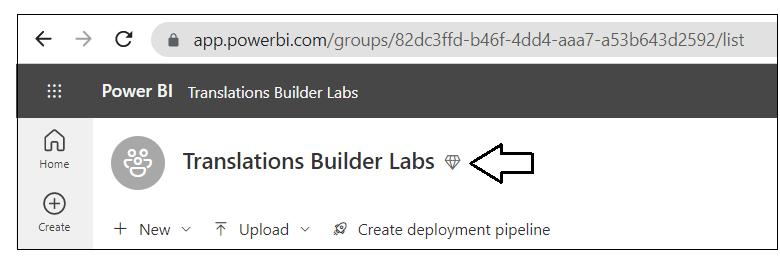
## **Lab 01: Getting Started with Translation Builder**

**Overview**: In this lab, you will learn how to work with Translations Builder and Power BI Desktop to build multi-language reports for Power BI. You will start by downloading a PBIX project file named **TB-Lab01.pbix** and opening it in Power BI Desktop. Once you have opened **TB-Lab01.pbix,** you will launch Translations Builder and move through the steps to add metadata translations and report label translations. At various milestones in this lab, you will be required to publish the **TB-Lab01.pbix** project from Power BI Desktop to the Power BI Service so you can test how the translations you’ve added to ensure they appear to users when loaded using different languages and different cultures.

**Prerequisite 1**: To complete this lab, you will need a Power BI workspace where you have appropriate permissions to publish project from Power BI Desktop to test your work. This workspace must also be associated with a Premium capacity as indicated by the diamond image (*see below*) displayed after the workspace name. A workspace in a premium capacity is required because Power BI translations do not load properly for reports running in the shared capacity.



**Prerequisite 2**: This lab assumes you’ve already installed Translations Builder. If you haven’t installed Translations Builder yet, you must follow steps in the [Translations Builder Installation Guide](https://github.com/PowerBiDevCamp/TranslationsBuilder/blob/main/Docs/Installation%20Guide.md) before continuing with these lab exercises.

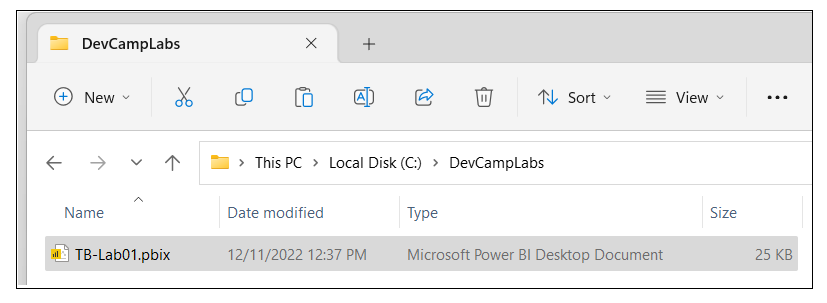
### Exercise 1: Creating and Testing Metadata Translations

In this exercise, you will begin by downloading a PBIX file which already has a simple data model and a single page report. You will then publish the project to the Power BI Service to set up a process whereby you can test out how your translations appear to report consumers.

1. Download the PBIX starter file named **TB-Lab01.pbix** from the following link

<https://github.com/PowerBiDevCamp/TranslationsBuilder/raw/main/Labs/StarterFiles/TB-Lab01.pbix>

1. Create a new folder on your local hard drive for these lab exercises such as **C:\DevCampLabs\**.

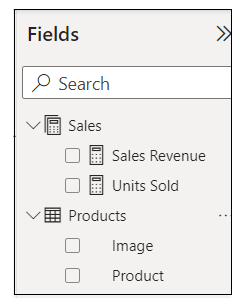


1. Copy **TB-Lab01.pbix** into the lab folder and then open it in Power BI Desktop to examine the report inside.

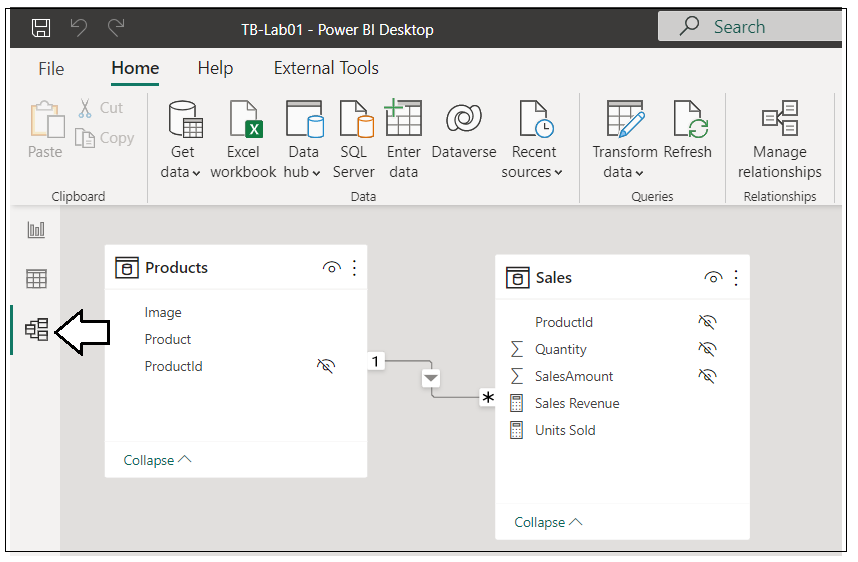
Graphical user interface, application, table

Description automatically generated

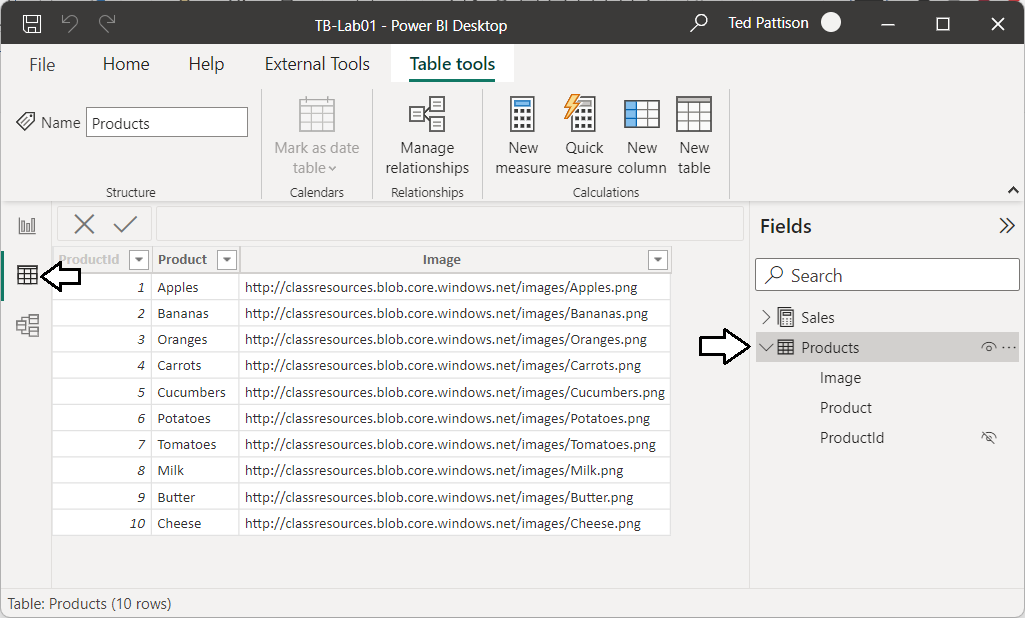
1. While in **Report view**, examine the **Fields** list to see the tables, columns and measure that are not hidden.



