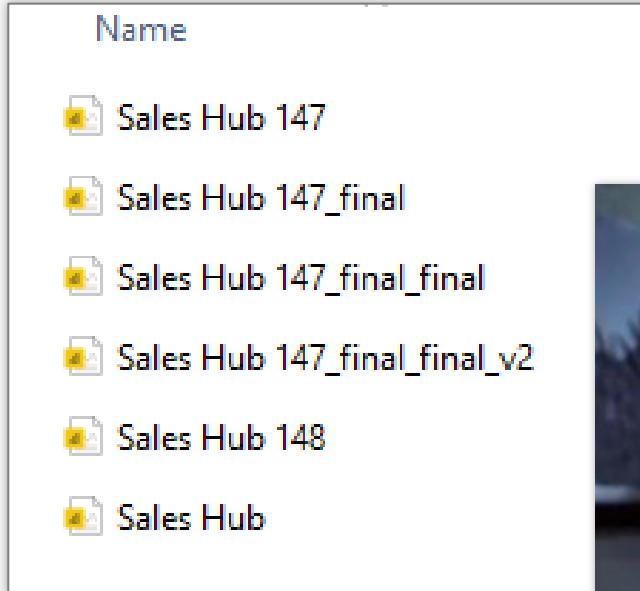


**Power BI Desktop or  
external tools only**

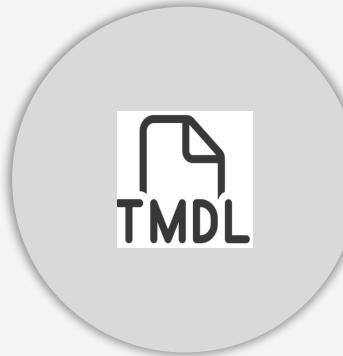
**Unsupported model  
changes with external tools**

