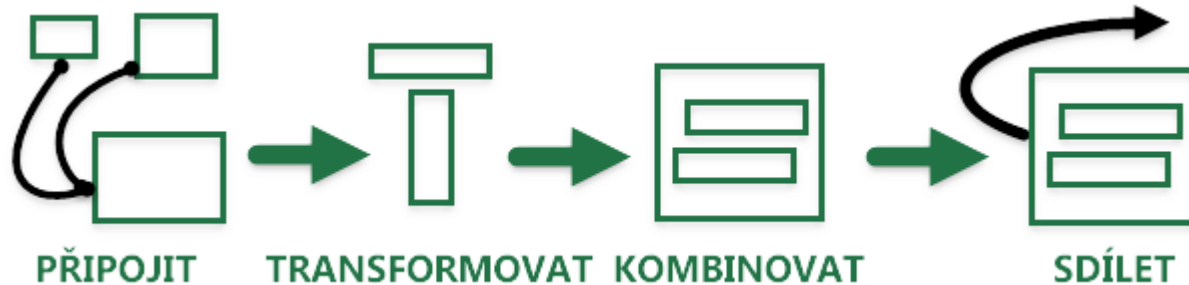


- Úvod k doplňku Power Query
- Požadované podmínky k použití PQ
- Rychlý pohled na Power Query
  - Výhody použití PQ

- Nový doplněk, který poskytuje komplexní funkce pro získávání, transformaci a analýzu dat.



## Pro koho je určen Power Query?

- **Business Analysts**
- Create queries
- Publish queries

- **IT Professionals**
- Configure data services
- Create and publish advanced queries

- **Users**
- Search for, and consume, published queries

## **Supported Operating Systems:**

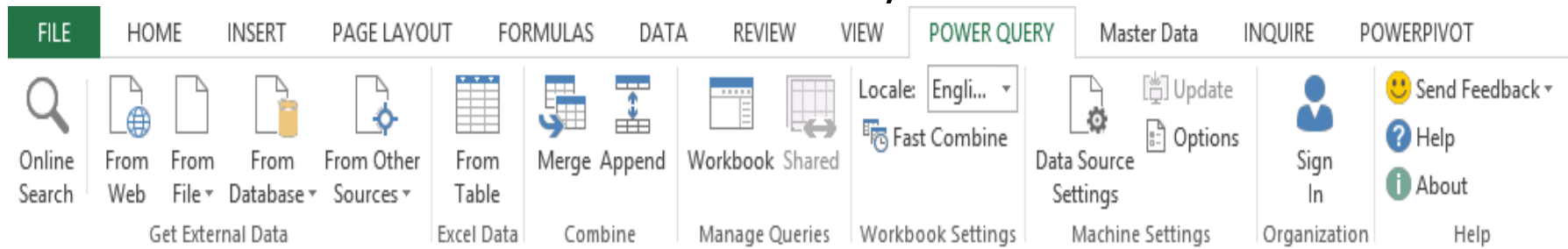
- Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows 10, Windows Server 2008

## **Office versions:**

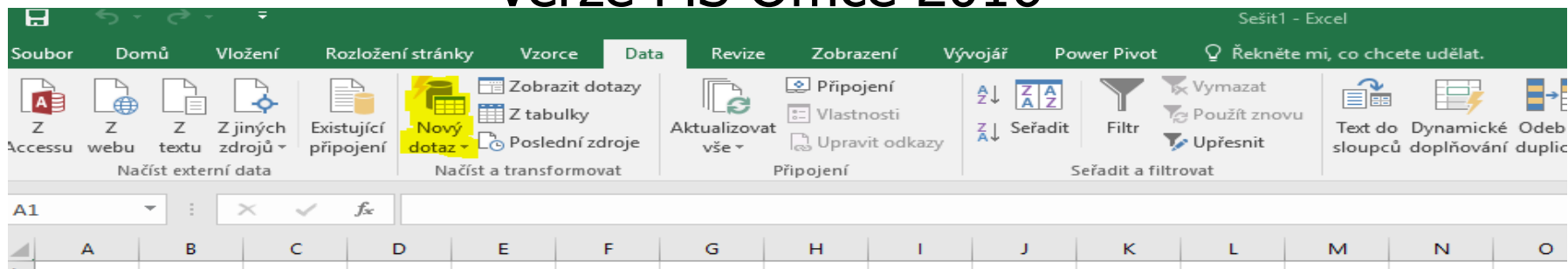
- Office 2007, Office 2010 SP1, Office 2013, Office 2016