1. Now, navigate to **Model view** so you can see the entire data model including the columns hidden from **Report view**.

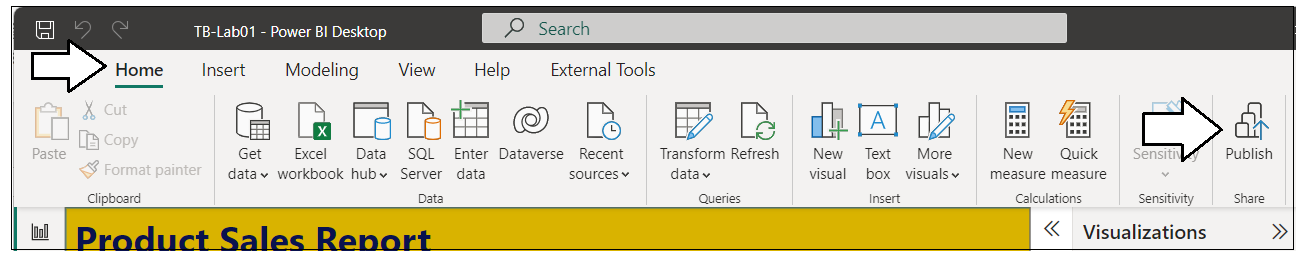


1. Navigate to Data view and examine the rows of the **Products** table.

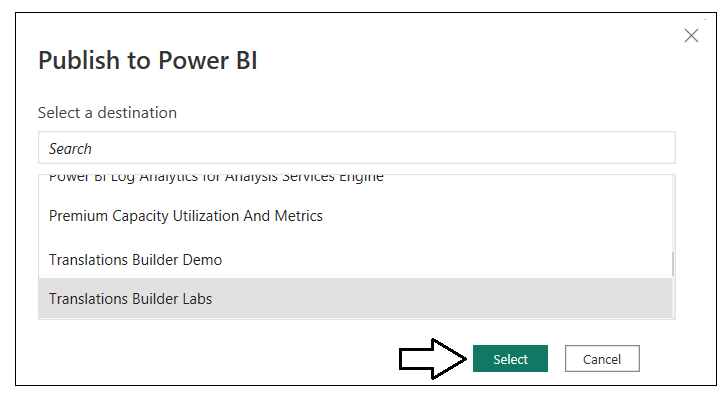


Now you are going to publish the **TB-Lab01.pbix** project to a workspace in the Power BI Service.

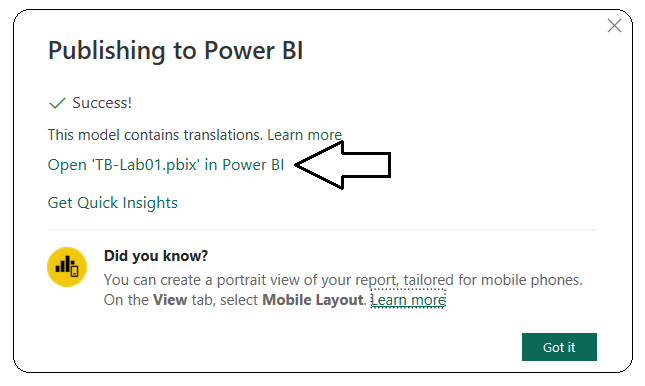
1. Navigate to the **Home** tab and then click the **Publish** button.



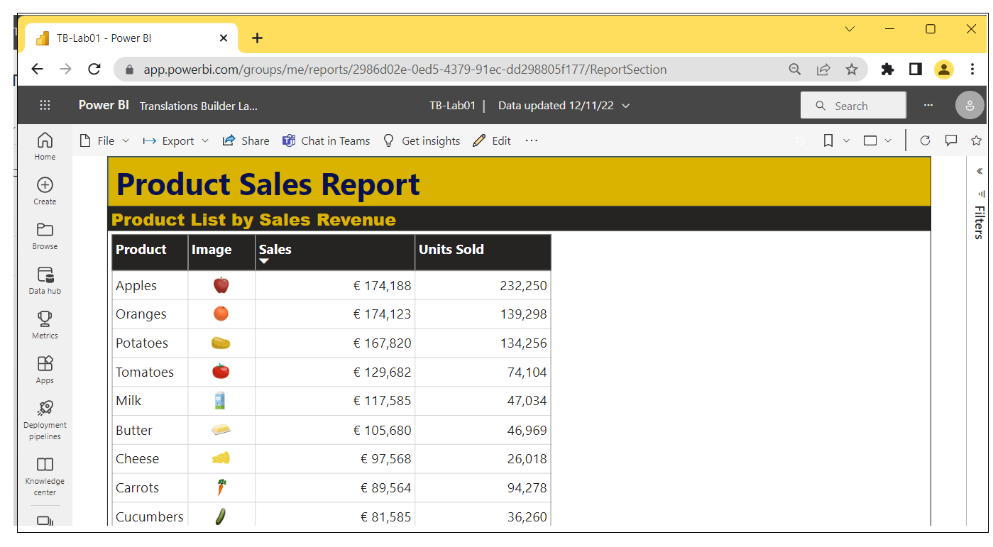
1. When prompted by the **Publish to Power BI** dialog, choose your test workspace and then click **Select**.



1. Once you see **Success!**, click **Open ‘TB-Lab01.pbx’ in Power BI** to view the report in the Power BI Service.

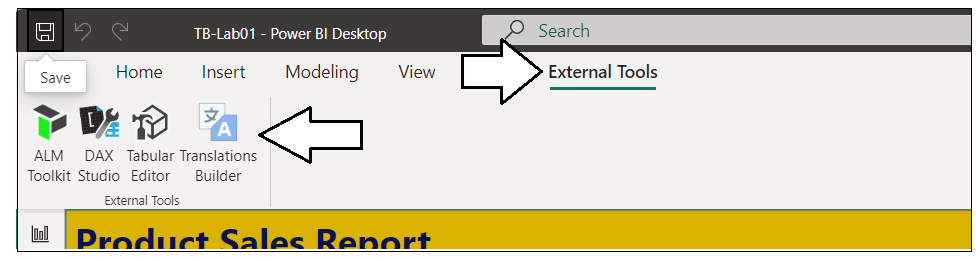


1. The report named **TB-Lab01** should appear like the report in the screenshot below.



Now it’s time to begin adding translations. As you begin to add translations to a PBIX project, you will often follow this set of steps:   
**(1)** make changes in Power BI Desktop, **(2)** publish the project, **(3)** check your work in the Power BI Service, **(4)** repeat until happy