**Lack of Git based  
Version Control**

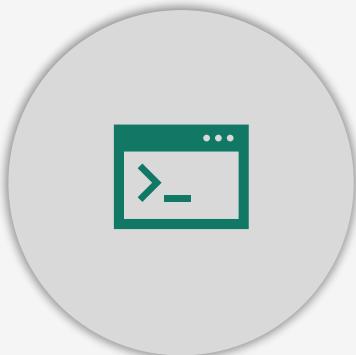
# Version Control



# Why do we need TMDL



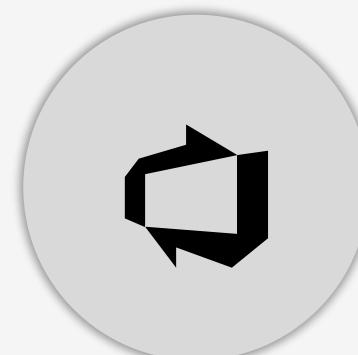
**TMDL**



**Developer mode**



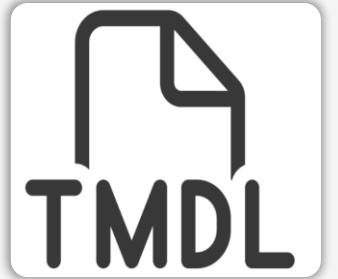
**Desktop hardening**



**Git based versioning**

# What is TMDL

Tabular Model Definition Language



**Serialized** metadata of a semantic model

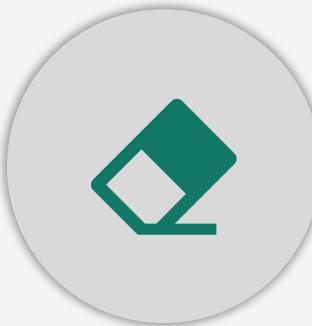


Each table, perspective, role, and culture stored as a separate **text** file

# 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**

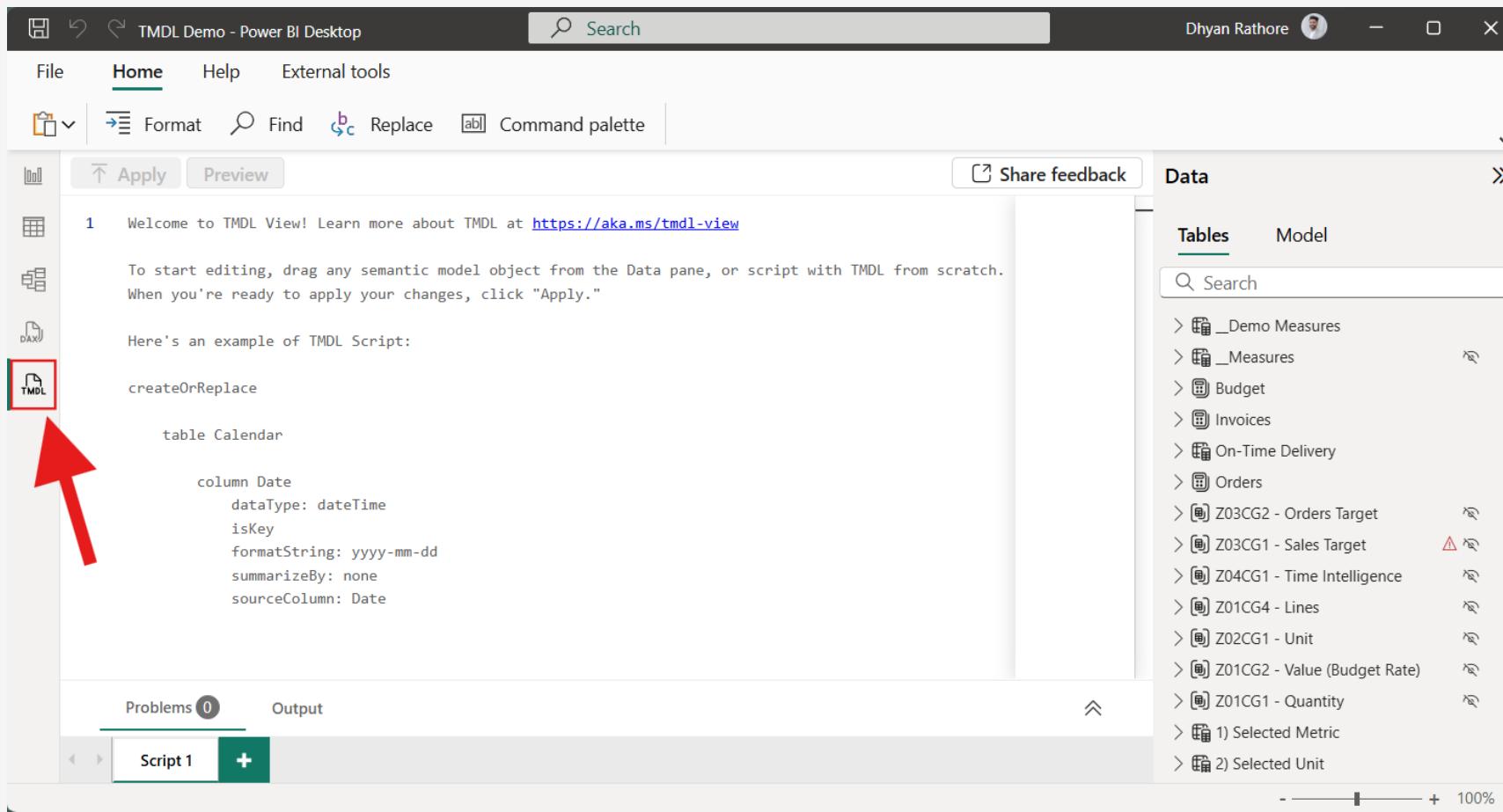
**Let's see it in Action!**

# 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)

### Options

GLOBAL
Data Load
Power Query Editor
DirectQuery
R scripting
Python scripting
Security
Privacy
Regional Settings
Updates
Usage Data
Diagnostics
<b>Preview features</b>
Auto recovery
Report settings
Copilot (preview)
CURRENT FILE
Data Load
Regional Settings
Privacy
Auto recovery
Published semantic model settings
Query reduction
Report settings

### Preview features

The following features are available for you to try in this release. Preview features might change or be removed in future releases.

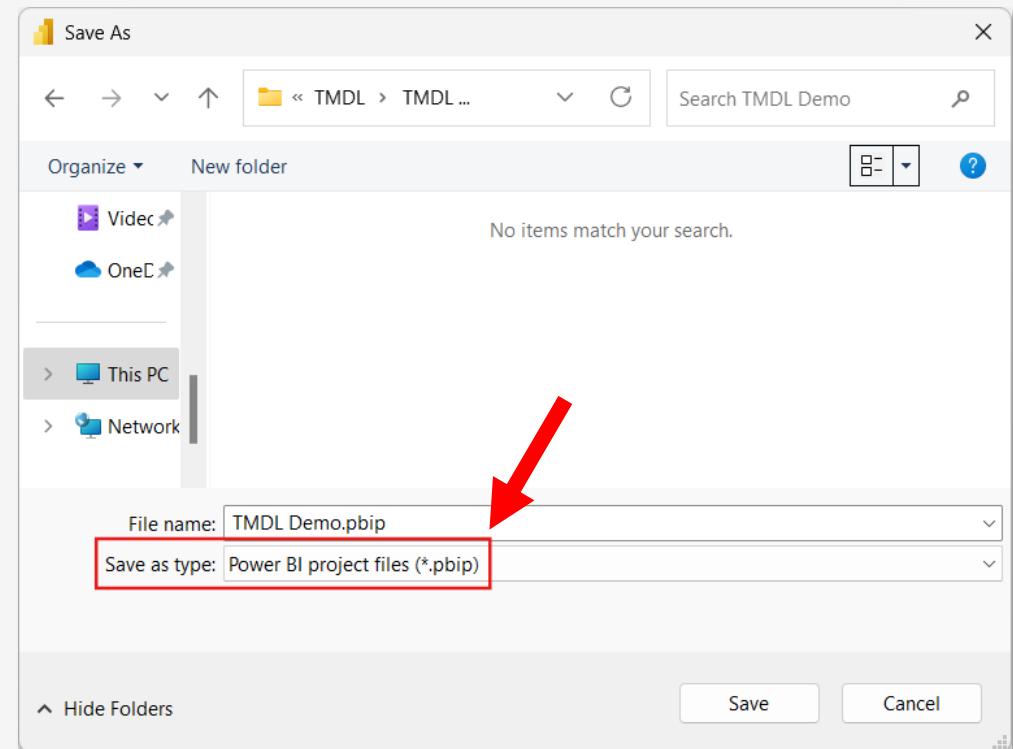
- Use new Databricks connector implementation [Learn more](#)
- Use new Google BigQuery connector implementation [Learn more](#)
- Use legacy Snowflake connector implementation [Learn more](#)
- Shape map visual [Learn more](#)
- Spanish language support for Q&A [Learn more](#)
- Q&A for live connected Analysis Services databases [Learn more](#)
- Import your Metrics into your report [Learn more](#)
- Connect to external semantic models shared with me [Learn more](#) | [Share feedback](#)
- Modern visual tooltips [Learn more](#) | [Share feedback](#)
- Metrics visual [Learn more](#)
- On-object interaction [Learn more](#) | [Share feedback](#)
- Set sensitivity label on exported PDF [Learn more](#)
- Save to OneDrive and SharePoint [Learn more](#)
  - Share to OneDrive and SharePoint [Learn more](#)
  - Saving to OneDrive and SharePoint uploads the file in the background [Learn more](#)
  - Show the new file saving and open experience [Learn more](#)
- Enhanced publish dialogs [Learn more](#)
  - Publish dialogs support folder selection [Learn more](#)
- Power BI Project (.pbip) save option [Learn more](#)
  - Store semantic model using TMDL format [Learn more](#)
    - Store reports using enhanced metadata format (PBIR) [Learn more](#)
    - Store PBIX reports using enhanced metadata format (PBIR) [Learn more](#)
  - Create semantic models in Direct Lake storage mode from one or more Fabric artifacts [Learn more](#)