Office Professional Plus and Office 365 Professional Plus editions only

## Verze MS Office 2007, 2010 a 2013








## Verze MS Office 2016











## Data můžeme získávat z těchto zdrojů:

### Creating Queries – External Data Sources











#### File:

-  **From Excel**  
Import data from a Microsoft Excel workbook.
-  **From CSV**  
Import data from a comma-separated value file.
-  **From XML**  
Import data from an XML file.
-  **From Text**  
Import data from a text file.
-  **From Folder**  
Import metadata and links about files in a folder.

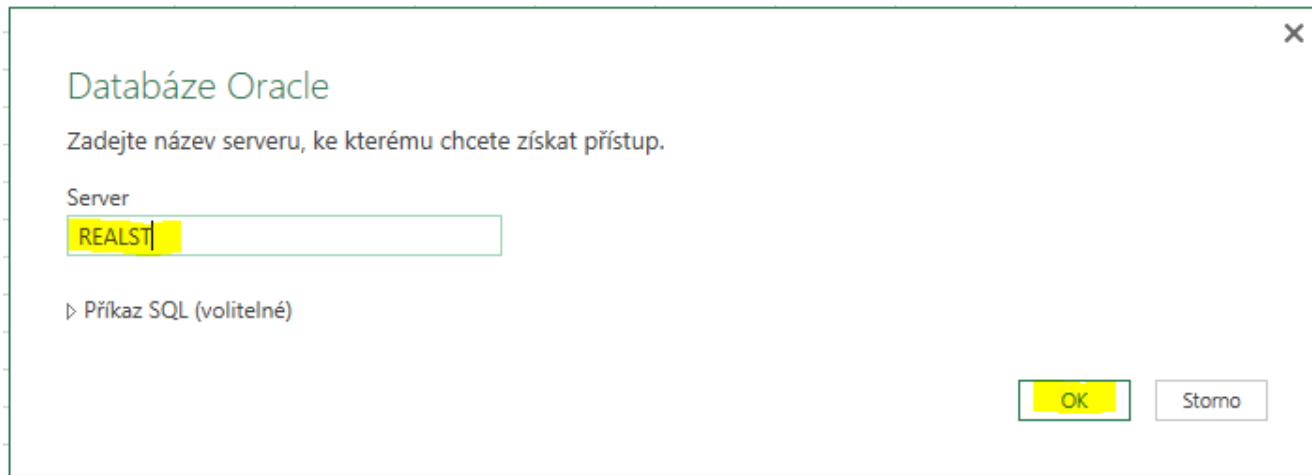
#### Database:

-  **From SQL Server Database**  
Import data from a Microsoft SQL Server database.
-  **From Windows Azure SQL Database**  
Import data from a Microsoft Windows Azure SQL database.
-  **From Access Database**  
Import data from a Microsoft Access database.
-  **From Oracle Database**  
Import data from an Oracle database.
-  **From IBM DB2 Database**  
Import data from a DB2 database.
-  **From MySQL Database**  
Import data from a MySQL database.
-  **From PostgreSQL Database**  
Import data from a PostgreSQL database.
-  **From Teradata Database**  
Import data from a Teradata database.