1. Return to Power BI Desktop, navigate to the **External Tools** tab and launch **Translations Builder**.

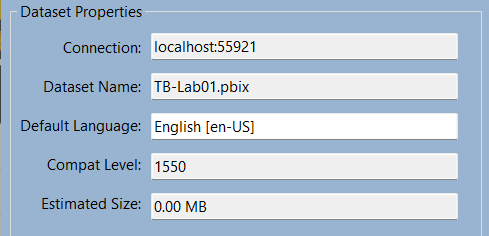


1. Translations Builder should start and load the data model for **TB-Lab01.pbix** as shown in the following screenshot.

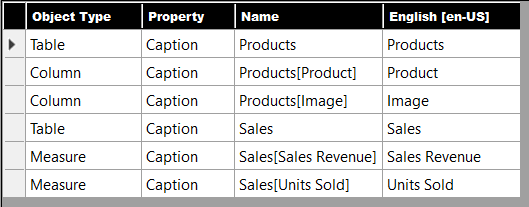
Graphical user interface, application

Description automatically generated

1. The **Dataset properties** section provides details about the dataset connection and the PBIX project file.

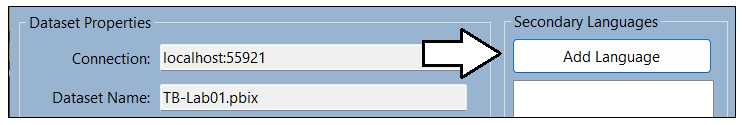


1. The grid on the bottom of the page displays one row for each non-hidden dataset object in the data model.

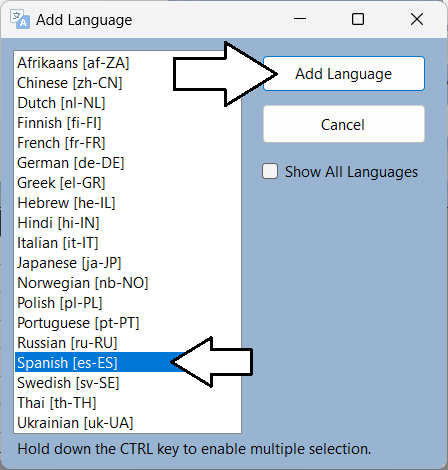


Tables, columns and measures that are hidden from report view in the data model are not displayed. You don’t need to translate them.

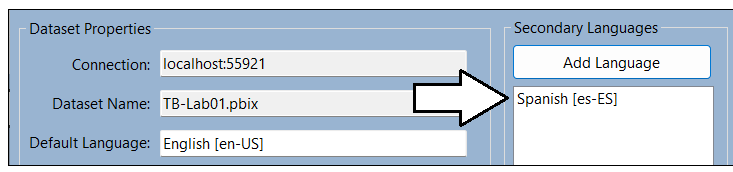
1. Click the **Add Language** button to add your first secondary language.



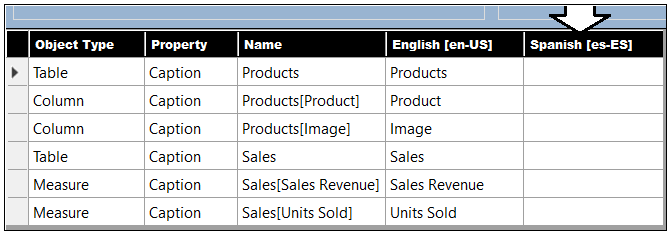
1. Select **Spanish [es-ES]** and click **Add Language**.



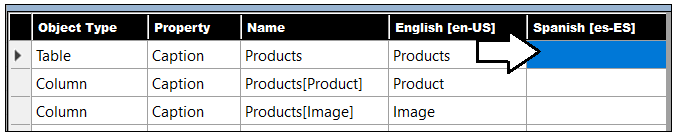
1. You should now see that **Spanish [es-ES]** appears the first language in the **Secondary Languages** list.



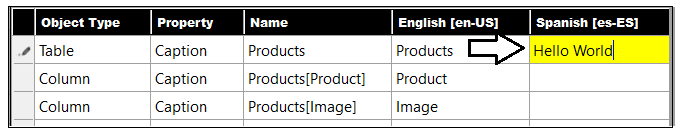
1. You will also notice that a new column has been added for Spanish translations.



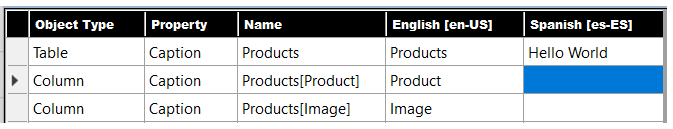
1. Locate the row for the **Products** table and click on the cell for the **Spanish** column. It should turn blue when selected.



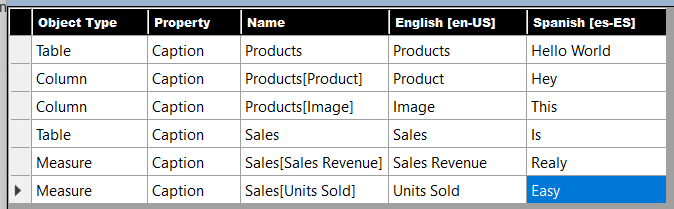
1. Type Hello World. You should see that you can just start typing in the selected cell to add or edit a translation.



1. Press the **ENTER** key to save your changes. Note that pressing **ENTER** will move the selection to the cell below.

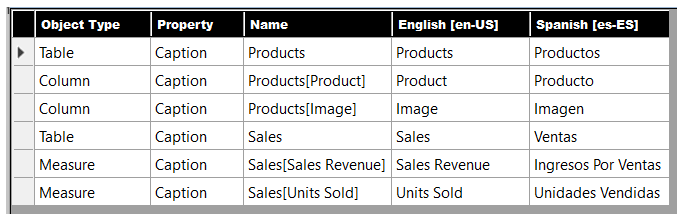


1. Now, type more text and press **ENTER** repeatedly to experiment quickly adding text to all cells in the Spanish column.

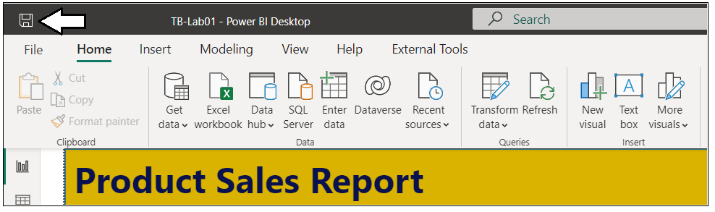


The point of the last few steps has been for you to become comfortable with the translation editing experience. You can see the grid provides an editing experience similar to working with Excel. You can even use the **{F2}** key to move a cell with content into edit mode.

1. Now edit the translations in the Spanish columns with better translated values. Use the following translations.
   1. For the **Products** table, enter the Spanish translation of **Productos**.
   2. For the **Product** column, enter the Spanish translation of **Producto**
   3. For the **Image** column, enter the Spanish translation of **Imagen**.
   4. For the **Sales** table, enter the Spanish translation of **Ventas**.
   5. For the **Sales Revenue** measure, enter the Spanish translation of **Ingresos Por Ventas**.
   6. For the **Units Sold** measure, enter the Spanish translation of **Unidades Vendidas**.
2. When you are done with your edits, the Spanish translations should match the following screenshot.

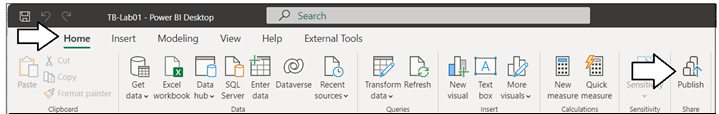


1. Return to the **TB-Lab01.pbix** project in Power BI Desktop and save your work by clicking the **Save** button.

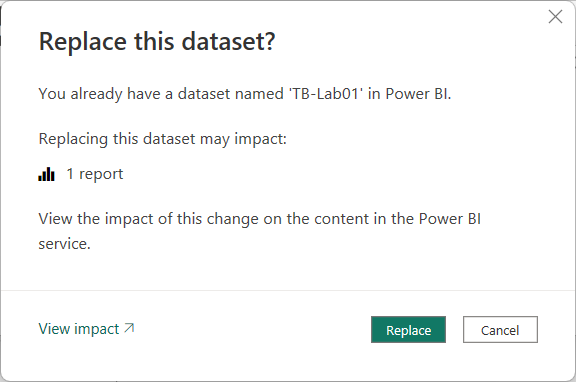


It’s easy to forget to save your changes in Power BI Desktop. Be aware that any changes made by Translations Builder are just made to the data model loaded in memory. None of your changes are saved back to the PBIX project file until you save in Power BI Desktop.

