

Start with PowerBI

"From Rookie to Rock"

Learn &
Practice

Develop faster with TDML

Part 1: Improve Reusability



Patou Tips #49

What is TDML?

An integrated code editor



TDML = Tabular Model Definition Language



The script TDML allows you to:

- ✓ Manage your data model more easily
- ✓ Share your code
- ✓ Modify, optimize, and improve your code with its integrated editor
- ✓ Manage your project versions

In these Patou Tips, we will examine the first 3 points.



Resources on GitHub

[Patou-Tips/#49 Patou Tips \(Develop faster with TDML - Improve reusability\) at main · PatouTips/Patou-Tips](https://github.com/Patou-Tips/49_Patou_Tips_Develop_faster_with_TDML_Improve_reusability)

Develop faster with TDML

Part 1

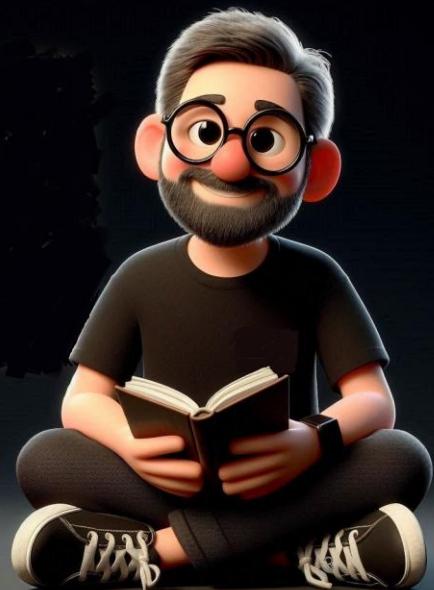
Improve Reusability



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Improve Reusability

Use case: Dimension table for dates (Date_Dim)

In every Power BI* project, it's useful to have a dimension table (Dim_Date). The goal here is to copy this table, incorporating all the measures and operations that follow in another PowerBI project:

- 1 Marking the table as a date table
- 2 Creating a date hierarchy
- 3 Sorting the months by their number (1 to 12), the days of the week by their day number (1 to 7)...
- 4 Hiding all elements of the date dimension except for the date hierarchy



Improve Reusability

Step 1: Generate the code



The screenshot shows the Power BI Data view. A yellow box highlights the 'TDML' tab in the top navigation bar. In the main area, a 'DimDate' dimension is selected, shown in a tree view with its properties. A red arrow points from the 'DimDate' node in the tree to a callout box labeled '2'. Another red arrow points from the 'TDML' tab to a callout box labeled '1'. A third red circle labeled '3' points to the code editor area where the TDML code for the 'DimDate' dimension is displayed.

```
1 < TDML >
  1 < createOrReplace >
    2 < table DimDate >
      3 < lineageTag: 723ffede-04e5-48af-9cf8-2975c961bc8a >
      4 < dataCategory: Time >
      5 < column Date >
        6 < isHidden >
        7 < isKey >
        8 < formatString: General Date >
        9 < lineageTag: 4f0b183d-a93f-4b76-93d6-a1b0942448c2 >
        10 < summarizeBy: none >
        11 < isNameInferred >
        12 < sourceColumn: [Date] >
        13 < annotation SummarizationSetBy = Automatic >
      14 < column Year >
```

- 1 Go in the **TDML View**
- 2 Drag and drop the "DimDate" in the "**TDML View window**"
- 3 A code appears in the **TDML View window** and includes all the characteristics of the dimension; its measures, the preparation operations described previously (see previous page).