#### Other Sources:

-  **From SharePoint List**  
Import data from a Microsoft SharePoint site.
-  **From OData Feed**  
Import data from an OData feed.
-  **From Windows Azure Marketplace**  
Import data from the Microsoft Windows Azure Marketplace.
-  **From Hadoop File (HDFS)**  
Import data from a Hadoop Distributed File System.
-  **From Windows Azure HDInsight**  
Import data from Microsoft Windows Azure HDInsight.
-  **From Windows Azure Blob Storage**  
Import data from Microsoft Windows Azure Blob Storage.
-  **From Windows Azure Table Storage**  
Import data from Microsoft Windows Azure Table Storage.
-  **From Active Directory**  
Import data from Active Directory
-  **From Facebook**  
Import data from Facebook.
-  **Blank Query**  
Write a query from scratch.

## Názorná ukázka připojení se k Oracle DB



The image shows a screenshot of a dialog box titled "Databáze Oracle". The dialog box has a close button (X) in the top right corner. The main text reads "Zadejte název serveru, ke kterému chcete získat přístup." Below this, there is a label "Server" followed by a text input field containing the text "REALST". Below the input field, there is a label "Příkaz SQL (volitelné)" with a small right-pointing arrow. At the bottom right of the dialog box, there are two buttons: "OK" and "Storno".

Databáze Oracle

Zadejte název serveru, ke kterému chcete získat přístup.

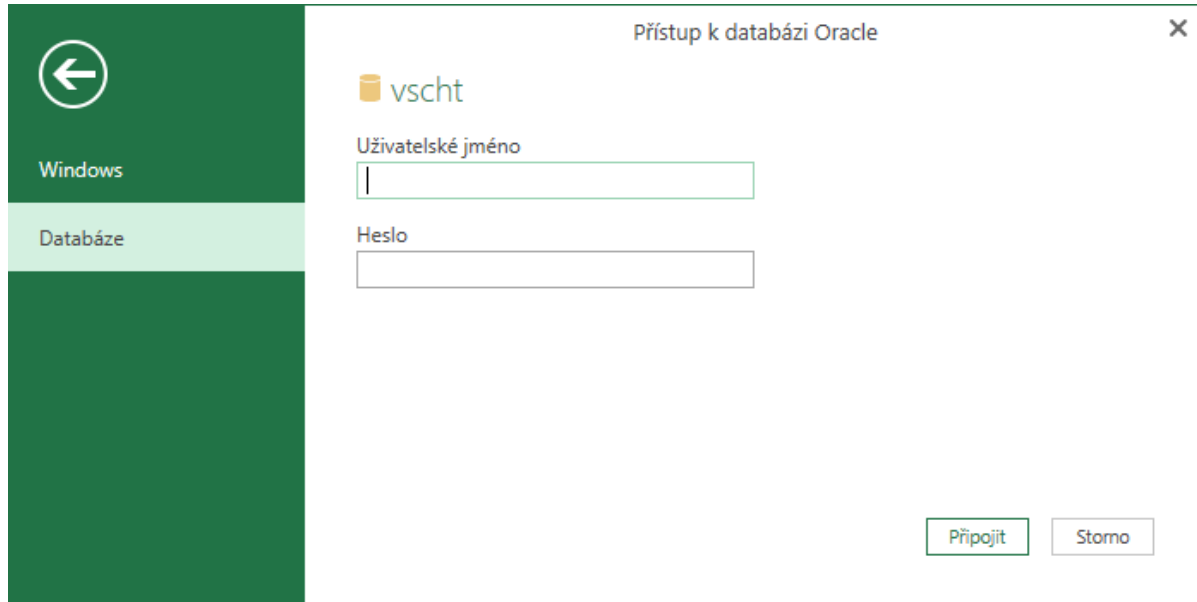
Server

REALST

▷ Příkaz SQL (volitelné)