1. Publish the **TB-Lab01.pbix** project to push the changes to the project’s translations to the Power BI Service.



1. When prompted by the **Replace this dataset?** Dialog, click the **Replace** button to continue.



1. Once you see **Success!**, click **Open ‘TB-Lab01.pbx’ in Power BI** to view the report in the Power BI Service.

Graphical user interface, text, application, email

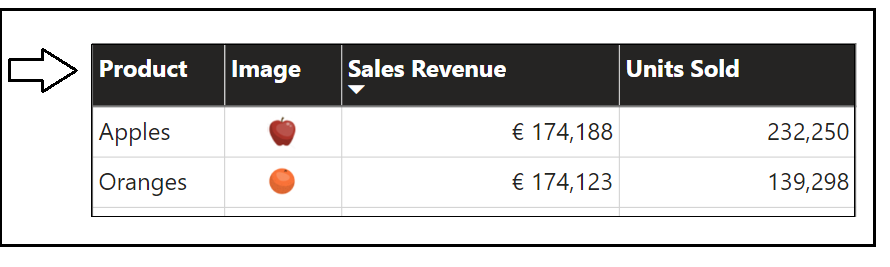
Description automatically generated

1. The report should load as normal showing all text in English at first.

Table

Description automatically generated

1. Inspect the table visual column headers which displays the names of columns and measures in English.

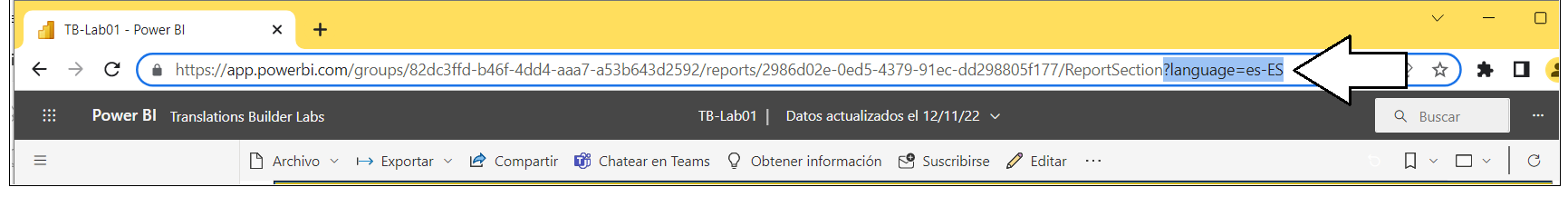


Now, it’s time to test your translations for the first time by using the **language** query string parameter to load the report.

Click the browser address bar and add the following **language** parameter to the end of the report URL.

/?language=es-ES

1. Press **ENTER.** You should see the **language** query string parameter accepted by the browser as it reloads the report.



When the report reloads, you should see the UI experience for the Power BI Service UI switch from English to Spanish.

1. Verify the column and measure names in columns headings are displayed with the Spanish translations you added.



You have now successfully added the metadata translations to display this report in both English and Spanish. Leave Power BI Desktop and Translations Builder open as you will continue using them in your next exercise.

### Exercise 2: Generating Machine Translations

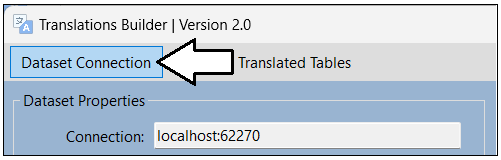
In this lab you will configure Translations Builder’s support to automatically generate machine translations using the Azure Translator Service. While machine translations might not prove good enough to use in all production scenarios, they do provide a great first step in generating translations for testing and getting something into production sooner.

To complete this lab you will require a **Key** and **Location** which provide access to the **Azure Translator Service**. If you do not have a Azure subscription and you cannot obtain your own Key, you can use the following Key and Location up through February 28, 2023.

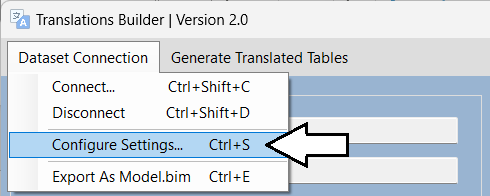
**Key**: a75b371ce1fc402ca84a05732cfcff27

**Location**: eastus2

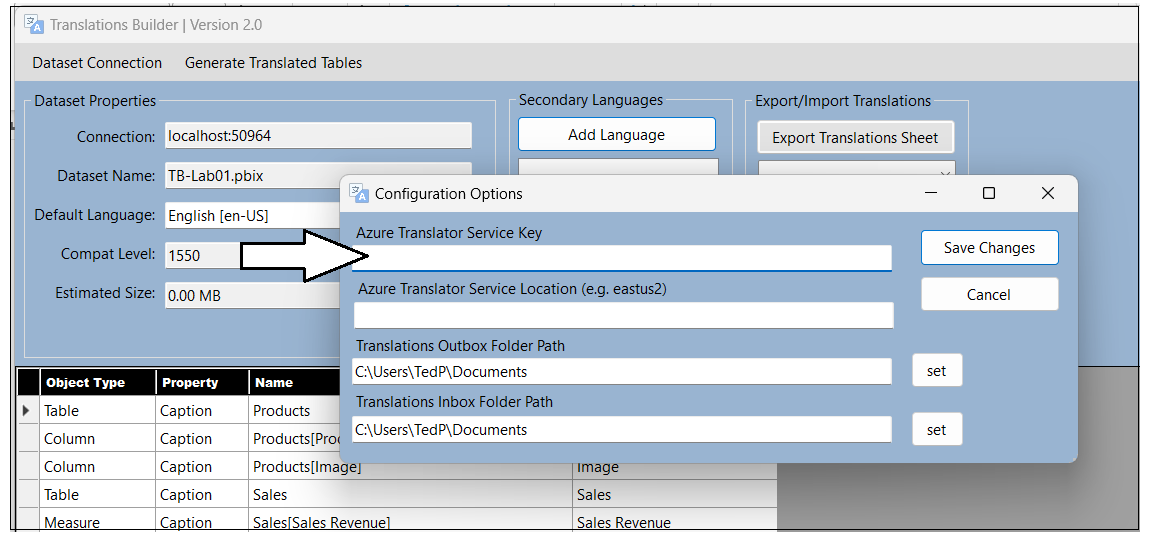
1. Return to Translations Builder and drop down the **Dataset Connection** menu.



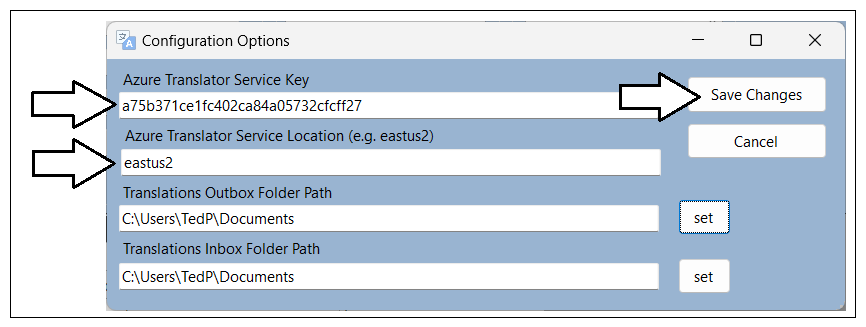
1. Select the **Configure Settings…** menu command to display the **Configuration Options** dialog.