OK

Cancel

## 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



# Local Model: Reuse Objects with TMDL Files

TMDL Demo.SemanticModel > definition > tables	
Sort View ...	
__Demo Measures.tmdl	Last Refresh.tmdl
__Measures.tmdl	On-Time Delivery.tmdl
1) Selected Metric.tmdl	Order Document Type.tmdl
2) Selected Unit.tmdl	Order Status.tmdl
3) Selected Target.tmdl	Orders.tmdl
4) Selected Period.tmdl	Products.tmdl
Brands.tmdl	Regions.tmdl
Budget Rate.tmdl	Table.tmdl
Budget.tmdl	Z01CG1 - Quantity.tmdl
Customers.tmdl	Z01CG2 - Value (Budget Rate).tmdl
Date.tmdl	Z01CG4 - Lines.tmdl
Employees.tmdl	Z02CG1 - Unit.tmdl
Exchange Rate.tmdl	Z03CG1 - Sales Target.tmdl
Invoice Document Type.tmdl	Z03CG2 - Orders Target.tmdl
Invoices.tmdl	Z04CG1 - Time Intelligence.tmdl

Source Model: TMDL Files

New Model.SemanticModel > definition > tables	
Sort View ...	
__Measures.tmdl	
Brands.tmdl	
Invoices.tmdl	
Products.tmdl	
Regions.tmdl	

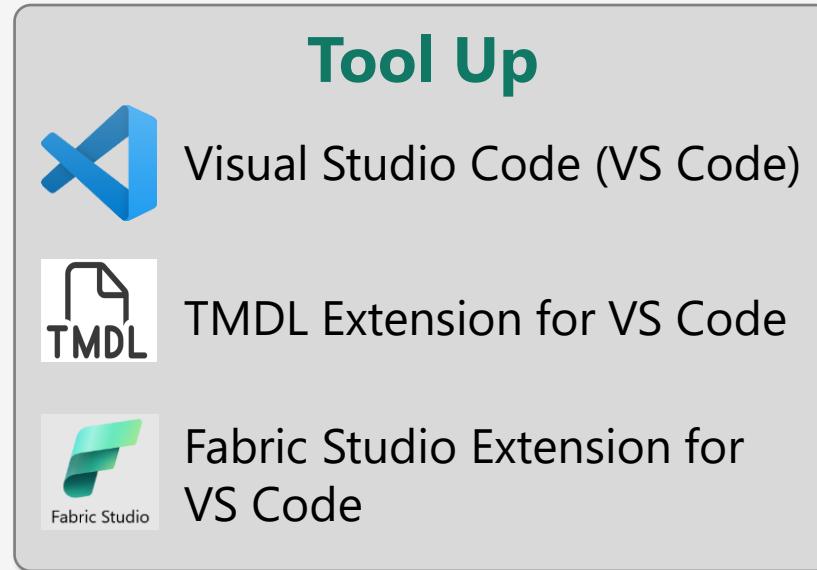
Target Model: TMDL Files

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



# 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](https://github.com/DhyanRathore/Presentations/tree/main/2026/20260220_GlobalPowerPlatformBootcamp)

# Thank You!!

**Dhyan Rathore**

