

PowerQuery

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1.Queries

FolderPath - The variable that will be used to dynamically set the location where the files are located.The location is taken from cell B2, after the user selects the location (folder) where the source files are located through a dialog box.

Month - Variable that allows selecting the data set for a month. The data is taken from cell D2. This cell contains a list of data sets in the source folder and the data in this list is taken from the FolderContent Query.

FolderContent - Query containing the list of data sets available in the source files. It is used to pass the data into the list associated with cell D2 allowing the user to select a specific data set.

Badge -contain data from Badge files

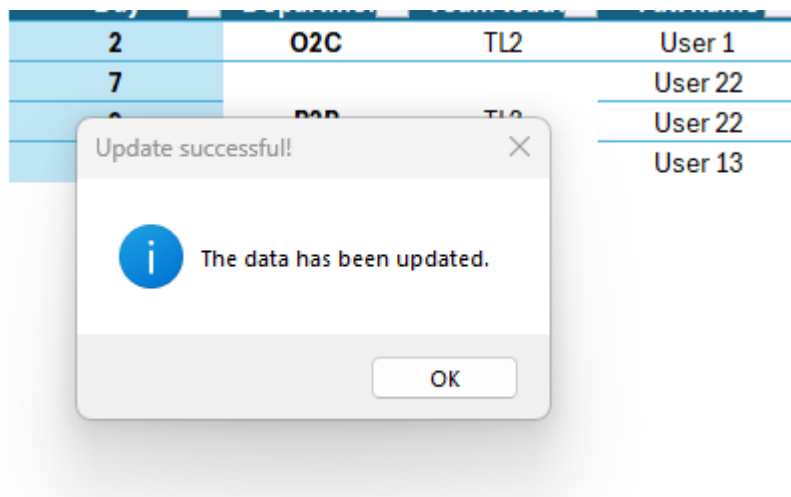
TimeSheet - contain data from Timesheet files

NewTable - Merging data between Timesheet and Badge tables

2. Bonus point - Does it make sense to use the Enable background refresh option on this report (from VBA perspective)? Please elaborate why.

It is not recommended to enable this option because it allows the user to work in the excel file while the data is being retrieved. When working with larger data sets, updating the data can take some time and the user may be misled into thinking that they are working on an updated data set.

Normally, I also use a message box in VBA (appears after the data update has been completed) to inform the user that they have access to updated data.



3. Macro

I changed the approach in this situation and used folder connector in this case.

Using the file selector for each data set could generate human errors by selecting different data types. Ex: badge could be selected for the month 01_2024 and Timesheet for the month 02_2024.

a. VBA code for dialog box and refresh query FolderContent

```
Sub SelecteazaFolder()
```

```
    Dim FolderDialog As FileDialog
```

```
    Dim FolderPath As String
```

```
    Set FolderDialog = Application.FileDialog(msoFileDialogFolderPicker)
```

```
    With FolderDialog
```

```
        .Title = "Selecteaza folderul cu fisierele sursa"
```

```
        .AllowMultiSelect = False
```

```
        If .Show = -1 Then
```

```
            FolderPath = .SelectedItems(1)
```

```
            ActiveSheet.Range("B2").Value = FolderPath
```

```
        Else
```

```
            MsgBox "No folders selected.", vbExclamation, "Loading files..."
```

```
        Exit Sub
```

```
    End If
```

```
End With
```

```
Set FolderDialog = Nothing
```

' Obține valoarea curentă a background-refresh

bBackground = ActiveWorkbook.Connections("Query -
FolderContent").OLEDBConnection.BackgroundQuery

' Dezactivează background-refresh

ActiveWorkbook.Connections("Query -
FolderContent").OLEDBConnection.BackgroundQuery = False

' Refresh

ActiveWorkbook.Connections("Query - FolderContent").Refresh

ActiveWorkbook.Connections("Query -
FolderContent").OLEDBConnection.BackgroundQuery = True

MsgBox "Files have been uploaded successfully", vbInformation, "Loading files..."

' Setarea înapoi a valorii background-refresh la valoarea originală

ActiveWorkbook.Connections("Query -
FolderContent").OLEDBConnection.BackgroundQuery = bBackground

End Sub

b.VBA code to update data sets based on the value chosen from the list associated with cell D2

Private Sub Worksheet_Change(ByVal Target As Range)

Dim tbl As ListObject

Dim tblName As String

Dim cell As Range

```
tblName = "Month"
```

```
On Error Resume Next
```

```
Set tbl = Me.ListObjects(tblName)
```

```
On Error GoTo 0
```

```
If Not tbl Is Nothing Then
```

```
    For Each cell In Target
```

```
        If Not Intersect(cell, tbl.DataBodyRange) Is Nothing Then
```

```
            'ActiveWorkbook.Connections("Query - New Table").Refresh
```

```
            'ActiveWorkbook.Connections("Query - FolderContent").Refresh
```

```
            ActiveWorkbook.RefreshAll
```

```
            MsgBox "The data has been updated.", vbInformation, "Update successful!"
```

```
            Range("D3").Select
```

```
            Exit For
```

```
        End If
```

```
    Next cell
```

```
End If
```

```
End Sub
```

4. Using File

1

Folder Path
C:\Users\nicol\OneDrive\Desktop\TGSB Case Study 1

Month
02_2024

2

Presence without entry for month: 02_2024

Day	Department	Team lead	Full name	Total
2	O2C	TL2	User 1	8
7			User 22	8
9	P2P	TL3	User 22	8
15			User 13	8

> PivotTable Graph +

Step1 - Click on the folder on the left to open the dialog box that allows you to select the folder where the source file is located.

Step2 - Select the month for which you want to view data from the "Month" list.

Note: Since the location of the source files is dynamic, please make sure that Power Query has the Privacy parameters set appropriately. Otherwise, the Firewall will block access to the source files.