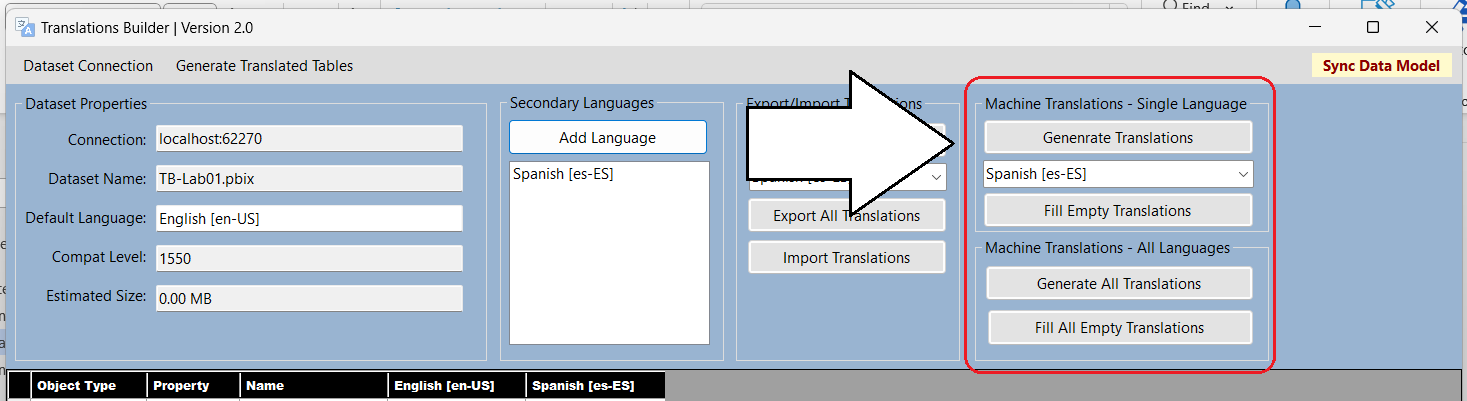
1. In the **Configuration Options** dialog, enter the **Key** and **Location** for the Azure Translator Service.



1. Once you have added the **Key** and **Location**, click **Save Changes**.

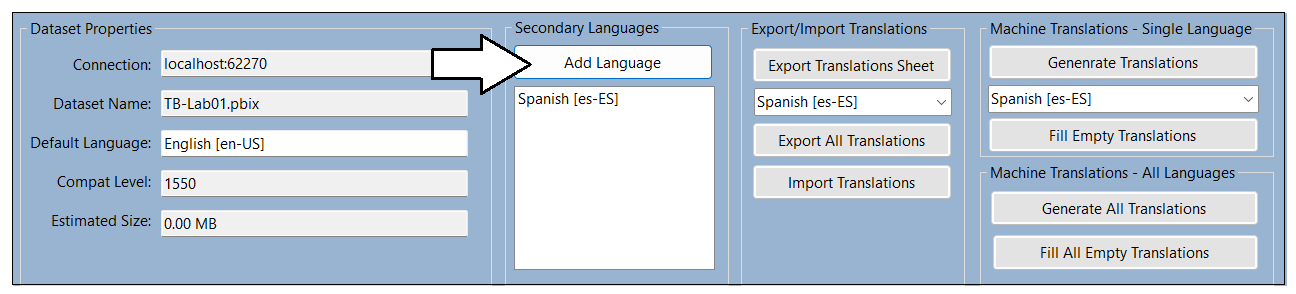


1. After you have configured the **Key** and **Location** for the Azure Translator Service, new controls will appear on the main page.



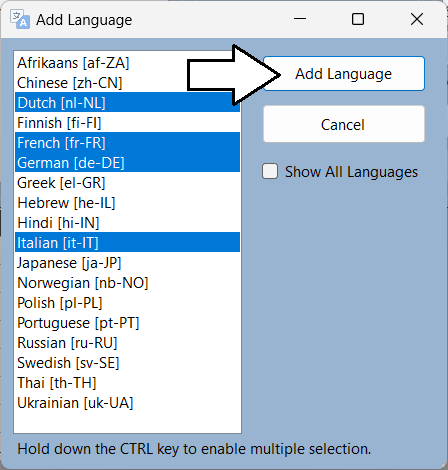
Now that you have added support for generating machine translations, it’s time to put that automatic translation support to work!

1. Click the **Add Language** button to add your second secondary language.

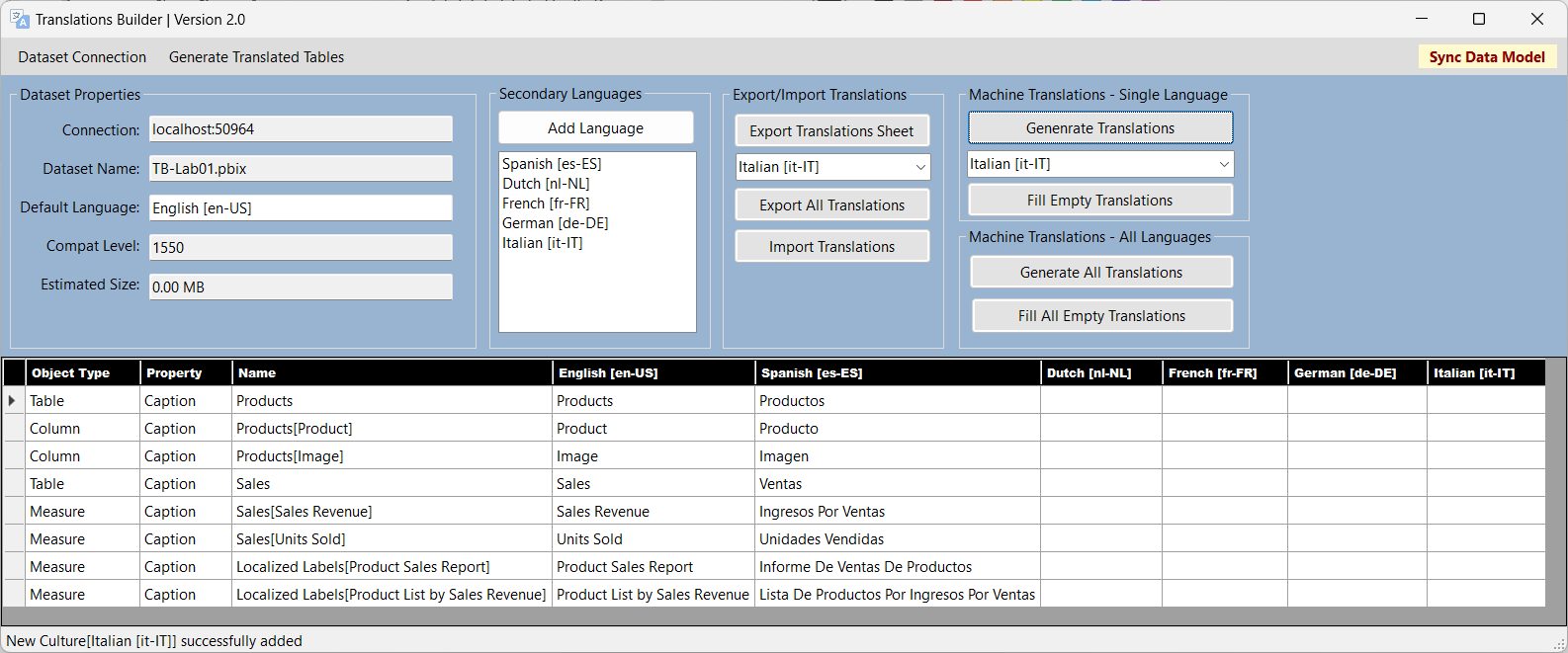


You can hold down the **CTRL** key in the **Add Language** dialog while selecting languages to enable multiple selection