OK Storno

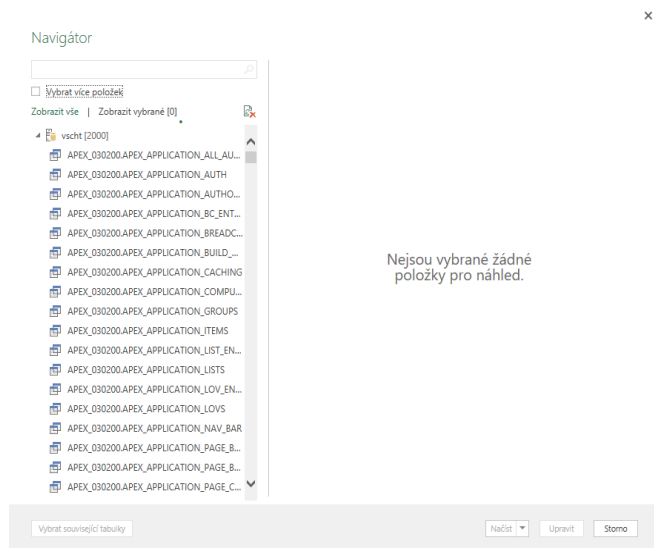
## Názorná ukázka připojení se k Oracle DB



The screenshot shows a dialog box titled "Přístup k databázi Oracle" with a close button (X) in the top right corner. On the left side, there is a dark green sidebar with a back arrow icon and two menu items: "Windows" and "Databáze", with "Databáze" being the active selection. The main area of the dialog displays the user name "vscht" with a small orange icon to its left. Below this, there are two input fields: "Uživatelské jméno" (Username) and "Heslo" (Password). At the bottom right of the dialog, there are two buttons: "Připojit" (Connect) and "Storno" (Cancel).



Po přihlášení se nabídnou tabulky k analýze:



Tabulku nebo více tabulek můžeme jednoduše načíst do MS Excel nebo vstoupit do editoru PQ a zde si data ještě lépe připravit.

**Refresh**  
Import the latest data (run query steps)

**Formula Bar**  
View or edit the formula directly

**Navigator Pane**  
Browse structured data sources to find the data source that you want to query

**Query preview**

**Query Name**  
Unique name for the query

**Applied Steps**  
Edit any query step, represented as a Gear icon, by using the Edit Settings option on each step.  
Steps can also be deleted.

**Load Settings**  
Load worksheet and/or data model

Latest refresh time

State	CensusPopulation
1 Alabama	4708708
2 Alaska	698473
3 Arizona	6595778
4 Arkansas	2889450
5 California	36961664
6 Colorado	5024748
7 Connecticut	3518288
8 Delaware	885122
9 District of Columbia	599657
10 Florida	18537969
11 Georgia	9829211
12 Hawaii	1295178
13 Idaho	1545801
14 Illinois	12910409
15 Indiana	6423113
16 Iowa	3007856
17 Kansas	2818747
18 Kentucky	4314113
19 Louisiana	4492076
20 Maine	1318301
21 Maryland	5699478
22 Massachusetts	6593587
23 Michigan	9969727
24 Minnesota	5266214
25 Mississippi	2951996
26 Missouri	5987580
27 Montana	974989
28 Nebraska	1796619
29 Nevada	2643085

## Working with Power Query Advanced Scenarios – Example

```
fx = Table.ReplaceValue(RemovedColumns,"#(00A0)"," ",Replacer.ReplaceText,{"State"})
```



#.	State	CensusPopulation
1	Alabama	4708708
2	Alaska	698473
3	Arizona	6595778

In the Query Editor, click the Script icon (only available when Advanced Query Editing is enabled) to edit the query script

```
let
    Source = Web.Page(Web.Contents("http://www.tapyourdatagoldmine.com/pages/USCensusPopulation.html")),
    Data0 = Source{0}[Data],
    ChangedType = Table.TransformColumnTypes(Data0,{{"State", type text}, {"Number", type number}, {"Rank"
FilteredRows = Table.SelectRows(ChangedType, each ([State] <> "United States")),
RenamedColumns = Table.RenameColumns(FilteredRows,{{"Number", "CensusPopulation"}}),
RemovedColumns = Table.RemoveColumns(RenamedColumns,{"Rank"}),
ReplacedValue = Table.ReplaceValue(RemovedColumns,"#(00A0)"," ",Replacer.ReplaceText,{"State"})
in
    ReplacedValue
```

## Výhody PQ?



Děkuji za pozornost 😊