Improve Reusability

Step 2: Reproduce the code



The screenshot shows three steps in a PowerBI interface:

- Step 1:** A TDML View window with the code for the DimDate table. An orange circle labeled "1" highlights the "Apply" button at the top.
- Step 2:** A "New" dialog box with a "Blank report" option, highlighted by an orange circle labeled "2".
- Step 3:** A second TDML View window where the copied code has been pasted into the text area, highlighted by an orange circle labeled "3".

```
1 createOrReplace
2
3   table DimDate
4     + lineageTag: 723ffede-04e5-48af-9cf8-2975c961bca8
5     + dataCategory: Time
6
7       column Date
8         + isKey
9         + formatString: General-Date
10        + lineageTag: 4f0b183d-a93f-4b76-93d6-a1b0942448c
11        + summarizeBy: none
12        + isNameInferred
13        + sourceColumn: [Date]
14
15       annotation SummarizationSetBy = Automatic
16
17       column Year
18         + formatString: 0
19         + lineageTag: 53f72a62-40b7-4911-91c3-5d4d4d54b771
20         + summarizeBy: sum
21         + isNameInferred
22         + sourceColumn: [Year]
23
24       annotation SummarizationSetBy = Automatic
25
26       column YearSemester
27         + lineageTag: fad97932-5b2f-4afb-a125-4769aa8652f4
28         + summarizeBy: none
29         + isNameInferred
30         + sourceColumn: [YearSemester]
```

- 1 Select all the code (ctrl + A) and copy it (ctrl + C)
- 2 Create a new PowerBI project
- 3 Paste the code (ctrl + V) in the TDML View window

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Improve Reusability

Step 3: That's all folks!



Click on the Apply button (1), then to the Refresh button (2).

The screenshot shows the 'Changes applied to the model' pane. At the top, there is a warning message: '⚠ One or more calculated tables need to be manually refreshed.' Below this are two buttons: 'Apply' (highlighted with a red circle labeled 1) and 'Preview'. A large orange arrow points down from this pane to the 'DimDate' table settings.

```
1 createOrReplace
3     table DimDate
152         hierarchy 'Date Hierarchy'
159             level Month
162
163     partition DimDate - calculated
164         mode: import
```

- All the measures and properties are here;
- the mark of the table as a date table (3),
 - date hierarchy (4),
 - sort months by their number (1 to 12), days of the week by their day number (1 to 7) (5)
 - and all elements of the date dimension are hided except for the date hierarchy (6)

The screenshot shows the 'DimDate' table settings pane. It highlights several sections with red dashed boxes and numbered circles: (3) marks the table as a date table; (4) highlights the 'Date Hierarchy' section; (5) highlights the 'SortOrder' section; and (6) highlights the 'Hidden' section where most date dimension elements are listed and marked as hidden.

- 3
- 4
- 5
- 6

| Element |
|----------------|
| Date |
| Date Hierarchy |
| Year |
| Month |
| Day |
| Month |
| MonthLong |
| MonthShort |
| NumDayMonth |
| NumDayWeek |
| NumMonth |
| NumWeek |
| Quarter |

Coming soon, in 2026!



Patrice Fayard

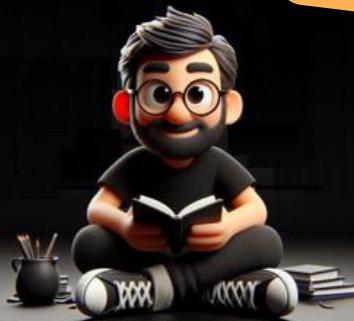
Business Intelligence WORKBOOK

Start PowerBI

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- ✓ 5 Cheat Sheet
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Easy to do it...

Patou Tips #5



Create a **Customized Chart** (for income statement)



To practice downloadable free resources in GitHub



Patou Tips #5
Create a
Customized
Chart
(for income
statement)

Easy to do it...

Patou Tips #6



Create
Customized Icon



(with PowerPoint for PowerBI)



Patou Tips #6
Create
Customized Icon

Easy to do it...

Patou Tips #7



Create an **Age Pyramid Chart** (for Human Ressources)



To practice downloadable free resources in GitHub



Patou Tips #7
Create an Age
Pyramid Chart
(for Human
Ressources)

Easy to do it...

Patou Tips #12



Calculate the correct evolution for KPI



Patou Tips #12
Calculate right
evolution for
KPI

Patou Tips #23



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9 tips explained step by step to practice

Quick Guide Visualization & Storytelling



Patou Tips #23
Quick Guide Visualization &
Storytelling



Resources on GitHub
<https://github.com/Patou-Tips/Patou-Tips>

Don't forget!
This isn't the truth, it's just my truth!

Patou Tips



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