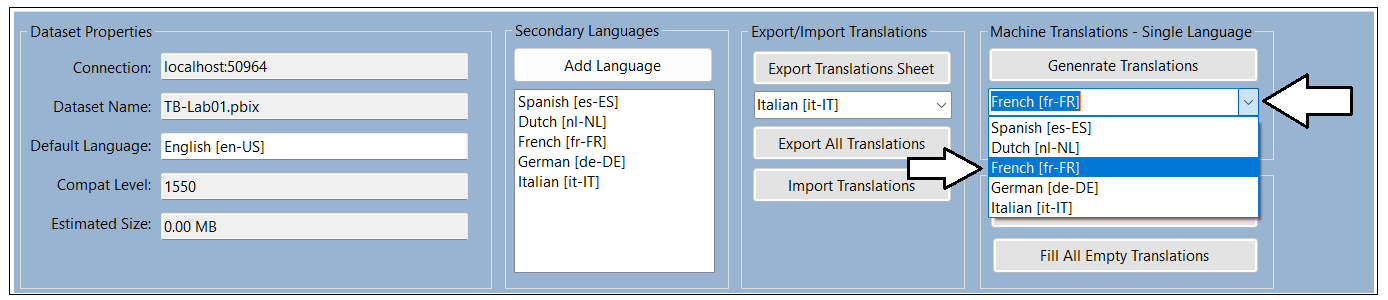
1. Hold down the **CTRL**, and select **Dutch**, **French**, **German** and **Italian**. And then click **Add Language**.



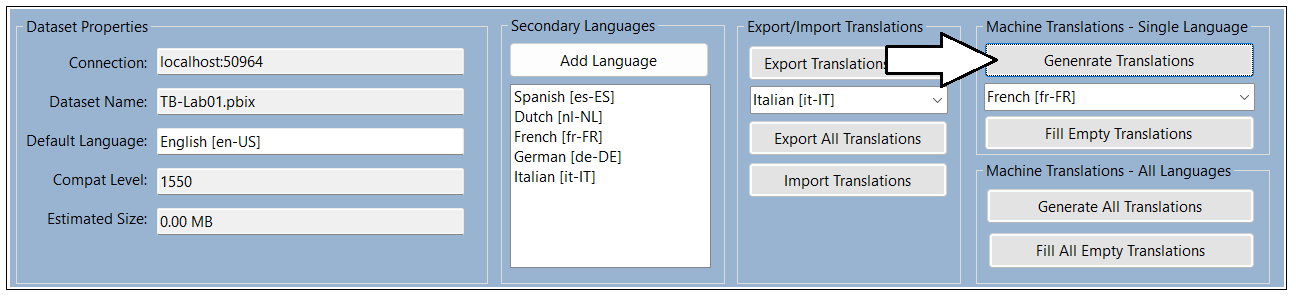
1. You should now see that all four new languages appear as second languages in the **Secondary Languages** list.
2. You will also notice that new columns have been added to the translation grid for each new language.



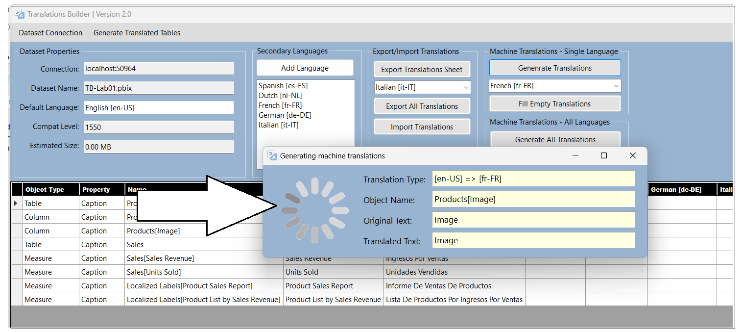
1. In the **Machine Translations – Single Language** section, select **French [fr-FR]** from the drop down menu.



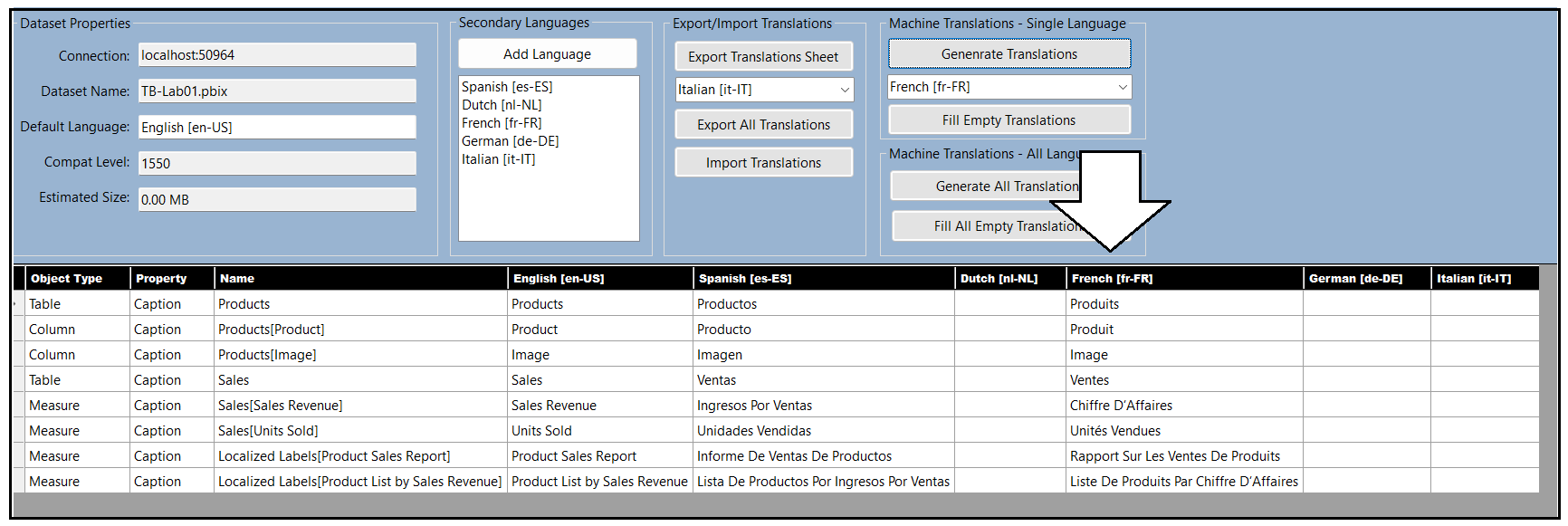
1. Once you have selected **French [fr-FR]**, click **Generate Translations** to create French translations for all rows in the grid.



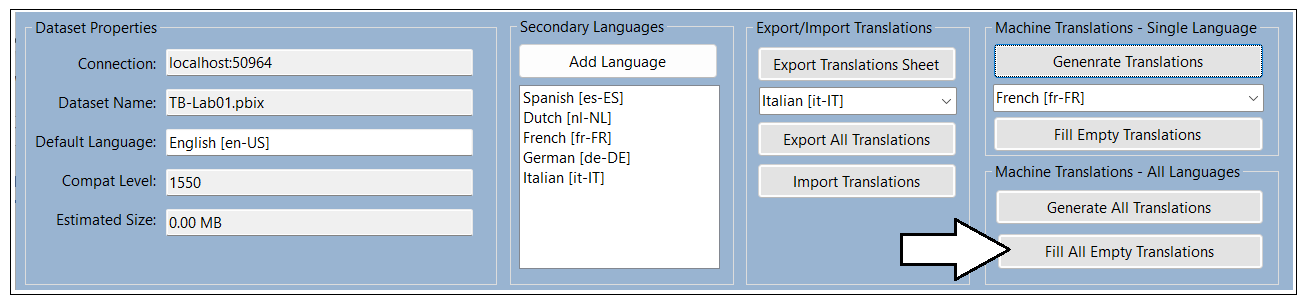
1. As the code runs to interact with the Azure Translator Service, the **Generating machine translation** dialog shows the progress.



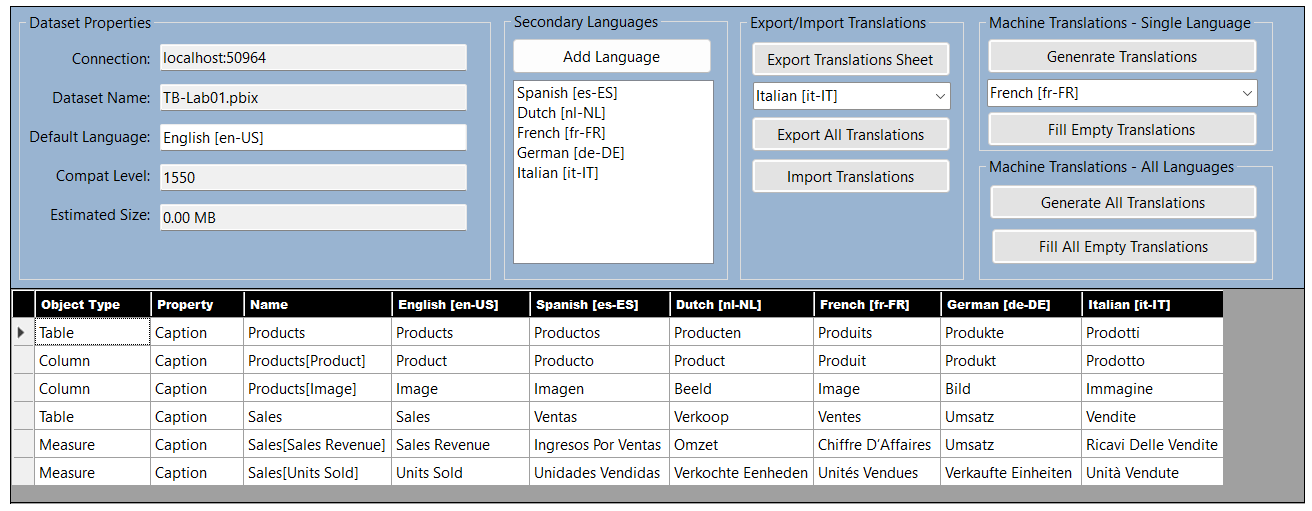
1. Once this dialog closes, you should see all cells the French column has been filled with machine generated translations.



1. Click the **Fill All Empty Translation** button in the **Machine Translations - All Languages** section.



1. You should see that all the cells the all languages have now been populated with machine-generated translations.



Now, it’s time once again to test your work in the Power BI Service,

1. Return to the **TB-Lab01.pbix** project in Power BI Desktop and save your work by clicking the **Save** button.

Graphical user interface, application, Word

Description automatically generated

Don’t forget to save your work! Did we mention it’s easy to forget.

1. Publish the **TB-Lab01.pbix** project to push your changes to the project’s translations to the Power BI Service.

Graphical user interface, application

Description automatically generated

1. When prompted by the **Replace this dataset?** Dialog, click the **Replace** button to continue.

Graphical user interface, text, application, email

Description automatically generated

1. Once you see **Success!**, click **Open ‘TB-Lab01.pbx’ in Power BI** to view the report in the Power BI Service.

Graphical user interface, text, application, email

Description automatically generated

1. The report should load as normal showing all text in English at first.

Table

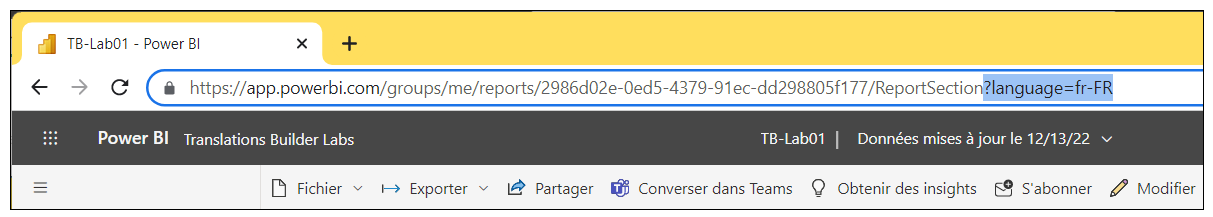
Description automatically generated

Now, it’s time to test your French, German, Dutch & Italian translations using the **language** query string parameter to load the report.

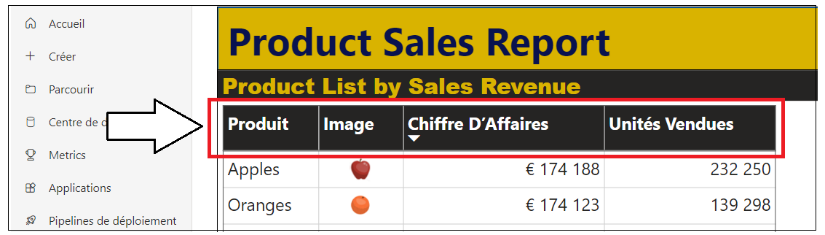
1. Click the browser address bar and add the **language** parameter value of **fr-FR** for French to the end of the report URL.

/?language=fr-FR

1. When the report reloads, you should see the UI experience for the Power BI Service UI switch from English to French.



1. Verify the column and measure names in columns headings of the table visual are displayed with French translations.

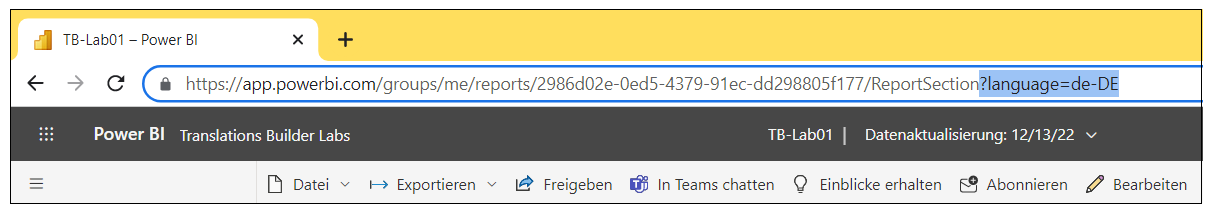


Now that you have tested the French translations, it’s time to test the three other new languages.

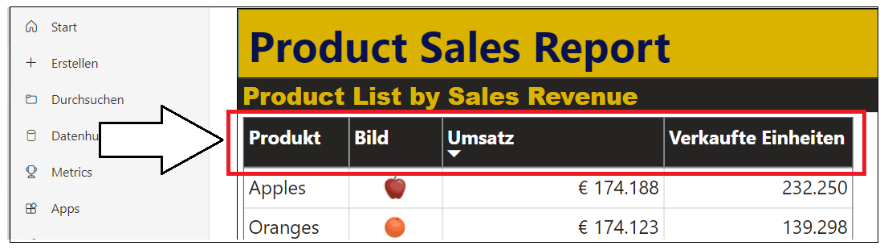
1. Click the browser address bar and add the **language** parameter value of **de-DE** for German to the end of the report URL.

/?language=de-DE

1. When the report reloads, you should see the UI experience for the Power BI Service UI switch to German.



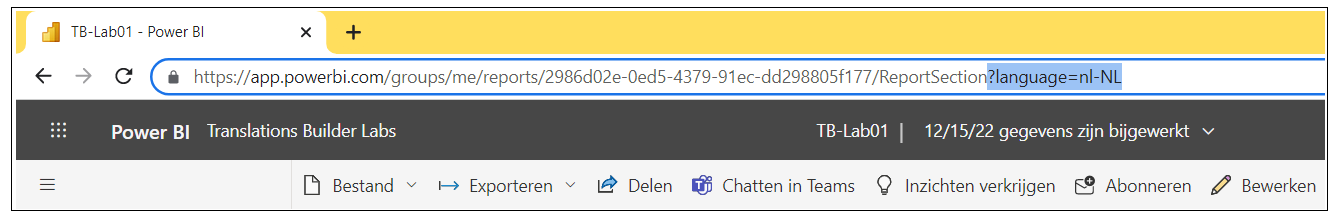
1. Verify the column and measure names in columns headings are displayed with the German translations.



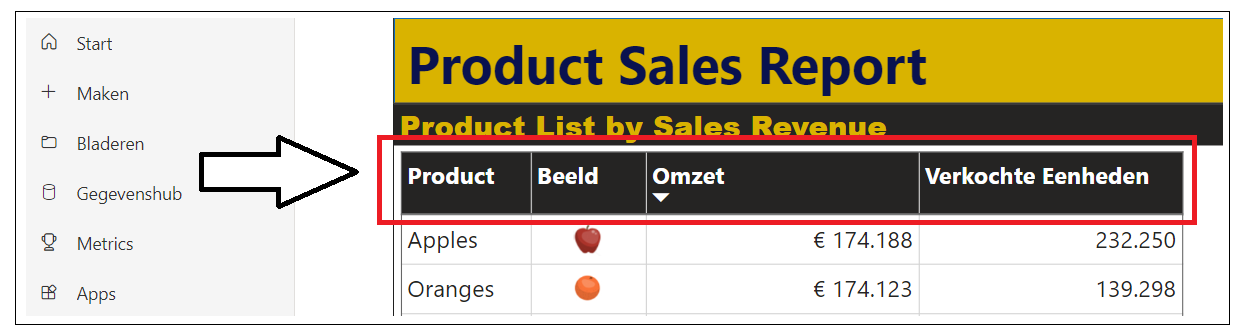
1. Click the browser address bar and add the **language** parameter value of **n-NL** for Dutch to the end of the report URL.

/?language=nl-NL

1. When the report reloads, you should see the UI experience for the Power BI Service UI switch to Dutch.



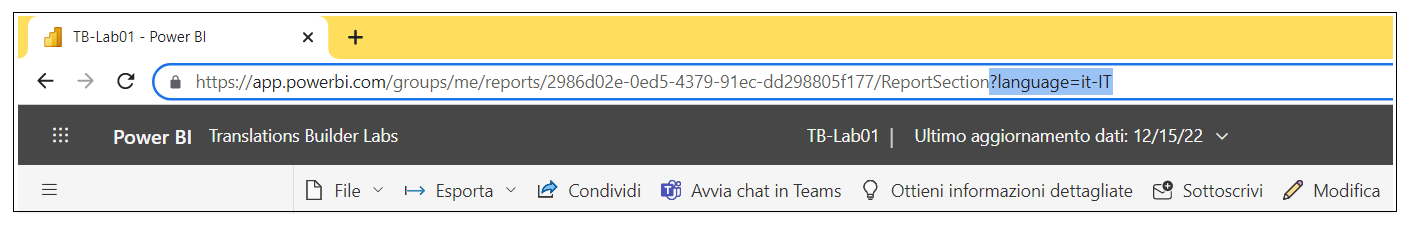
1. Verify the column and measure names in columns headings are displayed with the Dutch translations.



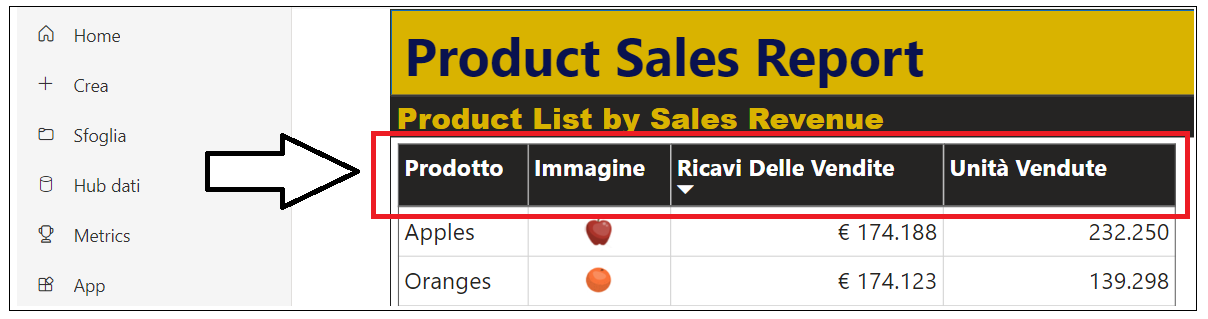
1. Click the browser address bar and add the **language** parameter of **it-IT** for Italian to the end of the report URL.

/?language=it-IT

1. When the report reloads, you should see the UI experience for the Power BI Service UI switch to Italian.

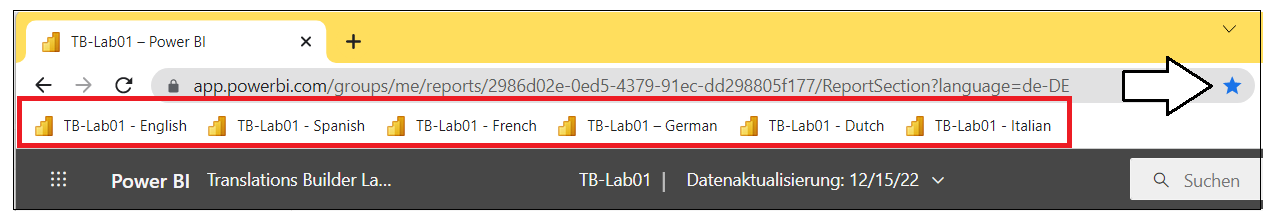


1. Verify the column and measure names in columns headings are displayed with the Italian translations.



You have now successfully added the metadata translations to display this report in six different languages. Throughout these lab exercises, you will continue to test all six languages in the browser as you add additional translation support.

1. As a final step in this exercise, add a browser bookmark with a language parameter at the end of the for each language.



Creating a browser bookmark for each language might take a minute or two to set up at first. However, it will save lots of time in the long run as you continue to test the translations for this report in the lab work that remains ahead.

### Exercise 3: Creating and Testing Report Label Translations

In this exercise, blah blah blah

1. Rub your belly
2. Tap your forehead

### Exercise 4: Creating a Workflow Process To Gather & Integrate Human Translations

In this exercise, blah blah blah

1. Rub your belly
2. Tap your forehead